,
,

- Comprehensive
- Updated

Name	
Name	
Roll No.	
Batch	

BUSINESS MATHEMATICS AND LOGICAL REASONING & STATISTICS DAILY DOSE FOR

CA FOUNDATION MATHS VOLUME - 1

CA. VINOD G. REDDY

(B.COM, FCA)

Published by : SWAPNIL PATNI'S CLASSES

(Notes for Private Circulation Only)

CA VINOD REDDY

CA FOUNDATION MATHS

© Exclusive publication, distribution and promotion rights reserved with the Author Price: ` 1000/-

Edition: November 2019 Edition (New Syllabus) Author: CA Vinod G. Reddy Visit us : <u>www.swapnilpatni.com</u>

Published by: SWAPNIL PATNI'S CLASSES KUMAR PRESTIGE POINT 283 , OFFICE NO. 15B , SHUKRAWAR PETH OPP.CHINCHEHI TALIM, NEAR BY BSNL TEL.EXCHANGE, BAJIRAO ROAD PUNE-411002 Website: www.swapnilpatni.com phone No. : 9011854847 / 9011851796

Every effort has been made to avoid errors or omissions in this publication. In spite of this, errors may creep in. Any mistake, error or discrepancy noted may be brought to our notice which shall be taken care off in the next edition. It is notified that neither the Author nor the Seller will be responsible for any damage or loss of action to any one, of any kind, in any manner, there from. It is suggested that to avoid any doubt the reader should cross-check all the facts, law and contents of the publication with the Institute's publication or notifications.

No part of this book shall be reproduced or copied in any form or by any means [graphic, electronic or mechanical, including photocopying, recording, taping, or information retrieval system], or reproduced on any disk, tape, perforated media or other information storage device, etc. without the written permission of the author. Breach of this condition is liable for legal action.

CA VINOD REDDY

CA FOUNDATION MATHS

Dedicated to

My Parents, Friends and Students

YOUR 'I CAN' IS MORE IMPORTANT THAN YOUR 'IQ' !!

'FORM' IS TEMPORARY, 'CLASS' IS PERMANENT !!

CA VINOD REDDY

CA FOUNDATION MATHS

PREFACE

Dear Students,

It gives us immense pleasure to present before you, the daily dose on Business Mathematics and Logical Reasoning & Statistics. This book is for all the Foundation students aspiring to achieve the highest rank in CA FOUNDATION MATHS examination. The subject of Business Mathematics and Logical Reasoning & Statistics is both interestingand easy to understand.

Every care has been taken to make the presentation in this book free from blemish. Nevertheless, it is conceded that no one is infallible, unintended errors or omissions may have crept in. The users of this book are requested to bring these to the notice of the author and offer, without inhibition, their suggestions for further improvement.

Let us remind ourselves of two facts <u>One</u>: This book is not a substitute for the study material prescribed by ICAI, This is only an aid. <u>Two</u>: There is no short cut to success. It is resolute hard work that pays. Let us begin.

I am thankful to CA Ritu Dhanwani for help in notes designing.

"Everyman is free to rise as far as he is able or willing But the degree to which he thinks determines The degree to which he will rise"

Committed to your success,

CA Vinod G. Reddy SWAPNIL PATNI'S CLASSES, Pune JUNE,2023

CA VINOD REDDY

CA FOUNDATION MATHS

WHY STUDENTS ARE AFRAID OF CA FOUNDATION MATHS EXAM?

How can you overcome your Fears?

CA FOUNDATION MATHS is a challenging examination that tests conceptual understanding and also the ability to apply your mind to resolve problems within the given time frame.

Most books available in the market do not focus on testing conceptual understanding. They have a formulaic method whereby they feed the students similar questions that give the student's an illusion of confidence and not tackle the real problem at hand.

Questions in the DD focus on providing students with conceptual clarity and testing their ability to solve varied questions within the given timeframe. Similar questions are distributed across pages to gain momentum as you practice.

All past exam questions are covered in the DD. We are proud to claim that it is error free and our students will never be baffled with a wrong answer when they are in the midst of their exam preparation. Your time management skills with respect to calculation and navigating through varied questions from varied chapters will improve as you progress through our practice questions.

It is well known that, 'Practice makes a man perfect.' We hope this book becomes your trusted partner for CA FOUNDATION MATHS preparations!

Best of Luck! CA Vinod Reddy CA Ritu Dhanwani

CA VINOD REDDY

CA FOUNDATION MATHS

DD-1	By CA VI	NOD REDDY	www.swapnilpatni.com
Qs. 1 : What is the future	value of `25,000 after 2	5 years, if rate of inter	rest is 14% p.a. compound interest.
a. `6,65,148	b. `6,61,548	c. `6,51,487	d. None of these.
Qs. 2 : What is the future	value of `65,000 after 1	8 years, if rate of inter	rest is 17%p.a. compound interest.
a. `10,97,132	b. `11,28,761	c. 10,72,761	d. 12,67,871
Qs. 3 : Find Present value	of `25,93,821 to be reco	eived after 29 years, if	money is 18% effective.
a. `31,248	b. `21,438	c. `21,348	d. `41,238
Qs. 4 : Find Present Value	of `32,65,332 to be rec	eived after 35 years, il	f money is 12% effective.
a. 68,144 b	. 61,488 c	. 61,844	d. None
Qs. 5 : A T.V can be purch	ased by paying `10,000	now and `20,000, `50	0,000, `90,000, `80,000 at the end of years
1,2,3,4 respectively. Find	the cash down price of T	Г.V if money is 12% eff	fective.
a. `1,83,816	b. `1,82,618	c. `1,86,218	d. `1,62,861
Qs. 6 : A house can be pur	rchased by paying `2,00	,000 now and 8 instalr	ments of $1,00,000$ to be paid at the end of d. $7.86.833$
every year. Find cash dow	In price, if money is 15%	effective.	
a. `6.48.733	b. `4.68.733	c. `8.46.733	
Qs. 7 : Mr. A invested `20 receivable at the end of 2 a. `25,088	9,000 in a bank for 2 year years. b. `25,24	rs at 12%p.a compoun .9 c. `25,	ded half yearly. Find the amount 336 d. `22,549
Qs. 8 : P = `1,00,000, r = 1	.3% p.a.c.q, n=8 years 6	months, A=?	d. ` 9,62,662
a. `6,29,662	b. ` 2,96,662	c. `2,69,992	
Qs. 9 : P = `16,00,000, r =	18% p.a.c.m, n=7 years	3 months, A=?	d. `58,73,401
a. `85,43,401	b. `48,53,401	c. `58,43,401	
Qs. 10 : P = ?, r = 16% p.a.	c.q, n=17 years 9 month	s, A=`50,00,00,000	d. `3,08,74,712
a. `8,05,43,401	b. `3,48,53,401	c. `5,08,43,401	
Qs. 11 : How many conve	rsion periods are there in b. 4	n a year , if the amour	nt is compounded annually?
a. 52		c. 1	d. 2
Qs. 12 : Find the present v	/alue of `6,61,548 to be	received after 25 year	rs, if money is 14% effective
a. `20,000	b. `16,0000	c. `25,000	d. `30,000
Qs. 13 : P = ?, r = 15% p.a.	c.m, n=5 years 7 months	s, A=`70,00,000	d. `35,40,306
a. `30,45,306	b. `40,35,306	c. `30,65,403	
Qs. 14 : How many conve	rsion periods are there i	n a year , if the amour	nt is compounded forth-nightly?
a. 52	b. 24	c. 15	d. 4
Qs. 15 : If there are two c	onversion periods in a ye	ear, the amount is con	npounded
a. Half-yearly	b. Bi-annually	c. Semi-annually	d. All of the above
Qs. 16 : P = `20,00,000; n	= 2 years 5 months; r = 2	12%p.a.c.f, A = ?	d. None
a. `26,70,924 b	. `27,60,924 c	. `29,70,624	
CA VINOD REDDY	CA FOU	INDATION MATHS	WWW.SWAPNILPATNI.COM

DD-1	By CA VINOD REDDY	WWW.SWAPNILPATNI.COM
Qs. 17 : Mr. A invested `20,000 in a bar receivable at the end of 2 years.	ink for 2 years at 12%p.a co	mpounded quarterly. Find the amount
a. `25,088	b. `25,249 c	c. `25,336 d. `22,549
Qs. 18 : P = `1,00,000; n = 15 days; r = a. `1,00,494 b. `1,00,92	12% p.a.c.d, A = ? 24 c. `1,00,000	d. None
Qs. 19 : Mr. A invested `20,000 in a bather end of 2 years.	nk for 2 years at 12%p.a co	mpounded yearly. Find the amount receivable at
a. `25,088 b. `25	,249 c. `25,33	6 d. `22,549
Qs. 20 : P= ?, r = 12% p.a.c.m, n=3 yea a. `49,45,306 b. `49,38,	rs 6 months, A=`75,00,000 142	d. `45,40,306

WWW.SWAPNILPATNI.COM

Answers : DD-1

Qs.	Answer	Qs.	Answer
1	В	11	С
2	А	12	С
3	С	13	А
4	С	14	В
5	В	15	D
6	А	16	А
7	В	17	С
8	В	18	А
9	С	19	А
10	D	20	В

CA VINOD REDDY

a. 2,46,310	b. `4,26,548	ears, if rate of interest i c. `6,51,487	d. None of these.
Qs. 2 : What is the future a. `5,65,707	value of `30,000 after 18 y b. `6,28,761	/ears, if rate of interest i c. 5,92,761	s 17%p.a. compounded bi-annually. d. 3,67,871
Qs. 3 : Find Present value a. `29,22,070	e of `1,05,93,821 to be rece b. `26,18,631	ived after 10 years, if m c. `24,77,348	oney is 15% effective. d. `31,41,238
Qs. 4 : Find Present Value a. 1,97,023	e of `32,65,332 to be receiv b. 1,78,092	ed after 25 years, if mor c. 1,92,078	ney is 12% effective. d. None
Qs. 5 : A second-hand ca the end of years 1,2,3,4 r a. `1,60,816	r can be purchased by payir respectively. Find the cash c b. `1,70,618	ng `30,000 now and `40 Iown price of the car if n c. `1,86,218	,000, `30,000, `60,000, `50,000 at noney is 12% effective. d. `1,64,113
Qs. 6 : A shop can be pur every year. Find cash dov	chased by paying `3,00,000 wn price, if money is 17% ef) now and 7 instalments fective.	of `2,00,000 to be paid at the end of
Qs. 7 : Mr. A invested `1 at the end of 4 years.	0,000 in a bank for 4 years a	at 15%p.a compounded	bi-yearly. Find the amount receivable
a. `17,835	b. `18,249	c. `15,336	d. `20,549
Qs. 8 : P = `10,00,000, r = a. `12,29,662	= 7% p.a.c.q, n=3 years 6 mc b. `13,96,662	onths, A=? c. `12,74,917	d. `11,62,662
Qs. 9 : P = `16,00,000, r = a. `16,23,041	= 18% p.a.c.d, n=29 days, A= b. `17,53,401 c	-? . `16,43,401 d	. None
Qs. 10 : P = ?, r = 13% p.a	.c.q, n=5 years 9 months, A	=`50,00,00,000	d. `3,08,74,712
a. 23,03,43,401	0. 25,90,00,512	0. 5,08,45,401	
Qs. 11 : How many conve a. 340	b. 23,96,06,512 Prsion periods are there in a b. 397	year, if the amount is c c. 365	compounded daily? d. 320
 Qs. 11 : How many conve a. 340 Qs. 12 : Find the present a. `27,842 	b. 23,96,06,512 ersion periods are there in a b. 397 value of `3,06,993 to be re b. `37,988	v year , if the amount is c c. 365 ceived after 23 years, if c. `12,560	compounded daily? d. 320 money is 11% effective d. `30,000
 Qs. 11 : How many conve a. 340 Qs. 12 : Find the present a. `27,842 Qs. 13 : P = ?, r = 9% p.a.(a. `30,45,306 	b. 23,96,06,512 ersion periods are there in a b. 397 value of `3,06,993 to be re b. `37,988 c.m, n=4 years2 months, A= b. `24,08,881	 c. 3,08,43,401 year , if the amount is c c. 365 ceived after 23 years, if c. `12,560 `35,00,000 c. `30,65,403 	compounded daily? d. 320 money is 11% effective d. `30,000 d. `28,40,306
 Qs. 11 : How many conve a. 340 Qs. 12 : Find the present a. `27,842 Qs. 13 : P = ?, r = 9% p.a.(a. `30,45,306 Qs. 14 : How many conve a. 52 	ersion periods are there in a b. 397 value of `3,06,993 to be re b. `37,988 c.m, n=4 years2 months, A= b. `24,08,881 ersion periods are there in a b. 24	 c. 3,08,43,401 a year , if the amount is c c. 365 ceived after 23 years, if c. `12,560 `35,00,000 c. `30,65,403 year , if the amount is c c. 12 	compounded daily? d. 320 money is 11% effective d. `30,000 d. `28,40,306 compounded monthly? d. 4
 a. 23,03,43,401 Qs. 11 : How many conve a. 340 Qs. 12 : Find the present a. `27,842 Qs. 13 : P = ?, r = 9% p.a.(a. `30,45,306 Qs. 14 : How many conve a. 52 Qs. 15 : If there are 52 co a. Weekly 	ersion periods are there in a b. 397 value of `3,06,993 to be re b. `37,988 c.m, n=4 years2 months, A= b. `24,08,881 ersion periods are there in a b. 24 onversion periods in a year, b. Bi-annually	 c. 3,08,43,401 a year , if the amount is c ceived after 23 years, if c. `12,560 `35,00,000 c. `30,65,403 year , if the amount is c c. 12 the amount is compoun c. Forth-nightly 	compounded daily? d. 320 money is 11% effective d. `30,000 d. `28,40,306 compounded monthly? d. 4 ded d. None of the above
 Qs. 11 : How many converses a. 340 Qs. 12 : Find the present a. `27,842 Qs. 13 : P = ?, r = 9% p.a.(a. `30,45,306) Qs. 14 : How many converses a. 52 Qs. 15 : If there are 52 converses a. Weekly Qs. 16 : P = `27,000; n = a. `31,358 	ersion periods are there in a b. 397 value of `3,06,993 to be re b. `37,988 c.m, n=4 years2 months, A= b. `24,08,881 ersion periods are there in a b. 24 onversion periods in a year, b. Bi-annually 1 years 3 months; r = 12%p. c. `27,924 c. `	 c. 3,08,43,401 a year , if the amount is c ceived after 23 years, if c. 12,560 35,00,000 c. 30,65,403 year , if the amount is c c. 12 the amount is compoun c. Forth-nightly a.c.f, A = ? 29,624 d. N 	compounded daily? d. 320 money is 11% effective d. `30,000 d. `28,40,306 compounded monthly? d. 4 ded d. None of the above

DD-2	By CA VIN	OD REDDY	WWW.SWA	PNILPATNI.COM
Qs. 17 : Mr. A invested `23,00 receivable at the end of 2 yea	00 in a bank for 2 yea rs.	rs at 16%p.a compou	inded quarterly. Find the a	mount
a. `31,477	b. `35,249) c. `28,	336 d. `25,54	19
Qs. 18 : P = `1,00,000; n = 19 a. `1,04,477 b.	weeks; r = 12% p.a.c. `1,09,924 c.	w, A = ? `1,00,000	d. None	
Qs. 19 : Mr. A invested `17,00 at the end of 2 years.	00 in a bank for 2 yea	rs at 12%p.a compou	inded weekly. Find the amo	ount receivable
a. `21,605	b. `22,249	c. `20,336	d. `19,549	
Qs. 20 : A= ?, r = 2% p.m.c.m,	n=18 months, P=`68,	.00,000	4 ,80 10 506	
a. 94,43,300 D	. 90,30,142	L. 97,12,074	u. 09,40,300	

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	A	11	С
2	A	12	A
3	В	13	В
4	С	14	С
5	D	15	А
6	С	16	А
7	A	17	A
8	С	18	А
9	А	19	А
10	В	20	С

WWW.SWAPNILPATNI.COM

Qs. 1 : If Amount = `2,50 a. 14.29% b	,000, Principal = `80, p. 15.65%	000, n = 5 year c. 21.27%	s 6 months, th d.	nen r = None of these	_% p.a.c.q
Qs. 2 : If Amount = `30,0 a. `7,97,132	0,000, n = 66 months b. `7,90,469	s, r = 25% p.a.c. c. 9,	q. then P = 72,761	d. 8,67,8	371
Qs. 3 : If A = `83,25,000, a. 58.25 b	P =`50,00,000, r = 12 0. 38.37	2% p.a.c.m. the c. 50.67	n n = d. 51.24	months	
Qs. 4 : If P = `85,00,000, a. `1,17,68,144	r = 26% p.a.c.w. n =1 b. `1,17,54,73	Lyear 3 months 88 c. `6	s, then A = ? 51,54,844	d. None	
Qs. 5 : Mr. A invested `2, year. a. `2.816	000 in a bank for a ye b. `2.618	ear at 12%p.a.c c. `2	.q. Find the ar	nount receivat d. `2.86	ble at the end of the
Qs. 6 : Nominal rate is 13 a. 13% b	% p.a.c.q. Find effect b. 13.65%	tive rate of inte c. 13.50%	rest. d.	14.5%	
Qs. 7 : Nominal rate is 24 a. 25.25%	24% p.a.c.f. Find eff b. 24.24%	ective rate of ir c. 27.28%	nterest. d.	30.25%	
Qs. 8 : Nominal rate is 9% a. 9%	p.a.c.a. Find effectiv b. 9.9%	ve rate of intere c. 10%	est. d. 12%		
Qs. 9 : Nominal rate is 18 a. 18.81%	.81% p.a.c.m. Find ef b. 20.52	fective rate of %	interest. c. 2:	1%	d. 19.57%
Qs. 10 : Nominal rate is 1 a. 15%	5% p.a.c.half yearly. b. 16.52%	Find effective r	ate of interes c. 15.56%	t. d. 1	7.57%
Qs. 11 : 18%p.a.c.m is equ a. True	uivalent to 19.5618% b. False	p.a.c.a. This sta	itement is c. Can't Say	d.	I don't know.
Qs. 12 : Effective rate of 1 a. 15%	13.65% is equivalent t b. 13.65%	co% p.a c. 13%	a.c.q	d. 12.65%	
Qs. 13 : Effective rate of 2 a. 24%	26.97% is equivalent t b. 25%	co% p.a c. 26.97%	a.c.f	d. 26.38%	
Qs. 14 : Effective rate of a. 52%	67.77% is equivalent b. 24%	to% p. c. 60.66%	a.c.w	d. 67.77%	
Qs. 15 : 12%p.a.c.q is equ a. True	ivalent to 13.550881 b. False	%p.a.c.a. This s	tatement is c. Can't Say	d.	I don't know.
Qs. 16 : Nominal rate is 8 a. 8%	% p.a.c.w. Find effec b. 8.90%	tive rate of inte	erest. c. 9%	d. 8	.32%

CA VINOD REDDY

CA FOUNDATION MATHS

DD-3		By CA VIN	WWW.SWAPNILPATNI.COM	
Qs. 17	: 13.17%p.a.c.m is equi	valent to 14%p.a.c.a.	This statement is	
a.	True	b. False	c. Can't Say	d. I don't know.
Qs. 18	: Effective rate of 21.94	% is equivalent to	% p.a.c.m	
a.	21.94%	b. 20%	c. 20.66%	d. 22.77%
Qs. 19	: Effective rate of 16.13	3% is equivalent to	% p.a.c.f	
a.	15% b.	16% c. :	16.13%	d. 15.13%
Qs. 20	:: Effective rate of 40.2	22% is equivalent to_	% p.a.c.half yearl	y
a.	40.22%	b. 32.22%	c. 36.83%	d. 35%

WWW.SWAPNILPATNI.COM

Answers : DD-3

Qs.	Answer	Qs.	Answer
1	С	11	A
2	В	12	С
3	D	13	А
4	В	14	A
5	С	15	В
6	В	16	D
7	С	17	A
8	А	18	В
9	В	19	А
10	С	20	С

CA VINOD REDDY

Ву	CA	VINOD	REDDY
----	----	-------	-------

WWW.SWAPNILPATNI.COM

Qs. 1 : 12% p.a.c.q = 11.88% p.a.c. a. True b.	m. Is the statement true . False	c. Can't Say	d. I don't know.
Qs. 2 : If Amount = `2,96,662, P =	1,00,000, n = 8 years 6 m	onths, then r =	p.a.c.q
a. 13% b. 12%	c. 14% d. 15	5%	
Qs. 3 : If A = `71,53,844, P =`50,00	0,000, r = 12% p.a.c.m. the	n n =yea	ırs
a. 5 b.	4 c. 6	d. 3	3
Qs. 4 : If rate is 13%p.a.c.half yearl	y. Find the equivalent rate	per annum compound	ed monthly
a. 12.66% b.	13.42% c. 13	3% d. None	
Qs. 5 : Mr. A invested `5,000 in a b	oank for a year at 12%p.a.c	.q. Find the amount rec	ceivable at the end of the
a. 5,816 b.	`5,628 c.`7	',251 d.	6,861
Qs. 6 : Nominal rate is 12% p.a.c.m	. Find effective rate of inte	erest.	
a. 12.68% b. 13.65%	c. 13.50%	d. 14.5%	
Qs. 7 : Nominal rate is 22.50% p.a.	c.q. Find effective rate of i	nterest.	
a. 25.25% b. 24.47	7%	d. 30.25%	
Qs. 8 : Nominal rate is 20% p.a.c.a.	Find effective rate of inte	rest.	
a. 20% b. 20.9%	% c. 21.50%	d. 22%	
Qs. 9 : Nominal rate is 52% p.a.c.w	. Find effective rate of inte	erest.	d. 67.77%
a. 52.81%	b. 55.52%	c. 60.76%	
Qs. 10 : Nominal rate is 5% p.a.c.ha	alf yearly. Find effective ra	te of interest.	d. 7.57%
a. 5% b	b. 5.75%	c. 5.0625%	
Qs. 11 : 19.5618%p.a.c.m is equiva	lent to 18%p.a.c.a. This sta	itement is	d. I don't know.
a. True b.	. False	c. Can't Say	
Qs. 12 : Effective rate of 10.38% is	equivalent to% p.a	a.c.q	5%
a. 10% b. 13.6	5% c. 11%	d. 12.65	
Qs. 13 : Effective rate of 24.82% is	equivalent to% p.a	a.c.m	. None
a. 22.37% b. 2	3.47% c. 24.8	2% d	
Qs. 14 : interest rate of 52%p.a.c.v	w is equivalent to9	% p.a.c.q	. 67.77%
a. 55.24% b. 5	6.24% c. 60.6	6% d	
Qs. 15 : 17.60%p.a.c.q is equivalen	t to 18.80%p.a.c.a. This sta	tement is	d. I don't know.
a. True b.	. False	c. Can't Say	
Qs. 16 : Future Value = `6,61,548,	Present Value =` 25,000, r =	= 14% p.a., find n.	d. 32 years
a. 28 years%	b. 29 years	c. 25 years	

CA VINOD REDDY

DD-4

CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-4	Ву СА	WWW.SWAPNILPATNI.CO	M	
Qs. 17 : 17.85%p.a	c.m is equivalent to 18.12%	p.a.c.q. This statement is		
a. True	b. False	c. Can't S	ay d. I don't know.	
Qs. 18 :	% p.a.c.m is equivalent to 14	4% p.a.c.q		
a. 18.34%	b. 20%	c. 15.66%	d. 13.84%	
Qs. 19 : Effective r	ate of 28.13% is equivalent	to% p.a.c.f		
a. 26.92%	b. 24.92%	c. 25.13%	d. 22.13%	
Qs. 20 : Effective r	ate of 7.1225% is equivalent	to% p.a.c.half ye	early	
a. 9%	b. 8%	c. 7% d	. 6%	

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	A	11	В
2	A	12	A
3	D	13	A
4	А	14	А
5	В	15	А
6	А	16	С
7	В	17	A
8	А	18	D
9	D	19	В
10	С	20	С

Qs. 1 : Mr. A deposited `10,000 at the end of every year for 5 years. Find amount to be received at the end of 5 years. if money is 12% effective				
a. 61,528	b. `63,528	c. `59,285	d. `35,222	
Qs. 2 : Ms. Richa deposited 2 8 years, if money is 13% effect	22,000 at the end of every	y year for 8 years. Find amo	unt to be received at the end of	
a. 2,11,528	b. `2,33,528	c. `2,80	,660 d. None	
Qs. 3 : Annuity regular and Ar a. True	nuity Due are same. b. False	c. Can't Say	d. I don't know	
Qs. 4 : In annuity regular, the a. True	amount to be paid are d b. False	ifferent for different years c. Can't Say	d. I don't know	
Qs. 5 : In annuity regular, the a. True	time gap between two pa b. False	ayments is same. c. Can't Say	d. I don't know	
Qs. 6 : Mr. Dominic deposited of 2 years. if money is 15% eff	7,000 at the end of eve	ery year for 2 years. Find am	oount to be received at the end	
a. 16,705	b. `15,050	c. 18,800 c	l. `12,580	
Qs. 7 : Mr. A deposited `50,00 15% effective.	00 at the beginning of eac	ch year for 4 years. Find fut	ure value of annuity, if money is	
a. `1,87,219	b. `2,99,290	c.`2,87,119 c	l. `3,05,288	
Qs. 8 : Find future value of an a. 35,68,796	nuity due of `20,000 for 2 b. `20,96,618	25 years @ 12% p.a. c. `26,89,679	d. `29,86,679	
Qs. 9 : Mr. A decided that he i decided to keep some amoun money is 20% effective.	s going to purchase a pal t aside at the end of ever	ace of `500 crores at the erry year. Find the amount he	nd of 50 years from now. He should keep aside every year, if	
a. 10,00,000	b. `10,09,897	c. `1,09,897	d. `6,77,897	
Qs. 10 : Ms. Harsha deposited end of 7 years, if money is 9%	1`35,000 at the end of ev effective.	very year for 7 years. Find a	mount to be received at the	
a. `2,33,015	b. `3,22,015	c. `5,22,3	d. None	
Qs. 11 : In annuity, when amo a. Annuity Regular	ount is paid at the beginn b. Ordinary Annui	ing of every period, it is call ty c. Annuity I	led - Due d. None	
Qs. 12 : Mr. Kailash deposited of 4 years, if money is 18% eff	1`18,000 at the end of ev fective.	very year for 4 years. Find a	mount to be received at the end	
a. `93,878	b.`95,288	c. `96,888	d. `94,000	
Qs. 13 : Mr. A invested 20,00 years, if money is 18% effective	00 at the end of every yea ve	ar for 4 years. Find future va	lue of annuity at the end of 4	
a. `4,01,309	b. `1,04,309	c. `5,02,508	d. `2,05,903	

CA VINOD REDDY

CA FOUNDATION MATHS

DD-5	By CA VINOD REE	DDY	WWW.SWAPNILPATNI.COM
Qs. 14 : Mr. Balchandra will requ amount aside at the end of every effective.	ire of `20,00,000 at the e y year. Find the amount h	end of 5 years from now. I he should keep aside every	He decided to keep some y year, if money is 16%
a. `4,20,819	b.`4,00,000	c. `2,90,819	d. `3,02,229
Qs. 15 : Mr. D deposited 75,000 is 8% effective.) at the beginning of each	year for 5 years. Find fut	ure value of annuity, if money
a. `5,87,219	b.`7,99,290 c	. 4,75,195 d.	6,05,288
Qs. 16 : Mr. A received 2,87,119 money is 15% effective.	9 at the end of 4 th year. F	ind amount he invested a	t the beginning of each year, if
a. `71,780	b.`45,000 c	.`27,119 d.	`50,000
Qs. 17 : Ms. Richa deposited 22 the end of 8 years, if money is 13	,000 at the beginning of 6 3% effective.	every year for 8 years. Fin	d amount to be received at
a. 2,11,528	b. `3,17,146	c. `2,80,6	560 d. None
Qs. 18 : Ms. Piya deposited `42,0 end of 5 years, if money is 7% ef	000 at the beginning of ev fective.	very year for 5 years. Find	amount to be received at the
a. 2,58,438	b. `5,17,156	c. `3,80,5	560 d. None
Qs. 19 : Annuity immediate is the	e amount to be paid		
a. When demanded	b. At the end of the year	c. At the beginning c	of the year d. None
Qs. 20 : You require 32,00,000 a end of every year, if money is 14	at the end of 9 years from % effective.	n now. Find the amount ye	ou should keep aside at the
a. 2,20,819	b. `3,00,000	c. `3,55,556	d. `1,98,939

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	В	11	С
2	С	12	A
3	В	13	В
4	В	14	С
5	А	15	С
6	В	16	D
7	С	17	В
8	D	18	А
9	С	19	С
10	В	20	D

DD-6

By CA VINOD REDDY

Qs. 1 : A loan of `50,000 is to interest is 10%.	be repaid in 5 annual equ	ial instalments. Find amo	unt of instalment, if rate of		
a. `15,180	b. `13,190	c. `19,285	d. `15,222		
Qs. 2 : A loan of `5,00,00,000 interest is 14%.) is to be repaid in 35 annu	ual equal instalments. Fin	d amount of instalment, if rate of		
a. 72,11,528.25	b. `42,33,528.50	c. `70,72,090.5	0 d. None		
Qs. 3 : A loan of 25,000 is to interest is 8%.	be repaid in 2 annual equ	ial instalments. Find amo	unt of instalment, if rate of		
a. `15,029.43	b. `14,019.23	c. `24,109.32	d. None		
Qs. 4 : Mr. Harish took a loan of x, if rate of interest is 12% a. `50,000	of 2,00,000, to be repaid p.a. compound interest. b. 55,486.98	d in 4 annual equal instal c. `69,846.89	ments of `x each. Find the value d. None		
Qs. 5 : Periodic Amount = 42 a. 1,78,510	,500; n = 6 years, r = 11.25 b. `1,99,200	5%, Find the present value c. `2,55,0	e of annuity. 100 d. None		
Qs. 6 : Periodic Amount = 6,6 a. `66,705	24.78; n = 13 years, r = 7.9 b. `52,650	90%, Find the present val c. `62,850	ue of annuity. d. `95,580		
Qs. 7 : Ms. Kiran took a loan of if rate of interest is 17.25% p.	of `25,438 to be repaid in .a.	4 annual equal instalmer	nts of \hat{x} each. Find the value of x,		
a. `7,219.60	b. `9,318.70	c. `8,119.65	d. `5,288.89		
Qs. 8 : Periodic Amount = 2,0 a. 6,68,796)0,000; n = 5 years, r = 109 b. `9,96,618	%, Find the present value c. `10,00,000	of annuity d. `7,58,157		
Qs. 9 : Mr. Anish decided to i	nvest `20,000 at the end o	of each year for 5 years, v	where money can fetch 20%		
a. `1,00,000	b. 20,000	c. `59,812	d. `1,48,832		
Qs. 10 : Mr. Anish decided to interest p.a. Find Future Valu	invest `20,000 at the end e of his investments.	of each year for 5 years,	where money can fetch 20%		
a. 1,00,000	b. `20,000	c. `59,812	d. `1,48,832		
Qs. 11 : Mr. Raj deposited 2 money is 16.25% effective.	,00,000 at the end of ever	y year for 5 years. Find P	resent Value of his investments, if		
a. `10,00,000	b. `9,28,755	c. `6,51,058	d. None		
Qs. 12 : You received a loan of `90,000 to be repaid in 6 equal annual instalments @ 15%. Find the instalment amount you are required to pay each year					
a. 25,878	b. 37,288	c. `23,781	d. `15,000		
Qs. 13 : Ms. Megha invested return is 8.75%.	Qs. 13 : Ms. Megha invested `10,200 at the end of every year for 7 years. Find present value of annuity, if rate of return is 8 75%				
a. `41,309	b. `51,770	c. `52,508	d. `55,903		

CA VINOD REDDY

CA FOUNDATION MATHS

DD-6		By CA VINOD RE	EDDY	WWW.SWAPNI	LPATNI.COM
Qs. 14 : instalm	Mr. Khan requires `35,9 ent amount, if rate of int	900 now. He can repay th rerest is 9.5%.	ne amount in 8 equal ann	ual instalments. Find	d the
a.	6,607.24	b. 4,200.22	c. 7,908.19	d. `3,022.2	29
Qs. 15 : deposit	Mr. Kartik deposited 7 ed, if money is 20% effe	5,000 at the end of each ctive.	year for 13 years. Find th	ne present value of a	amount
a.	5,87,219	b. `7,99,290	c. `3,39,951	d. `6,05,288	
Qs. 16 I a.	Periodic Amount = 16,72 `78,510	5; n = 9 years, r = 14.50% b. `99,200	6, Find the present value c. `81,245	of annuity. d. None	
Qs. 17 :	: Periodic Amount = 5,00	,000; n = 3 years, r = 12.	50%, Find the present val	lue of annuity.	
a.	11,78,510	b. 11,90,672	c. 12,5	5,766 d.	None
Qs. 18 : if rate c	: Ms. Riya invested `5,00 of interest is 12%.	,000 at the end of every	year for 5 years. Find Pre	esent value of amour	nt invested,
a.	21,58,438	b. `20,17,156	c. `1	18,02,388	d. None
Qs. 19 : value o a.	Mr. Naman took a loan f x, if rate of interest is 1 8,58,438	of `49,25,000, to be rep 3.65% p.a. compound in b. `7,58,406	aid in 17 yearly equal ins terest. c. `9,0	talments of `x each. 2,388 d.	Find the None
Qs. 20 : instalm	: Ms. Simran requires `5; ent amount. if rate of int	2,650 now. He can repay rerest is 7.90%.	the amount in 13 equal	annual instalments.	Find the
a.	3,819.29	b.`5,264.87	c.`5,556.56	d. `6,624.7	78

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	В	11	С
2	С	12	С
3	В	13	В
4	D	14	А
5	А	15	С
6	В	16	С
7	В	17	В
8	D	18	С
9	С	19	В
10	D	20	D

Qs. 1 : A loan of `50,00, a. `94,180.66	000 is to be repaid in b. `99,190	90 EMIs. Find EMI).32	amount, if rate of c. `95,285.87	interest is 15%.p.a.c.m. d. `92,857.30	
Qs. 2 : What sum of mor a. 3,94,000	ney will produce `28, b. `3,25,000	500 interest in 3 ye c. `3,52	eras & 3 months @ ,000 d.	2.5%p.a.simple interest. None	
Qs. 3 : A loan of `20,00,	000 is to be repaid in	19 annual equal ir	stalments. Find an	nount of instalment, if rate of	:
a. 3,52,999	b. `2,3!	5,147	c.`3,25,846	d. None	
Qs. 4 : In what time will a. 99 years	` 85,000 amount to ` b. 29 yea	1,57,675, rate of i rs	nterest being 4.5% c. 19 years	óp.a. simple interest. d. 9 years	
Qs. 5 : Find the amount a. `8,024	of `5,000 @12% p.a. b. `6,235	in 4 years compou	nded quarterly. c. `5,000	d. None	
Qs. 6 : A person sets up education. How much annually.	a sinking fund in orde mount should be set a	r to have `1,00,00 aside bi-annually in	0 after 10 years fo nto an account pay	r his children's college ing 5%p.a. compounded sem	i-
a. 3,705.67	b. `3,914.71	c. `3,8!	52.33 d	.`3,194.17	
Qs. 7 : How much should annually.	d be invested @5% p.	a. so that after 4 y	ears it amounts to	2,000. Interest is compound	ded
a. `1,645	b. `1,564	c. `1,639	d. `1,555		
Qs. 8 : How much should guarterly.	d be invested @5% p.	a. so that after 4 y	ears it amounts to	2,000. Interest is compound	ded
a. 1,645	b.`1,564	c.`1,639	d. `1,555		
Qs. 9 : Find compound in a. 214	nterest of `5,000 for 1 b. `412	. year @ 8%p.a.c.c c. `142	l. d	. 124	
Qs. 10 : Compound inter	rest on a certain sum	for 2 years @ 10%	p.a. is `2,100. Sim	ple interest on the same at th	e
a. 2,000	be - b. `4,000	с. `	5,000	d. `6,000	
Qs. 11 : Out of certain su and simple interest from	um 1/3 rd is invested at all these investment	t 3%, 1/6 th is inves s is `600, the origi	ted @ 6% and the nal sum is -	rest at 8% is invested for 2 ye	ars
a. 3,500	b. 4,000	С.	5,000	d. 4,500	
Qs. 12 : Three years bac cleared, the bank is payi a. 3,000	k, a sum of money wa ng the sum of `6,800 b. `6,000	s remitted in bank . The sum originall c.	@ 12%p.a.simpey invested was.7,000	interest. The accounts are no d. `5,000	w
Qs. 13 : An overdraft of	50,000 is to be paid	back in equal annu	ual instalments ove	er a period of 4 years. Find the	е
a. 14,309	b. 15,774	c. 25,5	08	d. `28,903	
Qs. 14 : Population of a a. 13,310	village is 10,000. If it i b. 14.220	ncreases at 10% p c. 17,908.3	.a. what will be its 19	population after 3 years. d.13,000	
CA VINOD REDDY	CA	FOUNDATION MA	THS	WWW.SWAPNILPATNI.C	СОМ

WWW.SWAPNILPATNI.COM

DD-7

DD-7		By CA VINOD REE	DDY	WWW.SWAPNILPATN	I.COM
Qs. 15 is	: On a certain sum simple	interest at the end of 6.2	25 years becomes 3/8 th c	f the sum. The rate of inte	rest
а.	7%	b. 9%	c.5%	d. 6%	
Qs. 16 `3,100	The amount of certain su in 5 years. The rate of inf	m of money with simple in rerest is	nterest at certain rate of	interest is `2,660 in 3 yea	rs &
a.	12%	b. 11%	c.13%	d. 10%	
Qs. 17 triple it	: A sum of money double tself is	s itself in 10 years @ simp	le interest. The number	of years it would require t	0
a.	10 years	b. 15 years	c. 20 years	d. 25 years	
Qs. 18 a.	: At what rate of interest 12.75%	(compound interest) mon b. 11.22%	ey will become 8 times c.10.96%	in 20 years? d.	None
Qs. 19	: At what rate of interest	(simple interest) money v	vill become 8 times in 20) years?	
a.	55%	0.40%		. None	
Qs. 20 a.	: In what time `1,00,000 77 years	will become `8,00,000, if b. 7 years	the rate of interest is 10 c. 70 years	% p.a. simple interest d. 17 years	

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	D	11	С
2	С	12	D
3	В	13	В
4	С	14	A
5	А	15	D
6	В	16	В
7	A	17	С
8	С	18	С
9	В	19	A
10	A	20	С

WWW.SWAPNILPATNI.COM

Qs. 1: Nominal rate of Interest 9.9% p.a. If Interest is compounded monthly. What will be the effective rate of Interest? (a) 10.36 % (b) 9.36% (d)9.9 % (c)11.36% Qs. 2 : The difference between compound and simple interest at 5% per annum for 4 years on 20,000 is-(a) 250 (b) 277 (c) 300 (d) 310 Qs. 3. The compound interest on half-yearly rests on 10,000 the rate for the first and second years being 6% and for the third year 9% p.a. is (c) 2,265 (a) 2,200 (b) 2,277 (d) None Qs. 4. The present value of 10,000 due in 2 years at 5% p.a. compound interest when the interest is paid on yearly basis is (b) 9,000 (c) <u>9,061</u> (a) 9,070 (d) None Qs. 5. The present value of 10,000 due in 2 years at 5% p.a. compound interest when the interest is paid on halfyearly basis is _____ (b) 9,069 (c) 9,060 (a) 9,070 (d) None Qs. 6. In how many years will a sum of money double at 5% p.a. compound interest? (a) 15.3 years (b) 14.2 years (c) 14.6 years (d) 15.2 years Qs. 7. In how many years a sum of money trebles at 5% p.a. compound interest payable on half-yearly basis? (a) 18 years 7 months (b) 19 years 6 months (c) 20 years 8 months (d) 22 years 3 months Qs. 8. A machine can be purchased for 50000. Machine will contribute 12000 per year for the next five years. Assume borrowing cost is 10% per annum compounded annually. Determine whether machine should be purchased or not. (a) Purchased (b) Not purchased (c) It doesn't make any difference (d) None Qs. 9. Find amount to be received, if principal is 60,000 is invested @ 13%p.a. simple interest for 8 years a. 1,25,600 d. 1,45,500 b. 1,22,400 c. 2,24,400 Qs. 10. A loan of 50,000 is to be repaid in 7 annual equal instalments. Find amount of instalment, if rate of interest is 18.25%. (a) 11,311 (b) 12,411 (c) 13,211 (d) None Qs. 11. Alibaba borrows 6 lakhs Housing Loan at 6% repayable in 20 annual instalments commencing at the end of the first year. How much annual payment is necessary. (a) 52,420 (b) 52,419 (d) 52,320 (c) 52,311 Qs. 12. A sinking fund is created for redeming debentures worth 5 lakhs at the end of 25 years. How much provision needs to be made out of profits each year provided sinking fund investments can earn interest at 4%p.a.? (a) 12,006 (b) 12,040 (c) 12,039 (d) 12,035 Qs. 13. A machine costs 5,20,000 with an estimated life of 25 years. A sinking fund is created to replace it by a new model at 25% higher cost after 25 years with a scrap value realization of 25000. what amount should be set aside every year if the sinking fund investments accumulate at 3.5% compound interest p.a.? (a) 16,000 (b) 16,564 (c) 16,046 (d) 16,005 CA VINOD REDDY CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-8	By CA \	INOD REDDY	WWW.SWA	PNILPATNI.COM		
14. Raja aged 40 wishes and he starts making ec he invest annually?	s his wife Rani to have [`] 4 qual annual investments	10 lakhs at his death. If commencing now at 39	his expectation of life is an % compound interest p.a. h	other 30 years now much should		
(a) ^{84,448}	(b) `84,450	(c) `84,449	(d) `84,077			
Qs. 15. Appu retires at (life after reckoning his l single sum is equivalent	60 years receiving a pens ife expectation to be 13 t to his pension?	sion of `14,400 a year p years and that interest	paid in half-yearly instalme at 4% p.a. is payable half-y	nts for rest of his yearly. What		
(a) 1,45,800	(b) `1,44,871	(c) `1,44,850	(d) `1,44,781			
Qs. 16. Johnson left 1, Dick and Harry aged 9, 1 interest being 3.5%, how	Qs. 16. Johnson left `1,00,000 with the direction that it should be divided in such a way that his minor sons Tom, Dick and Harry aged 9, 12 and 15 years should each receive equally after attaining the age 25 years. The rate of interest being 3.5%, how much each son receive after getting 25 years old?					
(a) 50,000	(b) 51,947	(c) 5	2,000	(d) None		
Qs. 17. The time in whic compounded interest c	ch a sum of money will b ompounded annually ap	e doubled at 6% compo proximately.	ound interest compounded	l interest		
(a) 10 years	(b) 12 years	(c)13 years	(d) 14 years			
Qs. 18. The Future Value of an annuity of `150 for 12 years at 3.5% p.a C.I is						
(a) 2,190.29	(b) 1,290.29	(c) 2,180.29	(d) none of these			
Qs. 19. Find simple inte	rest for an investment o	f`4,00,000@5%p.a.fo	or 4 years			
a. `90,000	b. `80,000	c. `25,000	d. `20,000			
Qs. 20. Find amount of	investment, if simple int	erest received is `8,00) @ 3%p.a. for 2 years			
b. `1,25,667	b. `1,33,333	c. `2,33,333	d. `1,45,667			

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	A	11	С
2	D	12	A
3	D	13	С
4	A	14	D
5	С	15	В
6	В	16	В
7	D	17	В
8	В	18	А
9	В	19	В
10	С	20	В

WWW.SWAPNILPATNI.COM

Qs. 1 : A sinking fund is t amount to be kept aside	to be created for reperted for reperted to the created for reperted to the created for the cre	placement of machi	nery of `50,00,0	00 at the end of !	50 years. Find
a. `479	b. 580		c. `870	d. None	2
Qs. 2 : A sum of money a. 3,000; 30.75%	amounts to `6,200 i b. `3,500; 2	n 2 years & `7,400 29.55%	in 3 years in sim c. `3,800; 31.5	ole interest. Find 7%	P and r. d. None
Qs. 3 : Calculate simple i a. 14,640	interest for `40,000 b. `12,540	@5.7% for 66 mon c. `15,	ths 240	d. `11,240	
Qs. 4 : Find rate of intera a. 15.27%	est at which a sum o b. 12.47%	of money trebles its c. 17.2	elf in 8 years wit 5%	h compound inte d, 14.72%	rest.
Qs. 5 : A company wants amount to $10,00,000$ in a $65,984$	s to set aside a certa n 10 years at 12%p.a h	ain sum at the end c a. Find the sum to b 85 694	f each year to cr e set aside every د 56	eate a sinking fui year. 984	nd. If it should d. None
	vod house noving `7	0.000 each down ar	d`4 000 at the		tor 25 years
5%p.a. compound intere	est. The cash down	orice is –	10 4,000 at the	end of every year	TOT 25 years @
a. 67,376	b. 76,376	c, 37,676	d. Non	e	
Qs. 7 : A sum of money of years?	doubles itself in 20	ears by simple inte	rest. How many	times it will beco	me after 120
a. 6 times	b. 7 times	c. 14 times	d. Non	e	
Qs. 8 : A machine with u costs `8,000. The first m Determine which machi a. Machine 1	iseful life of 7 years nachine saves labou ne should be purcha b. Machine	costs 10,000 while r expenses of 1,90 ased assuming borro 2 c. Bot	another machir Dannually and se Dwing cost is 10% h d. Non	e with a useful li econd one saves p.a.c.a. e	fe of 5 years `2,200 annually.
Qs. 9 : P = `89,000, A = ` a. 36.29 years	89,00,000, r = 16% b. 62.39 years	o.a.c.q. Find n. c. 29.36 years	d. Non	e	
Qs. 10 : : Population of a a. 93,310	a village is 1,00,000. b. 94.220	If it decreases at 59 c. 90,250	6 p.a. what will b	e its population a d.93,000	after 2 years.
Qs. 11 : : Population of a a. 9%	a village is 10,250 af b. 8%	ter 2 years & 11,07(c. 10%) after 3 years. V d.7%	/hat is the rate of	f increase p.a.?
Qs. 12 : Find the present a. `64,925	t value of annuity, il b.	periodical amount 46,295	of `5,000 invest c. `46,925	ed for 12 years @ c. `49,6	04%p.a. 625
Qs. 13 : Find the present a. `0.89	t value of `1 to be r b. `0.79	eceived after 2 year c. `0.73	s @ 10% p.a.c.a d. `0.83		
Qs. 14 : A sum of money	v doubles itself at co	mpound interest in	5 years, in how	many years it wil	l become 32
a. 20 years	b. 15 years	c. 25 y	ears	d. None	
CA VINOD REDDY	C	A FOUNDATION MA	THS	WWW.SV	VAPNILPATNI.COM

DD-9

DD-9		Βγ ϹΑ \	/INOD REDDY	WWW.SWAPNILPATNI.COM
Qs. 15 : a.	Find effective ra 20%	ate of interest if interest b. 5%	= `1,800, Principal = `1; c. 15%	8,000 and no. Of years is 1 year. d. 10%
Qs. 16 : much m	Sinking fund is t noney should be	to be created for a mach provided out of profits e	inery replacement for ` each year @ 4%p.a.	1,00,000 at the end of 25 years. How
a.	2,401	b. ` 4,201	c.`3,401	d. `5,201
Qs. 17 : years.	A sum of mone	y triples itself at compou	und interest in 9 years. H	low many times it will become after 81
, а.	27 times	b. 6,561 time	c. 81 times	d. 19,683 times
Qs. 18 : a.	If principal = `6 1.926%	0,000, n = 2 years, simpl b. 2.916%	e interest = 3,500, find t c. 6.291%	he rate of interest. d. 9.216%
Qs. 19 :	Calculate simple	e interest for `60,000 @	3% for 25 months	
a.	`4,250	b. `7,550	c. `3,750	d. `1,240
Qs. 20 : a.	P = `1,60,000, S 1.5 years	Simple Interest = `5,000 b. 1.04 years	, r = 3%p.a. Find n. c. 2.40 years	d. 4.01 years

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	A	11	В
2	С	12	С
3	В	13	D
4	D	14	С
5	С	15	D
6	В	16	А
7	В	17	D
8	В	18	В
9	С	19	С
10	С	20	В

Answers : DD-9

CA VINOD REDDY

CA FOUNDATION MATHS

DD-10

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

(From Qs. 1 to 5)Is the Qs. 1 : 11,17,23,29,35	following series h G.P	in A.P or G.P	c I	Both	d None
u. / u.	5.6.1		0.1	5011	u. Hone
Qs. 2 : 5,25,125,625,31 a. A.P	25 b.G.P		c. I	Both	d. None
Qs. 3 : 5,55,555,5555	h G P		c I	Both	d None
u. A.i	0.0.1		0.1	Join	u. None
Qs. 4 : 5,5,5,5,5,5,5 a. A.P	b.G.P		c. f	Both	d. None
	OF				
a. A.P	b.G.P		c. I	Both	d. None
Os 6 · What is the com	mon difference	in the series '	1 50 1 57 1 64	1 71 1 78	
a. 0.07	b. 0.14	c. 0.7	d. None	, 1.71, 1.78	
	010121		diffence		
Qs. 7 : Find r in the seri	es – 4, 4 ³ , 4 ⁵ , 4 ⁷	, 4 ⁹			
a. 4	b. 4 ²	c. 4 ³	d. None		
Qs. 8 : (5x+2), (7x+9), (8	3x-13) are in A.P	P, Find x			
a29	b. 29	c. 13	d. None		
Qs. 9 : (/t-31), (11t+39)	, (13f+55) are ir	A.P. Find f.	d Nono		
d. 27	D27	C. 2.7	u. None		
Os. 10 : 88.93.98.103	are in A.P fin	nd t ₃₆			
a. 263	b. 632	c. 362	2	d.108	
Qs. 11 : 100,97,94,91	are in A.P f	find t ₈₁			
a. 140	b. 1.40	c14	0	d1.40	
Qs. 12 : 88,93,98,103	are in A.P fin	d t ₂₀₀			
a. 1038	b. 1083	c. 3	3081	d. 3018	
0. 12 . 100 07 04 01		Sin al 4			
QS. 13 : 100,97,94,91	dre in A.P i b _10	nnu t ₂₈		d 01	
a. 19	D19	C91		u. 91	
Os. 14 : 100.97.94.91	are in A.P f	find t ₂₁₅			
a452	b. 452	c. 542		d542	
Qs. 15 : 100,97,94,91	are in A.P f	find t ₂₁₅₅			
a4528	b6362	C	-5425	d5420	
	·				
Qs. 16 : For A.P t ₅₃ = 81	9/ and $t_{68} = 921$./, Find t ₂₀₀	100	1 40400	
a18193	b. 18193	c. 19	9183	a19183	

CA VINOD REDDY

CA FOUNDATION MATHS

DD-10		By CA VINOD REDDY	WWW.SWAPNILPATNI.CC	M
Qs. 17 : For A.P t₅₃ = 81 a5273	97 and t ₆₈ = 9217 b. 4661	, Find t ₁₀ c4661	d. 5273	
Qs. 18 : For A.P t ₅₃ = 81 a5273	97 and t ₆₈ = 9217 b. 4661	, Find t1 c4661	d. 5273	
Qs. 19 : For A.P t ₁₂₃ = 5 a. True	0,813, T ₁₃₇ = 53,44 b. False	15, value of "a" and "t ₁ c. Partly False	" are the same. This statement is - d. Can't Say	
Qs. 20 : For A.P t ₁₂₃ = 5 a. 1,21,689	0,813, T ₁₃₇ = 53,44 b. 1,29,569	15, Find t₅00 c. 2,65,289	d. 1,65,289	

WWW.SWAPNILPATNI.COM

DD-10

Qs.	Answer	Qs.	Answer
1	A	11	С
2	В	12	В
3	D	13	A
4	С	14	D
5	A	15	В
6	A	16	В
7	В	17	D
8	A	18	В
9	В	19	A
10	A	20	A

Answers : DD-10

CA VINOD REDDY

CA FOUNDATION MATHS

DD-11

By CA VINOD REDDY

Qs. 1 : This series - 11, a. True	22,44,88,166 is ir b. False	n Geometric Pro	gression . c. Partly True	d. None
Qs. 2 : For G.P - 5,25,1 a. 5	25,625,3125, find b. 20	r	c. 25	d. None
Qs. 3 : For A.P find n th a. 2n + 9	term for 11,13,15, b. 2n +	,17,19,21, 7	c. 2n - 9	d. 2n - 7
Qs. 4 : 10,10,10,10,10,	,10, find nth term b. 0	for this A.P	c. 100	d. None
Qs. 5 : Find d for A.P : a. 2p	р,2р,3р,4р,5р,6р b. р		c. p/2	d. None
Qs. 6 : What is the cor	nmon difference i	n the series 2+>	<pre><, 4+x, 6+x, 8+x, 10+x</pre>	
a. 2+x	D. X	c. 2	a. None	
Qs. 7 : Find the 11 th te a. 11	rm for the series 1 b. 1	.,2,3,4,5 c. 10	d. None	
Qs. 8 : (2x-8), (4x-16), a. 1.10	(5x-14) are in A.P, b. 10	Find x c1.0	d. None	
Qs. 9 : Find t ₂₃₆ for A.P a. 736	. 34,37,40,43,46,4 b. 733	9 c. 739	d. None	
Qs. 10 : 95,100,105,11 a. 225	.0 are in A.P fi b. 235	nd t ₂₇ c. 252	d.257	
Qs. 11 : For A.P t ₁₂₃ = 5 a. 29,569	50,813, t ₁₃₇ = 53,44 b. 59,269	15. Find t ₁₀ c. 2	21,569	d.31,659
Qs. 12 : For A.P t ₈ = 28	8; t ₁₁ = 58. Find t ₁			
a. 42	b. 10	c42	d10	
Qs. 13 : For A.P t ₁₀₀ = a4541.6875	-3298; t ₁₀₇ = -3210 b42	0625. Find t ₂ 59.125	c4529.125	d3900.1350
Qs. 14 : For A.P find t ₂ a2.5	₁₅ = 545; t ₂₀₀ = 507. b. 2.5	50. Find the cor c7.50	nmon difference. d.7.55	0
Qs. 15 : t ₁ = 27; t39 = 3 a. 12	87. Find common o b. 1.2222	difference. c. 0.277	77 d.:	1.2777
Qs. 16 : For A.P, comm a. 1920	non difference is 5 b. 1290	, t ₂₆₁ = 2600. Fin c. 1300	nd t ₁₂₅) d. None	
Qs. 17 : For A.P t ₁ = 81 a. 12,277	.97 and t ₂ = 9217, b. 17,722	Find t₅ c. 12,7	77 d. 13	,297
CA VINOD REDDY		CA FOUNDAT	ION MATHS	WWW.SWAPNILPATNI.COM
DD-11	Ву СА	VINOD REDDY	WWW.SWAPNILPATNI.COM	
---------------------------------------	---	-------------------------------------	----------------------	---
Qs. 18 : Find n th term fo	or A.P, if t ₂ = 35; t ₅ = 62			
a. 9n + 17	b. 17n - 9	c. 9n - 17	d. 17n + 9	
Qs. 19 : Find 5 th term fo	or A.P if a = 26; d = -1.5			
a. 21.50	b. 20 c. 32	d. 30.50		
Qs. 20 : Find the differe	ence between 1 st and 20	th term of A.P 1,3,5,7,9		
a. 38	b. 37	c. 39	d. 4	0

CA FOUNDATION MATHS

WWW.SWAPNILPATNI.COM

DD-11

Qs.	Answer	Qs.	Answer
1	В	11	А
2	A	12	С
3	A	13	С
4	A	14	В
5	В	15	С
6	С	16	A
7	A	17	A
8	В	18	A
9	С	19	В
10	A	20	А

Answers : DD-11

CA VINOD REDDY

CA FOUNDATION MATHS

By CA VINOD REDDY

Qs. 1 : For A.P, if t ₃₉₅₈ = a2,35,475	2956, t ₃₉₇₉ = 469 b. 2,35	99, Find t ₁ 5,475	c3,25,475	d. None	
Qs. 2 : For A.P, if t ₃₉₅₈ = a83	2956, t ₃₉₇₉ = 469 b. 83	99, Find commor c. 98	n difference d. None		
Qs. 3 : Sum of first 20 r a. 55	natural numbers b. 210	is -	c. 120	d. 420	
Qs. 4 : Sum of first 13 r a. 130	natural numbers b. 91	is -	c. 182	d. None	
Qs. 5 : Sum of squares a. 204	of first 8 natural b. 408	numbers is -	c. 402	d. None	
Qs. 6 : What is the com a. 1+x	nmon difference b. x	in the series 5+: c. 1	x, 6+x, 7+x, 8+x, 9+> d. None	(
Qs. 7 : Sum of cubes of a. 4653	first 11 natural b. 4356	numbers is- c. 4563	d. None		
Qs. 8 : Sum of first 20 c a. 400	odd natural num b. 1521	bers is - c. 4000	d. None		
Qs. 9 : Sum of 1+3+5+7 a. 400	/++39 = b. 1521	c. 4000	d. None		
Qs. 10 : 101+105+109+ a. 4.17.89.44.106	-113+117++1,	82,841			
) I	o. 4,88,89,44,106	б с. 4,9	99,89,44,106	d.None
Qs. 11 : 88+92+96+100 a. 29,39,388)++4848 b. 59,3	o. 4,88,89,44,106 39,388	б с. 4,9 с. 21,39,388	d. None	d.None
Qs. 11 : 88+92+96+100 a. 29,39,388 Qs. 12 : 55+63+71+79+ a. 12,47,945)++4848 b. 59,3 Find S ₅₆₁ b. 14,	o. 4,88,89,44,106 39,388 75,945	б с. 4,9 с. 21,39,388 с. 12,87,495	d. None d. None	d.None
Qs. 11 : 88+92+96+100 a. 29,39,388 Qs. 12 : 55+63+71+79+ a. 12,47,945 Qs. 13 : For A.P t ₈₀ = 53 a. 23,11,450	9)++4848 b. 59,3 Find S ₅₆₁ b. 14, 361, t ₉₀ =5486, Fir b. 14,7	o. 4,88,89,44,106 39,388 75,945 nd S ₂₀₀ 25,690	5 c. 4,9 c. 21,39,388 c. 12,87,495 c. 15,45,295	d. None d. None d. None d. 11,23,450	d.None
Qs. 11 : 88+92+96+100 a. 29,39,388 Qs. 12 : 55+63+71+79+ a. 12,47,945 Qs. 13 : For A.P $t_{80} = 53$ a. 23,11,450 Qs. 14 : For AP, t_{10} =80; a5.17	9 9 9 9 9 9 9 9 9 9 9 9 9 9	o. 4,88,89,44,106 39,388 75,945 nd S ₂₀₀ 25,690 a. c7.5	5 c. 4,9 c. 21,39,388 c. 12,87,495 c. 15,45,295 1	d. None d. None d. 11,23,450 d7.15	d.None
Qs. 11 : 88+92+96+100 a. 29,39,388 Qs. 12 : 55+63+71+79+ a. 12,47,945 Qs. 13 : For A.P $t_{80} = 53$ a. 23,11,450 Qs. 14 : For AP, t_{10} =80; a5.17 Qs. 15 : 1+3+5+7+9 is a. 81	9 9 9 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2	o. 4,88,89,44,106 39,388 75,945 nd S ₂₀₀ 25,690 a. c. 5	5 c. 4,9 c. 21,39,388 c. 12,87,495 c. 15,45,295 1 d. 25	d. None d. None d. 11,23,450 d7.15	d.None
Qs. 11 : 88+92+96+100 a. 29,39,388 Qs. 12 : 55+63+71+79+ a. 12,47,945 Qs. 13 : For A.P $t_{80} = 53$ a. 23,11,450 Qs. 14 : For AP, t_{10} =80; a5.17 Qs. 15 : 1+3+5+7+9 is a. 81 Qs. 16. 1+3+5+7++2 a. 121)++4848 b. 59,3 Find S ₅₆₁ b. 14, 361, t ₉₀ =5486, Fir b. 14,2 $S_{12} = 560$; Find a b5.71 b. 9 21 is b. 441	o. 4,88,89,44,106 39,388 75,945 nd S ₂₀₀ 25,690 a. c7.5 c. 5 c. 370	5 c. 4,9 c. 21,39,388 c. 12,87,495 c. 15,45,295 1 d. 25 d. 444	d. None d. None d. 11,23,450 d7.15	d.None
Qs. 11 : 88+92+96+100 a. 29,39,388 Qs. 12 : 55+63+71+79+ a. 12,47,945 Qs. 13 : For A.P $t_{80} = 53$ a. 23,11,450 Qs. 14 : For AP, $t_{10}=80$; a5.17 Qs. 15 : 1+3+5+7+9 is a. 81 Qs. 16. 1+3+5+7++2 a. 121 Qs. 17. Sum of first 30 a. 930	9+4848 b. 59,3 Find S ₅₆₁ b. 14, 361, t ₉₀ =5486, Fir b. 14,2 $S_{12} = 560$; Find a b5.71 b. 9 21 is b. 441 even numbers is b. 900	5. 4,88,89,44,106 39,388 75,945 nd S ₂₀₀ 25,690 a. c. 5 c. 5 c. 370 ; c. 225	5 c. 4,9 c. 21,39,388 c. 12,87,495 c. 15,45,295 1 d. 25 d. 444 d. 240	d. None d. None d. 11,23,450 d7.15	d.None

DD-12		By CA VINOD REDDY		WWW.SWAPNILPATNI.COM	
Qs. 18. 2+4+6+8+ a. 930	+30 is b. 900	c. 255	d. 240		
Qs. 19. 59+63+67+71+ a. 1081	75+107 is b. 1079	c. 1907	d. 1801		
Qs. 20. If t _n for A.P. is 8 a. 7n ² +7n	3n+3. Find S _n b. 7n²+4n	c. 4n²-	⊦7n	d. 2n²+7n	

А

WWW.SWAPNILPATNI.COM

С

Answer Qs. Qs. Answer С 11 А 1 2 В 12 С В D 3 13 В 4 14 В 5 А 15 D 6 С 16 А 7 В 17 А 8 А 18 D 9 А 19 В

20

Answers : DD-12

10

By CA VINOD REDDY

Qs. 1 : 11 ³ +12 ³ +13 ³ ++55 a. 22,35,475	³ b. 23,68,575	c. 33,25	5,475	d. None
Qs. 2 : 545+546+547++9 a. 4,30,426	88 b. 3,83,4	46	c. 3,40,326	d. None
Qs. 3 : t ₅ = 89; t ₈ = 69 for A.P a. 15,341	P. find S ₈₈ b15,341		c. 12,351	d12,351
Qs. 4 : In A.P. ,if t _n = 6n-11, f a. 3n ² -8n	ind S _n b. 8n²-3n		c. 8n²-8n	d. None
Qs. 5 : Sum of cubes of first a a. 1204	8 natural numbers is b. 1408	-	c. 1296	d. None
Qs. 6 : If S _n for A.P is 15n ² -9r a. 24n-30	n, Find t _n b. 30n-24		c. 6n-30	d. None
Qs. 7 : If S _n for A.P is 15n ² -9r a. 6 b. 9	n, Find t1 c. 15	d. None	2	
Qs. 8 : If S _n for A.P is 5n ² -16r a. 5n-16	n, Find t _n b. 21n-10		c. 16n-5	d. None
Qs. 9 : If S _n for A.P is 5n ² -16r a. 169	n, Find t ₂₀ b. 179	c. 159		d. None
Qs. 10 : If S_n for A.P is $5n^2$ -16 a. 169	5n, Find t ₂₈ b. 229	c. 259		d. None
Qs. 11 : If t_n for A.P. is 6n-6. a. $3n^2-8n$	Find S _n b. 3n ² -3n		c. 8n²-3n	d. None
Qs. 12 : For A.P. if t ₁ = 11, cor a. 11n+2	mmon difference is 2, b. 2n+11	, Find t _n c. 2n+9	d.	None
Qs. 13 : 101 ³ +102 ³ +103 ³ + a. 3,23,11,450	. +123 ³ b. 3,26,53,376	с	. 3,15,45,295	d. 5,11,23,450
Qs. 14 If S _n for A.P is n ² -10n; a. 2n+11	find t _n . b. 11n+2	c. 11n-2	d.	2n-11
Qs. 15 : If S _n for A.P is n ² -10r a. 95 b. 5	n; find t ₃₅ . 59	d. 35		
Qs. 16. If 9 th term of A.P is 4 a. Infinity b. (0 and 40 th term is 9. I D c. 49	Find 49 th term d49		
Qs. 17. For A.P. t ₈₅ = 15, t ₁₅ = a. 0 b. I	85. Find t ₁₀₀	c. 100	d100	
CA VINOD REDDY	CA FOL	JNDATION MA	ГНЅ	WWW.SWAPNILPATNI.COM

By CA VINOD REDDY

-27
0
0

CA VINOD REDDY

CA FOUNDATION MATHS

WWW.SWAPNILPATNI.COM

DD-13

Answers : DD-13

Qs.	Answer	Qs.	Answer
1	В	11	В
2	С	12	С
3	В	13	В
4	А	14	D
5	С	15	В
6	В	16	В
7	А	17	А
8	D	18	D
9	В	19	A
10	С	20	D

By CA VINOD REDDY

Qs. 1 : If 10 th term of AP	is 20 and 20 th term	is 10 then 3	0 th term is		
a. Zero	b. 30	c. 45	d. No	one	
Qs. 2 : For A.P. If 13 x t ₁₃	= 30 x t_{30} then t_{43} =	?			
a. 43	b. 48	c1	d. No	one	
Qs. 3 : If S ₃₀ = S ₄₀ for A.P.	then S ₇₀ = ?				
a. Zero	b. 110		c110	d. Non	е
Qs. 4 : If p times of p th to	erm is q times of q th	term for A.	P. then (p+q) th	¹ for A.P. is	5
a. Zero	bq		c. (p+q)	d. Non	e
Qs. 5 : For A.P. fifth terr	m is 50 and and 50 th	term is 5 tl	hen 60 th term i	is -	
a5	b. Zero		c. 55		d.65
Os 6 · Insert 2 A means	hetween 2 and 8				
a. 4,6	b. 2.50,5.00)	c. 4,	16	d. None
O_{5} , $7 \cdot 1 f_{2}$ b c d o f g b a	rain A B than				
a. b-a = c-a	b. b-a = h-g	c. ab=	cd	d. Non	e
Qs. 8 : If a,b,c,d,e,f,g,h a	re in A.P. then a,c,e, b. G.P.	g are in	c. H.P.	d. Non	P
u	2				-
Qs. 9 : If a,b,c,d,e,f,g,h a	re in A.P. then c-a =	e-c	e Can't Say		d. Out of cullabus
a. True	D. Faise		C. Call L Say		a. Out of synabus
Qs. 10 : if Log a, Log b, L	og c are in AP then a	a,b,c are in			
a. A.P.	b. G.P.		c. H.P.		d. None
Qs. 11 : 10 + 9.66666666	56 + 9.33333333 +9.	=00	155 then n =?		
a. 30	b. 31		c. Option a o	r b	d. Can't Say
Qs. 12 : 5 A.means betw	een 20 and 200 are				
a. 50,80,110,145,1	70 b. 40,60,80	,100,120	c. 50,80,110,	,140,170	d. None
Os. 13 : What is AM of 5	0 and 110				
a. 75	b. 160		c. 40		d. 80
Os 14 In Progression 5	15 15 125 what is t.	_			
a. 98555	b. 98,514	0	c. 98,415		d. None of these
a. 13,26,800	b. 13,25,900 b.) 2	c. 98,415		d. 13,28,600
	, -,		, -		
Qs. 16. n th element of se	quence 1,3,5,7 is		c 2n-1		d None of these
u. 11	5. 11 1		0.2111		d. None of these
Qs. 17. n th element of se	quence 11,17,23,29	is	-0		_
a. U	D. 2N+9U	C. 6N+5	50	a. 6n+5	
	C				
CA VINOD KEDDY					

DD-14	By CA VINOD REDDY		
Qs. 18. 1+3+5+7+9+511 =? a. 2,61,121 b. 1,31,072	c. 65,536	d. None	
Qs. 19. Insert 5 Geometric means betw a. 30,90,270,810,2430 c. 30,300,900,2700,8100	veen 10 and 7290 b. 20,40,80,160,320 d. None		
Qs. 20. 1000,800,640,512Find S ₁₁ a. 4511 b. 4577.10	c.4570.50	d. 0	

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	A	11	С
2	D	12	С
3	A	13	D
4	A	14	С
5	A	15	D
6	A	16	С
7	В	17	D
8	A	18	С
9	A	19	A
10	В	20	С

Answers : DD-14

CA VINOD REDDY

CA FOUNDATION MATHS

By CA VINOD REDDY

Qs. 1 : Find 7 th term of <i>I</i> a10	А.Р. 8,5,2,-1 b. 10	c13	d. None	
Qs. 2 : If a,b,c,d,e,f,g,h,i a. 2r	j are in GP and commo, b. 100	n ratio is 10 tl c.20	nen for GP a,c,e,g, d. None	i common ratio will be
Qs. 3 : : If a,b,c,d,e,f,g,h a. 625	i,j are in AP and comm, b. 25	on difference c. 200	is 25 then for AP a d. 50	,c,e,g,i common difference will be
Qs. 4 : If a,b,c,d,e,f,g,h,i a. (b-a)	,j are in AP then (e-c) = b. (d-c)	? c. (j	-h) d. Noi	ne
Qs. 5 : If a, b, c, d are in a. True	GP then a ² , b ² , c ² , d ² ard b. False	e also in GP- c. N	lay be true	d. Can't Say
Qs. 6 : If x , y, z , p , q ar a. True	e In GP then z is GM of b. False	x and q c. N	lay be true	d. Can't Say
Qs. 7 : Sum of First 'n' n a. n(n+1)/2	atural numbers is b.n(n+1)(2n+1)/6 c. r	1 ²	d. None
Qs. 8 : Sum of squares o a. n(n+1)/2	of First 'n' natural numb b.n(n+1)(2n+1	ers is)/6 c. r	1 ²	d. None
Qs. 9 : Sum of cubes of a. n(n+1)/2	First 'n' natural number b.n(n+1)(2n+1	rsis)/6 c.r	2 ²	d. None
Qs. 10 : Find the value o a. 15/2	of x such that 8x+4, 6x-2 b. 15	2, 2x+7 are In c. 7	A.P. .50	d. Option a or c
Qs. 11 : Last term of the a. 455	e series 5, 7, 9 up to 2 b. 35	21 terms is c. 4	5	d. 55
Qs. 12 : Last term of the a. 7.20	e series 0.60, 1.20, 1.80 b.8.40	up to 2 c. 7	14 terms is 7.80	d. None
Qs. 13 : 2 Arithmetic mo a. 2/3, 22/3	eans between -6.00 and b. 2/3, 1/3	l 14 are	c. 0,8	d. None
Qs. 14 A.M. of 33,88 is a. 55	b. 66		c. 60.50	d. None of these
Qs. 15 : Number of num a. 1945	ber divisible by 5 betw b. 1,04,44,650	een 508 and 1	.0233 are c. 98,415	d. None
Qs. 16. Sum of first 100 a. 500500	0 natural numbers is b. 200200	C.	100100	d. None of these
Qs. 17. Find Sum of all e a. 2,13,890	even natural numbers b b. 5,16,850	etween 497, 1 c. 4	1223 19,700	d. 3,12,180
CA VINOD REDDY	CA F	OUNDATION	MATHS	WWW.SWAPNILPATNI.COM

DD-15	By CA VIN	WWW.SWAPNILPATNI.COM	
Qs. 18. Find Sum of all eve a. 12,61,12,155 b.	en natural numbers divisi . 17,70,89,166 c.	ble by 9 between 50 99,99,999	000 and 80,000 d. None
Qs. 19. Sum of certain nu	mber of terms of AP -8, -(6 ,-4 is 52. Find N	umber of terms
a. 14	b. 13	c. 4	d. None
Qs. 20. Which term of seri	ies 12,9,6 is (-100)		
a. 30 th	b. 33 rd	c. 34.333th	d. Not Possible

WWW.SWAPNILPATNI.COM

DD-15

Answers : DD-15

Qs.	Answer	Qs.	Answer
1	А	11	С
2	В	12	В
3	D	13	А
4	С	14	С
5	А	15	А
6	А	16	А
7	A	17	D
8	В	18	В
9	D	19	В
10	D	20	D

By CA VINOD REDDY

Qs. 1 : The number of term a. 10 b.	ns to be taken so that 1 + 2 + 15 c.13	4 + 8 will amo d. None	ount to 8191 is	
Qs. 2 : Product of 3 numbe a. 2,4,6	ers in G.P is 729 & sum of squ b. 3,9,27	ares is 819, the n c. 3,300,600	umbers are d. None	
Qs. 3 : Sum of series 1+3+9 a. 6 b.	9+27is 364. Find the num 5 c. 7	ber of terms d. 9		
Qs. 4 : Last term of series 1 a. 256	L,2,4upto 10 terms is b. 1024	c. 512	d. None	
Qs. 5 : t ₈ of series 6,12,18,2 a. 48	24,is- b. 768	c. 1024	d. None	
Qs. 6: 3 rd and 5 th term of 0 a. 2	G.P. are 12 & 48. Find the se b. 36	cond term of this c. 6	G.P d. None	
Qs. 7 : 1,y,9 are in G.P., fin a. 3 b.	d the value of y. -3		d. None	
Qs. 8 : A man saved `16,50 How much did he save in t	00 in 10 years. In each year h he first year.	ie saved `100 moi	re than he saved in the	preceding year.
a. 1,200	b. 1,550	c. 1,300		d. None
Qs. 9 : Find the sum of all s leaves a remainder of 8.	such natural numbers betwe	en 1000 & 10000	such that on division b	y 10 that number
a. 49,72,500	b.69,52,700	c. 94,42	2,700	d. 49,52,700
Qs. 10 : 101,105,109 a. 90,306	Find the sum of A.P. upto 10 b. 30,906	2 terms. c. 70,50	07 d. No	ne
Qs. 11 : 5 ³ ,5 ⁵ ,5 ⁷ ,5 ⁹ ······ Find a. 45	the common ratio b. 5	c. 25	d. 55	
Qs. 12 : 2,4,8,16, Find t a. 256	b.128	c. 512	d. None	
Qs. 13 : 2+6+18+54 Fi a. 80 b.	nd the sum of infinite terms 0 c. Infinity	d	1	
Qs. 14 120+60+30+15+17. a. 240	5+ Find the sum of infin b. 0 c. Inf	ite terms. inity	d120	
Qs. 15 : 60+6+0.6+0.06+ a. 60.66666	Find the sum of infinite ter b. 66.6666	ms c. 0	d. Infinity	
Qs. 16. Sum of first 243 na a. 29646 b	itural numbers is b. 59049	c. 29403	d. No	ne of these
CA VINOD REDDY	CA FOUNDA	TION MATHS	www.s	SWAPNILPATNI.COM

DD-16	By CA VINOD REDDY			WWW.SWA	APNILPATNI.COM
Qs. 17. Find Sum of all a. 2,02,500	odd natural numbers b b. 2,14,500	oetween 100,100 c. 2,47,500	0	d. None	
Qs. 18. Find the n th ter a. 10n-3	m of A.P. whose sum o b. 3n-10	f n terms is 5n²+2 c. 30n-3	n d. None		
Qs. 19. If t ₇ for G.P is 4 a. 1.25	40,820 and t9 is 63,781. b. −1.30	25. Find the com	mon ratio c. 1.50	d. None	
Qs. 20. Last term of se a. 9.4	ries 0.6,1.2,1.8 to 12 te b. 5.4	erms is - c. 6	d	. None of these	

WWW.SWAPNILPATNI.COM

Answers : DD-16

Qs.	Answer	Qs.	Answer
1	С	11	С
2	В	12	A
3	A	13	С
4	С	14	А
5	А	15	В
6	С	16	А
7	С	17	С
8	А	18	А
9	D	19	А
10	В	20	D

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

Qs. 1 : Sum of all natura a. 8,400	al numbers divisible b. 9,000	by 5 from 100 t	o 300 is c.8,200	d. None	
Qs. 2 : Number of odd r a. 342	numbers between 3 b. 303	304 to 988 c.	987	d. None	
Qs. 3 : Sum of all numb a. 2,4,6,8	er in A.P. such that b. 8,4,0,-4	their sum is 20 a c. 1,3,5,7	and sum of the	eir squares is 120, the d. 9,11,13,15	n the numbers are -
Qs. 4 : n th term of the se a. 20	eries is 16,8,4i b. 22	is 1/2 ¹⁷ . Find n. c.	21	d. None	
Qs. 5 : x,8,y are in G.P a a. x=16; y = 4	ind x,y,-8 are in A.P. b.	where x is not e x=4; y=16	equal to y. Fin	d the values of x & y. c. x=-4; y=16	d. None
Qs. 6 : If m th term of A.I a. 1	P. is n and n th term i b. 0	s m. Then r th ter c.	m is m+n+r	d. m	+n-r
Qs. 7 : 20 th term of A.P. a. 5	is 30 and 30 th term b5 c.	is 20, the 45 th to 4 d.	erm of this A.I	P. is -	
Qs. 8 : (5+x), (10+x), (25 a. 9	5+x) are in A.P. find b. 2	the value of x. c. 5		d. Wrong da	ta
Qs. 9 : A person travels the uniform speed of 5 a. 75	from Pune ot Mum 0 km/hr. Find the Av b.50	bai (200 kms) at verage speed of c. 66.666	t a uniform sp entire journe 6	eed of 100 km/hr & ro y. d. 100	eturn (200 km) at
Qs. 10 : In this series -5 a. 3,90,625	5,25,-125, find t ₈ k	o. 3,00,906		c. 3,70,507	d. None
Qs. 11 : 2+6+12+20+30 a. 45,900	+42 find the sur b. 44,200	m of 50 terms.	c. 42,40	00	d. None
Qs. 12 : If for A.P. first t a. 1	erm = common diff b. m:n	erence, then t _m : c	t _n = . a:d	d. n:m	
Qs. 13 : x, 2x+2, 3x+3 a. 22	are in G.P, then 4 th b22 c.	term is . . 13.5	d13	.5	
Qs. 14 : 2+5+10+17+26 a. 7742	+37 Find the su b. 7472	um of 28 terms c. Can't F	ind	d. Infinity	
Qs. 15 : 1+12+36+80+1 a. 67,803	50+ Find the sur b67,803	m of 22 terms 3	O	d. Infinity	
Qs. 16. In A.P the sum a. 0	of first 50 terms = su b. 2,500	um of first 60 ter o	rms. Find sum c. 12,100	of first 110 terms. d. 3,	600

CA VINOD REDDY

CA FOUNDATION MATHS

DD-17	By CA VI	NOD REDDY	WWW.SWAPNILPATNI.COM
Qs. 17. For two positive observ a. True b. False	vations G.M. is G.N c. Partly	1. of A.M. and H.M. True	d. Wrong Information.
Qs. 18. Find H.M. of 100 & 250 a. 192.3077	0 b. 1300	c. 500	d. None
Qs. 19. 8 ² +9 ² +10 ² ++22 ² = a. 6355	b. 3655	c. 5633	d. None
Qs. 20. 6+66+666+6666+	. upto n terms is -		
a. 5/9 {[10(10 ⁿ -1)]/9 – n}		b. 6/9 {[10(10 ⁿ -1)]/9 -	– n}
b. 9/6 {[10(10 ⁿ -1)]/6 – n	}	d. None of these	

WWW.SWAPNILPATNI.COM

А

В

В

Answers : DD-17				
Qs.	Answer	Qs.	Answer	
1	С	11	В	
2	A	12	В	
3	A	13	D	
4	В	14	А	
5	A	15	А	
6	D	16	А	
7	A	17	А	

D

С

А

nswors · DD-17

18

19

20

8

9

10

By CA VINOD REDDY

Qs. 1 : Standard format of a lin a. ax-bx-c=0	ear equation is - b. ax+by+c=0	c.ay+by+c=0	d. None
Qs. 2 : Points (30,-25) lie in a. IV	Quadrant b. II	c. III d. None	
Qs. 3 : Points satisfying the line a. (2,3) b. (3,4	ear equation 3x+2y=12)	d. None	
Qs. 4 : Equation of X-Axis is. a. x=0	b. y=0	c. x+y=0 d. M	None
Qs. 5 : If the equation of the lir a. Parallel to X axis	ne is x = 5, the line is - b. Perpendicular to Y A	xis c. Parallel to Y-Axis	d. Both A & B
Qs. 6 : If the equation of the lir a. Parallel to X axis	e is y = constant, the line b. Perpendicular to Y A	e is - xis c. Parallel to Y-Axis	d. Both A & B
Qs. 7 : Point of intersection of a. (10,40) b.(25,3	lines x+y=50 and 2x+y=60 30) c. (40,	D is - 10) d. (50,60)	
Qs. 8 : Point satisfying the equa a. (15,15)	ation X=15 is b. (15,0)	c. Both	d. None
Qs. 9 : Graphical presentation a. Curve b. Stra	of a linear equation is - ight Line	c. Segment	d. Can be anything.
Qs. 10 : If y co-ordinate of a po a. In First Quadrant	int is zero, then it lies - b. On X-Axis	c. On Y-Axis	d. None
Qs. 11 : Find the point of inters a. (20,10)	ection of 3x+5y=150 & 4 b. (30,40)	x+y=100. c. (50,50)	d. None
Qs. 12 : Point of intersection of a. 1 st	f lines 5x+3y=150 and 3x [.] b. 2 nd	+5y=350 lies inqu c. 4 th d.	uadrant. 3 rd
Qs. 13 : Point of intersection of a. (100,0) b. (0,1	f equations 3x+7y = 300 8 00) c. (300	& 7x+3y = 700 is- 0,700) d. (7	00,300)
Qs. 14 : Point of intersection of a. 1 st	f lines 2x+y=25 & x+2y=5 b. 2 nd	5 is in which quadrant? c. 4 th d.	3 rd
Qs. 15 : Point on the line x+3y= a. (0,80)	240 is - b. (30,70)	c. (60,60)	d. All of the above
Qs. 16. Point of intersection of a. 1 st	equations 3x+7y = 300 8 b. 2 nd	k 7x+3y = 700 is inqu c. 4 th d.	adrant. None
Qs. 17. Point of intersection of a. (-30,90) b. (line 3x+5y=120 & 3x+2y -90,30) c. (90,-	=210 is - -30) d. (90,30).
CA VINOD REDDY	CA FOUNDAT	TION MATHS	WWW.SWAPNILPATNI.COM

DD-18	By CA VINOD REDDY		WWW.SWAPNILPATNI.COM
Qs. 18. Point of intersection or a. (10,46)	f line 2x+4y=960 & 2x+2y=940 is b. (46,10)	- c. (460,10)	d. (460,100)
Qs. 19. If x co-ordinate of a po a. In First Quadrant	pint is zero, then it lies - b. On X-Axis	c. On Y-Axis	d. None 6355
Qs. 20. Point of intersection or a. (-10,60)	f line x+2y=40 & 2x+y=110 is - b. (60,-10)	c. (60,10)	d. (10,60)

CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

WWW.SWAPNILPATNI.COM.

Answers : DD-18

Qs.	Answer	Qs.	Answer
1	В	11	D
2	A	12	В
3	A	13	А
4	В	14	В
5	С	15	D
6	D	16	D
7	A	17	С
8	С	18	С
9	В	19	С
10	В	20	В

By CA VINOD REDDY

Qs. 1. If 3x+2y = 9 and x a. 1,4	x + 3y = 10 then x and y a b. 2,1.50	are	c. 3,0		d. 1,3
Qs. 2. Calculate the nur a. 32	nber such that it is equa b. 14	l to three	e times its differe c. 42	nce from 56.	d. None of these
Qs. 3. What is the solut a. $x = 3$, $y = 2$	ion of the system of sim b. x = -3, y = 4	ultaneou	s linear equation c. x = 3, y = -4	s 3x + 2y + 17 = d. x = -3	0 & 5x – 6y – 9 = 0; 3, y = -4
Qs. 4. Sheikh chili says i shall be three times as	s to his son, "Seven year old as you will be." Find	rs ago I w the prese	as seven times a ent age of Sheikh	s old as you we chili's son.	re, and three years later I
Qs. 5. A number consist of three digits of which the middle one is zero and the sum of the other digits is 8. the number formed by interchanging the first and third digits is more than the original number by 396. Find the					
number a. 306	b. 206	c. 305		d. None	
Qs. 6. X and Y each have gives `10 to X, then X w a. `54, `62	e some money. If X giver vill have thrice as much a b. `62, `34	n `30 to as is left v c. `72,	o Y, then Y will ha vith Y. Then X and `44	ive twice the m d Y have respec d. `34,	oney left with X. But if Y tively. `62
Qs. 7. The set of simultaneous equations $4x + 2y = 0$ and $6x + 3y = 10$ has :a. $x = 1, y = 2$ as solutionb. $x = 0, y = 0$ and $x = 1, y = -2$ as solutionsc. $x = 0, y = 0; x = -1, y = 2$ and $x = 1, y = -2$ as solutionsd. An infinite number of solutions					
Qs. 8. A two-digit numb are reversed. Find the r a. 18	per is such that the produ number b. 24	uct of the	e digits is 8. When c. 81	n 18 is added to	the number, the digits d. 42
Qs. 9. If x+2 = 3 then x = a. 1 b. 6	= ?	c. 7		d. 8	
Qs. 10. If x/2 + y/3 = 2 a a. (2,3)	nd 2x + 3y = 13 then (x,y b. (2,2)	y) = ? c. (1,1)		d. None of thes	e
Qs. 11. Graphical pres a. Straight Line	sentation of linear equat b. Circle	ion is c. Parab	oola	d. Hype	erbola
Qs. 12. There arer a. 1 b. 2	number of quadrants on c. 3	a Graph	paper d. 4		
Qs. 13. The inequalities a. $x > 0$ and $y > 0$	s representing First Quad b. x > 0 and y <	drant are 0	 c. x < 0 a	ind y > 0	d. x < 0 and y < 0
Qs. 14. The Line x = 67 i a. X axis	s parallel to b. Y axis		c. Z axis	d. None	e of these
Qs. 15. A line passes th a. x-y= 0	rough the point (2,2) an b. x+2y= 6	d (3,3), E	quation of that li c. 2x+3y = 10	ne is d. None	e of these
CA VINOD REDDY	CA FC	DUNDATI	ON MATHS	V	VWW.SWAPNILPATNI.COM

DD-19	By CA VINOD REDDY		WWW.SWAPNILPATNI.COM		
Qs. 16. On solving 2 linear equa is	tions simultaneously if w	ve get x=30 and y=50 the	n point of intersection of 2 lines		
a. (30,50)	b. (50,30)	c. (50,0)	d. Can't say		
Qs. 17. The sum of 2 numbers i	s 10 and their difference	is 2 then the numbers a	re		
a. 4,6	b3,-2	c4,-6	d. None of these		
Qs. 18. Divide 56 in 2 parts such parts are	that such that three tim	nes of first part exceed th	ne one third of second by 48. The		
a. 20,36	b. 25,31	c. 24,32	d. None		
Qs. 19. x+3 = 10x + 20 then x = ?					
a17/9	b. 17/9	c. 9/17	d. None		
Qs. 20. In number 54 place value of 5 is					
a. 50	b. 4	c. 54	d. 44		

WWW.SWAPNILPATNI.COM

А

А

А

А

А

А

Answers : DD-19				
Qs.	Answer	Qs.	Answer	
1	D	11	A	
2	С	12	D	
3	D	13	A	
4	А	14	В	

15

16

17

18

19

20

В

В

D

В

А

А

DD-19

5

6

7

8

9

10

WWW.SWAPNILPATNI.COM

1. If x + 8y = 19 and 2x + 11y = 28 then x, y are a 2,3 b. 3,2 c. 3,3 d. 2,2 2. I am three times old as my son. Five years later, I shall be 2.5 times as old as my son. How old am I? a. 35 years b. 15 years c. 20 years d. 45 years 3. Find x if 9x + 1 = 5x + 17d. None of these a. -4 b. -3 c. 3 4. (12x+1)/4 = (13x-1)/5 + 3 is true for a. x =1/8 b. x = 2 c. x = 5/8d. x = 51/8 5. The values of x and y satisfying the pair (x/2)+(y/3)=2, x+2y=8 are given by the pair. a. 3,2 b. -2,-3 c. 2.3 d. None of these 6. A lady has only 25 paise and 50 paise coins in her purse. If in all she has 40 coins following 12.75. How many of each type does she have? d. None of these a. 18.23 b. 30.8 c. 29.11 7. A number consist of 2 digits is 7 times of sum of digits. When 27 is subtracted from the number, the digits are reversed, the number is c. 56 a. 63 b. 36 d. None of these 8. A train travel a distance of 300 km at a constant speed. If speed of train is increased by 5 km/hr, the journey would have taken 2 hours less. The original speed of the train is a. 25 km/hr b. 28 km/hr c. 27 km/hr d. None of these 9. The equation of the line passing through is (3,5) and (5,3) is a. x + y =80 b. 2x + 3y = 30c. 8x + 8y = 64d. x - y = 2 10.slope of the line parallel to X- axis is b. Not defined a. Zero c. 2 d. 3 11. Slope of the line perpendicular to to Y- axis is a. Zero b. Not defined c. 2 d. 3 12. The sum of two digit number and number obtained by reversing the digits is 121, and digits differ by 3. The number is a. 37 b. 47 c. 58 d. 69 13. By selling a car at a price of 72,000 a person made profit of 20% on cost. Find cost of the car? b. 72,000 d. `60,000 a. 84,000 c. 50,000 14. Factors of quadratic equation $x^2-x-6 = 0$ are a. -3 and 2 b. -2 and 3 c. (x+2) (x-3) d. (x-2) (x+3) 15. Divide 78 in two parts such that their product is 1512. a. 52.26 b. 62.16 c. 42.36 d. 72.6

CA VINOD REDDY

DD-20

CA FOUNDATION MATHS

DD-20	Ву С	A VINOD REDDY	WWW.SWAPNILPATNI.COM	
16. The sum of two n a. 50,30 b. 20	umbers, one of which is),30	5 2/3 times of other 5,35	, is 50.Find two numbers d. 10,40	
17. A number consistby reversing the digita. 63b. 42	of two digits. The digit ts, is 27 less than the ori c. 84	at ten's place is two ginal number. Find d. Non	times the digit at unit place. The number formed the original number. e of these	
18.Divide 300 in two a. 168,132	parts so that half of on b. 150,150	e part be less than t c. 140,160	he other by 48 d. 172,128	
19.Find the values of a. 3,3	x, y for x+8y = 19, 2x b. 2,3	+11y = 28 c. 3,2	d. None of these	
20.The line x=25 will a. X-axis	be parallel to b. Y-axis	c. Both	d. None of these	
21. Point (2,-1/2) lie a. 1 st quadrant	in b. 3 rd quadrant	c. 4 th quadrant	d. 2 nd quadrant	
22. The lines x+y = 0, a. (0,0) b. Sc	x-y = 0 will intersect at mewhere on X-axis	c. Somewhere	on Y-axis d. Can't say	
23. The equation of t a. 8x+9y = 1 b. 9x	he line passing through (+8y =72 c. 8)	(0,8),(9,0) is x+9y =72	d. None of these	
24. The equation of t a. 8x+16y = 1 b. 16	he line passing through 5x+8y = 128 c.	(8,0),(16,0) is / = 0 d. Nor	e of these	
25. a ³ +b ³ = a. (a ² +ab+b ²) (a+b)	b. (a²+ab+b	²) (a-b)	c. (a²-ab+b²) (a+b) d. None	
26. Find two consecu a. 46,48 b. 49	tive positive even integ 9,45 c. 5	ers whose sum is 94 4,40	d. None of these	
 27. A number consist of two digits of which ten's digit exceeds the unit digit by 6. The number itself is equal to 10 times the sum of digits. The number is: a. 60 b. 93 c. 71 d. None of these 				
28. If $x^2 + 6x = -9$ then the roots of the equation area3,-3b3,3c. 2,4d. None of these				
29. The wages of 8 m each man and boy?	en and 6 boys amount t	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	n 4.50 more than 5 boys. Determine the wages of	
a. 1.50, 330. Line is a set of alla. Linear Equation	b. 3, 1.50 the points satisfying the b. Quadratio	c. 2.50, 2 e given c equation c. Cubi	d. 2, 2.50 c equation d. None of these	

Answers : DD-20

Qs.	Answer	Qs.	Answer
1	В	16	В
2	D	17	A
3	D	18	A
4	D	19	С
5	С	20	В
6	С	21	С
7	A	22	A
8	A	23	С
9	С	24	С
10	A	25	С
11	A	26	A
12	В	27	A
13	D	28	A
14	С	29	В
15	С	30	A

By CA VINOD REDDY

Qs. 1. The sum of thre a 15	ee positive even numbe b. 10	ers is 15 less than three-fo c. 12	ourth of 60. What is the middle number d. None of these
Qs. 2. If p and q are ro a 5/2	bots of the quadratic ed b5/28	quation 2x ² -5x+7=0, then c. 10	value of (2p+2q) is d. 10/2
Qs. 3. If b ² = 4ac in a c a Roots are imaginary c. Roots are not equal	quadratic equation the b. Roo d. Roo	n ots are equal ots are reciprocals of each	other
Qs. 4. In what time th a 16 years	e sum of money will do b. 10 years	ouble itself with 16.66% p c. 6 years	.a. simple interest d. 3 years
Qs. 5. At simple intera a 10% p.a.	est, a sum doubles afte b. 20% p.a.	r 20 years. The rate of int c. 5.50 % p.a.	erest p.a. is equal to d. None of these
Qs. 6. A sum of 12,0 become:	00 deposited at compo	und interest becomes do	uble after 5 years. After 20 years it will
a `1,29,000	b. `1,92,000	c. `1,24,000	d. None of these
Qs. 7. If one fifth of o a 400	ne third of one half is 1 b. 450	5. then the number is c. 500	d. None of these
Qs. 8. Three-fourth of a 300	one-fifth of a number b. 400	is 60. The number is- c. 1200	d. None of these
Qs. 9. The sum of the 18. Find the number a 75	digits of a two digit nu b. 93	mber is 12. if the digits ar c. 84	e reversed, the number is decreased by d. 57
Qs. 10. At what rate p.a a 10%	a. will `1000 amount to b. 12%	`1331 in 3 years? (The ir c. 11%	terest is compounded annually) d. None of these
Qs. 11. Find 1+2+3+4+ a 5000	5+ +105 b. 5560	c. 5565	d. None of these
Qs. 12. Five years ago,	I was thrice as old as m	ny son an ten years later l	shall be twice as old my son. How old are
a 50,20	b. 45,15	c. 65,25	d. None of these
Qs. 13. A man deposits whole sum.	`2000 in a Bank at 4%	p.a. and $\hat{}$ 3000 in UTI at 1	4% p.a. Find the rate of interest for the
a 10%	b. 5%	c. 15%	d. None of these
Qs. 14. If one root of th a -5	e equation 5x ² +2x+k=0 b. 1/5	is reciprocal of other, the c. 25	n k=? d. None of these
Qs. 15. If the equation a ±1	x ² -(p+4)x+2p+5=0 has b. ±2	equal roots, then p=? c. 2	d2
CA VINOD REDDY	CAF	OUNDATION MATHS	WWW.SWAPNILPATNI.COM

DD-21	By CA VINOD REDDY		WWW.SWAPNILPATNI.COM
Qs. 16. If one root o	of the equation x(x-6)=3	3k(1-x) is negative of other	r, Then value of k is
a 1	b. 2	c. 3	d. None of these
Qs. 17. x,x-4,x+5 are	the factors of the left-	hand side of the equation	
a x ³ +2x ² -x-2=0	b. x ³ +x ² -20x=0	c. X ³ -3x ² -4x+12=0	d. None of these
Qs. 18. Roots of the	cubic equation x ³ +7x ² ·	-21x-27=0 are	
a -3,-9,-1	b. 3,-9,-1	c. 3,9,1	d3,9,1
Qs. 19. If 4x ³ +8x ² -x-2	2=0 then 2x+3=?		
a 4,-1,2	b4,2,1	c. 2,-4,-1	d. None of these
Qs. 20. The distance	e between the points A	(a,2) and B(3,a) is 5 units, 1	Then a=?
a 1 or 4	b2 or 3	c1 or 6	d. None of these

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	В	11	С
2	D	12	А
3	В	13	А
4	С	14	D
5	D	15	В
6	В	16	В
7	В	17	В
8	В	18	В
9	A	19	A
10	А	20	С

Answers : DD-21

CA VINOD REDDY

CA FOUNDATION MATHS

By CA VINOD REDDY

Qs. 1. In AP terms of	sequence are incre	eased or decrea	sed by fixed nur	nber	
a. True	b. Partly true	c. False	9	d. None	
Qs. 2. Three numbers a. True	a,b,c, are in AP if a b. Partly true	and only if b-a= c. False	c-b i.e. if and on e	ly if a+c=2b d. None	
Qs. 3. In a GP any terr a. True b. Pa	m may be obtained rtly true	l by multiplying c. False	the preceding to d. Non	erm by common rat ie	io of GP
Qs. 4. If 'a' is the first end is given by a.r ^{m-n}	term and 'r' the co	ommon ratio of	finite GP consist	ting of m terms the	n nth term from the
a. True b. Pa	rtly true	c. False	d. Non	ie	
Qs. 5. Three numbers a. Partly True	a,b,c are in GP if a b. True	ind only if b/a=o	c/b i.e. and if b ² = c. False	ac d. None	
Qs. 6. Determine 25 th a. 16 b. 18	term of AP whose c. 12	9 th term is -6 a	nd common diff d. 14	erence is 5/4	
Qs. 7. Which term of a. 21 st b. 22 ^r	AP 5,13,21 is 1	81 c. 23 rd	d. 24 th		
Qs. 8. Determine k so a. 5 b. 7	that K+2, 4k-6 and	d 3k-2 are three c. 9	consecutive ter d. 3	ms of an AP	
Qs. 9. The ratio of the a. 8:5 b. 9:4	e 7 th to 3 rd term of <i>i</i>	AP is 12:5. Find c. 7:3	the ratio of 13 th d. 10:3	to 4 th term 3	
Qs. 10. If 7 times 7 th t a. 1 b. 2	erm of an AP is equ	ual to 11 times c. 0	its 11 th term the d. 3	n 18 th term of AP is	
Qs. 11. The 4 th term of Find the first term	of an AP is equal to	3 times the firs	st term and 7 th t	erm exceeds twice	the third term by 1.
a. 3 b. 5		c. 7	d. 9		
Qs. 12. If the 9 th term a. 0 b. 2	of AP is 99 and 99 c. 4	th term is 9 find	108 th term d. 6		
Qs. 13. Determine the a. 2510	e sum of first 35 te b. 2310	rms of AP if t ₂ = c. 2710	2 and t ₇ =22)	d. 2910	
Qs. 14. If the 5 th and a. 1175	12 th term of an AP b. 1250	are 30 and 65 r c. 1150	espectively. Find)	d S ₂₀ d. 1350	
Qs. 15. If 12 th term of a. 0 b. 2	AP is -13 and sum c. 1	of first 4 terms d. 4	is 24 what is the	e sum of first 10 ter	ms
Qs. 16. The sum of a s a. 3/2	series in AP is 525. b. 3/3	Its 1 st term is 3 c. 2/3	and last term is	39. Find the commo d. 1/3	on difference
CA VINOD REDDY		CA FOUNDAT	ION MATHS	WV	VW.SWAPNILPATNI.COM

DD-22		By CA VINOD REDDY		WWW.SWAPNILPATNI.COM
Qs. 17. Find com sum of next 6 ter	mon difference of an ms	AP whose first term is 10	0 and sum of whose fi	rst 6 terms is five times the
a10	b15	c20	d5	
Qs. 18. Sum of tl a. 1116	ne series 51+50+49 b. 1112	+21 is c. 1128	d. 1124	
Qs. 19. The sum	of n terms of an AP is	3n ² +4n then find nth te	rm	
a. 5n+2	b. 6n+1	c. 8n+3	d. 7n+3	
Qs. 20. How mar a. 33 ł	y terms of AP 1,4,7 5. 22	are needed to give the c. 24	sum 715? d. 27	

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer			
1	A	11	A			
2	A	12	A			
3	A	13	В			
4	A	14	С			
5	В	15	A			
6	D	16	A			
7	С	17	A			
8	D	18	A			
9	D	19	В			
10	С	20	В			

Answers : DD-22

CA VINOD REDDY

DD-23	By CA V	INOD REDDY	WWW.SWAPNILPATNI.COM		
Qs. 1. The first three a1, 0, 3	terms of sequence when b. 1, 0, 2	s _n is n ² – 2n are c1, 0, -3	d. None of these		
Qs. 2. The last term o a. 7.7 b. 8.7	f the A.P. 0.6, 1.2, 1.8, c. 7.8	. To 13 terms is d. None of these			
Qs. 3. If the sum of fir	st 20 terms is equal to th	ne sum of first 15 terms o	of an AP., then the sum of first 35 terms is		
equal to: . a35	b. 70	c. 15	d. None of these		
Qs. 4. The sides of a r a. 3:5:8	ight-angled triangle are i b. 2 : 3 : 4	n A.P. The ratio of sides i c. 3 : 4 : 5	is : d. 5 : 8 : 3		
Qs. 5. Which term of a. 11^{th}	the G.P. 5, 10, 20, 40, b. 9 th	is 1280? c. 8 th	d. 12 th		
Qs. 6. If a, G, b are in a. 2G = ab	G.P., then: b. G ² = ab	c. G = ½ ab	d. G = ½ (a + b)		
Qs. 7. A bond has face may be purchased now	e value of `1000 and ma if the buyer requires 10	ture in 5 years with inter % ROI?	est rate of 8%. At what price the bond		
a. 303	b. 621	c. 924	d. None of these		
Qs. 8. A sum of mone times of original sum ?	y doubles itself in 10 yea	rs with simple interest. I	n how many years would it will become 5		
a. 20 years	b. 50 years	c. 25 years	d. 40 years		
Qs. 9. Manoharlal len what percent must he g	d `10,000 in four parts. I get for the remainder, if f	f he gets 8% on Rs. 2,000 the average interest is 10	0; 7 % on `4,000 and 8½% on `3,000,)%?		
a. 9½%	b. 15.50%	c. 30.50%	d. None of these		
Qs. 10. If A = `1000, n = a. 888.480	= 2 years, r = 6% p.a. con b. 880	npound interest payable c. 800	half-yearly then principal (P) is d. None of these		
Qs. 11. Ram is confused student decided to find	d whether to invest at 9% effective rate of interes	5 p.a. compounded mont t, which is	thly or 9.25% p.a. simple interest. The		
a. 9%	D. 9.25%	c. 9.38%	a. None of these		
Qs. 12. At what rate pe a. 6%	rcent of compound inter b. 10%	est `1,250 will yield Rs. : c. 3%	102 in 2 years? d. 4%		
Qs. 13. Find the future compounded annually.	value of an annuity of `5	00 is made annually for	7 years at interest rate of 14%		
a. 5635.25	b. 5365.25	c. 6535.25	d. 6355.25		
Qs. 14. The effective ra a. 7%	te of interest correspond b. 7.30%	ding a nominal rate of 7% c. 7.10%	6 p.a. convertible quarterly is d. None of these		
Qs. 15. The effective ra a. 3.2% p.a.	te of interest correspond b. 3.25% p.a.	ling to a nominal rate 3% c. 3.0225% p.a.	6 p.a. payable half yearly is d. None of these		
CA VINOD REDDY	CA FC	OUNDATION MATHS	WWW.SWAPNILPATNI.COM		
DD-23	By CA V	INOD REDDY	WWW.SWAPNILPATNI.COM		
--	---	--------------------------------------	------------------------------------	--	--
Qs. 16. Calculate the nu a. 32	umber such that it is equ b. 14	al to three times its diffe c. 24	rence from 56. d. None of these		
Qs. 17. What is the solu 3x + 2y + 17 = 0 &	tion of the system of sin x 5x - 6y - 9 = 0;	nultaneous linear equation	ons		
a. x = 3, y = 2	b. x = -3, y = 4	c. x = 3, y = -4	d.x = -3, y = -4		
Qs. 18. Find the nomina a. 5.0625%	ll rate compounded sem b. 5.06%	i-annually and equivalen c. 5%	t to 5% effective. d. 4.94%		
Qs. 19. Points X and Y are 60 km apart. X bus starts from X and another from Y at the same time. If they go in the same direction they meet in 6 hours and if they go in opposite directions, they meet in 2 hours. The speed of the bus with greater speed is :					
a. 50m/hr	b. 20 km/hr	c. 30 km/hr	d. 40 km/hr		
Qs. 20. Anand starts his job with a certain monthly salary and earns a fixed increment every year. If his salary was 6,500 after 4 years of service and 7,000 after 9 years of service. What was his initial salary :					

a. a. 5,000 b. 6,000 c. 6,100 d. 5	100 d. 5,400
------------------------------------	--------------

С

Α

WWW.SWAPNILPATNI.COM

B C

Allsweis . DD-25					
Qs.	Answer	Qs.	Answer		
1	D	11	С		
2	С	12	D		
3	D	13	В		
4	С	14	D		
5	В	15	С		
6	В	16	D		
7	В	17	D		
8	D	18	D		

19

20

Answers : DD-23

CA VINOD REDDY

CA FOUNDATION MATHS

WWW.SWAPNILPATNI.COM

9

10

WWW.SWAPNILPATNI.COM

Qs. 1. A man purchased 56 stamps of 50 paise and 1 rupee. The total amount he spent was 55.50. What is the number of 50 paise and 1 rupee stamps purchased. a. 38 and 18 respectively b. 46 and 10 respectively c. 27 and 29 respectively d. None Qs. 2. Suppose α , β are the roots of the equation $2x^2 - 5x + 7 = 0$, then the equation whose roots are $(2\alpha + 3\beta)$ and $(3\alpha + 2\beta)$ is : a. $2x^2 + 25x + 82 = 0$ b. $2x^2 - 25x - 82 = 0$ c. $2x^2 - 25x + 82 = 0$ d. $2x^2 + 25x - 82 = 0$ Qs. 3. If the rate of simple interest is 15% p.a., the amount that would fetch interest of 5,000 per annum is b. `50,000 c. 30,000 a. 33,333.33 d. 32,000 Qs. 4. Due to a fall in the rate of interest from 13% p.a. to 12 ½% p.a., a moneylender's yearly income diminishes by 104. His capital is a. 20,400 b. 20,800 c. 22,300 d. 24,000 Qs. 5. Simple interest on a certain sum at a certain rate is 9/16 of the sum. If the number representing rate percent and time in years be equal, then time is a. 7 1/4 years b. 6 ½ years c. 6 1/4 years d. 7 ½ years Qs. 6. At simple interest, a sum doubles after 30 years. The rate of interest per annum is equal to : b. 10% c. 3.75% d. None of these a. 5% Qs. 7. The difference between the interests received from two different banks on 500 for 2 years, is 2.50. The difference between their rates is: c. 2.5 % d. 0.25 % a. 2% b. 0.5 % Qs. 8. The first and last term of AP are -4 and 146 and sum of AP is 7171. Find the number of terms in AP and common difference a. 101, 3/2 c. 100, 3/2 d. None of these b. 101, 2 Qs. 9. A man repays a loan of 3250/- by paying 20 in the first month and then increases the payment by 15 every month. How long will it take to clear his loan a. 1 Year and 9 months b. 1 Year and 8 months c. 21 months d. Can't say Qs. 10. Find the sum of all odd numbers of four digits which are divisible by 9 a. 25,56,000 b. 45,54,000 c. 27,54,000 d. None of these Qs. 11. The 6th term from end of G.P. 8,4,2,1,.......,1/1024 is d. None of these A. 1/64 b. 32 c. 1/32 Qs. 12. A person divides his journey 3 equal parts and decides to travel on 3 parts at the speeds of 40,30,15 km/hr respectively. Find the average speed of whole journey. A. 30 km/hr b. 24 km/hr c. 35 km/hr d. None of these Qs. 13. If Raja can walk a certain distance in 50 days when he rest 9 hours each day,. How long will it take him to walk twice as far if he walk twice as fast and rest twice as long each day? a. 125 days b. 25 days c. 50 days d. 100 days Qs. 14. Find present value of Annuity due of 3500 for 10 years at the rate of 12% p.a. a. 35,000 b. 38,000 c. 68,791 d. None of these CA VINOD REDDY CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-24

DD-24		By CA VINOD REDDY	WWW.SWAPNIL	PATNI.COM
Qs. 15. The sum o a 0.25	f two numbers is 15 b. 0.30	and their product is 50. su c. 0.20	n of their reciprocals is d. 0.40	
Qs. 16. If 1,ab,9 ar	e in GP then the va	lue of ab is		
a. 3 b.	-3 c. a c	r b d. None of these		
Qs. 17. If x ³ -25x ² -	50x+3000x=0 then t	he roots of the equation ar	2	
a. 15,20,10	b. 17,-19,5	c. 10,19,-7	d. None of these	
Qs. 18. If sum of p	terms of AP is the	same as sum of q terms. Wh	at is sum of (p+q) terms of AP?	
a. Can't find	b. (p+q)/2	c. 1	d. 0	
Qs. 19. If the ratio	of 7 th term to the 3	term of AP is 12:5. Find t	he ratio of 13 th to 4 th term	
a. 8:5	b. 9:4	c. 7:3	a. 10:3	
Qs. 20. The sum o	f series in AP is 525	Its first term is 3 and last to	erm is 39. Find the common difference	е.
a. 3/2	b. 3/3	c. 2/3	a. 1/3	

WWW.SWAPNILPATNI.COM

DD-24

Answers :	DD-24
------------------	-------

Qs.	Answer	Qs.	Answer
1	D	11	С
2	С	12	В
3	A	13	А
4	В	14	D
5	D	15	В
6	D	16	С
7	D	17	D
8	А	18	D
9	В	19	D
10	С	20	A

By CA VINOD REDDY

Qs. 1. a. x ² +9	lf p,q are roots of 55x-6734=0	f the equation x ² -13x+81 b. x ² +599x-7346	L=0. Find quad c. x ² +5	ratic equation, v 59x-4673=0	whose roots are d. x ² +999x-36	(p²+q²) (p³+q³) 74=0
Qs. 2. (α + β)	Suppose α, β are and (αβ) is :	the roots of the equatic	$2x^2 - 5x + 7$	= 0, then the Qu	adratic equation	n whose roots are
a. 2x ² ·	+ 25x + 82 = 0	b. $4x^2 - 24x + 35 = 0$	c. 2x ² - 25x +	82 = 0	d. 2x ² + 25x - 7	0 = 0
Qs. 3.	If b^2 -4ac = 0 then	roots of the Quadratic e	equation are:			
a. Rea	l, Rational, Equal	b. Real, irrational, Uneo	qual	c. Real, Ration	al, Unequal	d. Complex
Qs. 4. b. Rea	If b²-4ac = 25 the I, Rational, Equal	n roots of the Quadratic b. Real, irrational, Uned	equation are: qual	c. Real, Ration	al, Unequal	d. Complex
Os 5	If h^2 -4ac = -36 the	en roots of the Quadrati	c equation are			
c. Rea	l, Rational, Equal	b. Real, irrational, Uneo	qual	c. Real, Ration	al, Unequal	d. Complex
Qs. 6. d. Rea	If b²-4ac = 484 th I, Rational, Equal	en roots of the Quadrati b. Real, irrational, Uneo	ic equation are qual	e: c. Real, Ration	al, Unequal	d. Complex
Qs. 7.	If b^2 -4ac = 89 the	n roots of the Quadratic	equation are:			
a. Rea	l, Rational, Equal	b. Real, irrational, Uneo	qual	c. Real, Ration	al, Unequal	d. Complex
Qs.8.	If α , β are the roo	ots of the equation $2x^2 -$	5x + 7 = 0, the	en the value (α -	⊦β) is:	
a.	5/2	b. 7/2	c5/2	d. Nor	ne of these	
Qs.9.	If α , β are the root	ots of the equation $2x^2$ -	– 5x + 7 = 0, th	en the value (20	α +2 β) is :	
a.	25/2	b. 5	c5/2	d. Nor	ne of these	
Qs.10.	If α , β are the roo	ts of the equation $2x^2 -$	5x + 7 = 0, the	n the value (α (3)² is :	
a.	25/4	b. 49/64	c. 49/4	d. Nor	ne of these	
Qs.11. a.	If α , β are the roo -3/4	ots of the equation $2x^2$ - b. 4/3	– 5x + 7 = 0, th c. 7	en the value (α d. Nor	$^{2} + \beta^{2}$) is : ne of these	
06 12	If a flara tha raa	to of the equation y^2 1	1v + 15 - 0 +b	on the value (a	(0) ic (
QS.12. a.	11 11	b11/2	c. 15	d. Nor	e of these	
Qs.13. a.	If α , β are the roo 121	ots of the equation x ² – b. 11	11x + 15 = 0, t c. 91	hen the value (d. Nor	$\alpha^2 + \beta^2$) is : ne of these	
Qs.14. a.	If α , β are the root 3125	ts of the equation x ² – 12 b. 225	1x + 15 = 0, the c. 386	en the value (α³ d. 836	+β³) is:	
Qs.15. a.	If α , β are the root 91/121	ts of the equation x ² – 12 b. 121/91	1x + 15 = 0, the c. 91/1	en the value (α/ .5	′β+β/α) is : d. 15/91	
Qs.16. a.	If α , β are the root 225	ts of the equation x ² – 12 b. 911	1x + 15 = 0, the c.121	en the value $(\alpha \cdot$	- β)² is : d. 61	

CA VINOD REDDY

CA FOUNDATION MATHS

By CA VINOD REDDY

Qs.17.	If a = c then root	ts of the Quadratic equation are		
a.	Equal	b. Reciprocals of each other	c. Equal but opposite in sign	d. Can't Sav
	- 90.01		ei _daai aat opposite e.8.	
0 10				
Qs.18.	If b=0 then roots	s of the Quadratic equation are		
a.	Egual	b. Reciprocals of each other	c. Equal but opposite in sign	d. Can't Say
	•	•	1 11 0	,
~				
Qs.19.	If b^2 -4ac = 0 the	en roots of the Quadratic equation	on are	

a. Equal b. Reciprocals of each other c. Equal but opposite in sign d. Can't Say

Qs.20. If b^2 -4ab = 0 then roots of the Quadratic equation are

a. Equal b. Reciprocals of each other c. Equal but opposite in sign d. Can't Say

DD-25	
-------	--

Answers	:	DD-25
---------	---	-------

Qs.	Answer	Qs.	Answer
1	A	11	А
2	В	12	А
3	А	13	С
4	С	14	D
5	D	15	С
6	С	16	D
7	В	17	В
8	A	18	С
9	В	19	A
10	C	20	D

DD-26	By CA	VINOD REDDY		WWW.SW	APNILPATNI.COM
Qs. 1. A person travels 3 km/hr , find the average a. 150.12	300 km to a place at uni e speed of entire journe b. 160	form speed of 10 ey. c. 152.	50km/hr and retu 13	ırns at a uniforr d. 145	n speed of 145
Qs. 2. If same amount a. An ordinary anr	is received at equal intended in the nuity b. annuity re	ervals at the beg egular c. annui	inning of every ye ty due d. al	ear , it is known Il of the above	as
Qs.3. If roots of quadra a.257/83	tic equation 5px ² -13x ² + b257/83	22px-18x+88p-2	70=0 are reciproo c.83/257	cal . Find p. d. r	ione
Qs.4 . 55,65,75,95,105 a. AP	are in b.GP	c. B	oth	d. None	
Qs.5. 23,23,23,23,23 ar a. AP	e in b.GP	c. Both		d. None	
Qs. 6. (2p-81),(13p-163) a. 162	l,(19p-1) are in AP , Finc b.244	İ P	c.48.8		d. None
Qs.7. 1 ² +2 ² +3 ² + 4 ² + a.650	+12 ² = b.550	c.625	d. none		
Qs.8 Point of intersecti a. In first quadran	on of lines 2x+3y =72 & t	x=20 lies Y axis	c. In third quadı	rant	d. On X axis
Qs.9. 3x/30 =90/30 find a. 90	x b. 30	c.60	d. none	!	
Qs.10. Sum of two num Find the numbers. a. 32.56	bers is 88 and the diffe	rence of first nun 44	nber and half of s c. 36.52	econd number	is is 10. d. 30. 58
Qs. 11. X+5y=36; (x+ a. 20,16	y)/(x-y) = 5/3. Find x,y. b. 16,4	c. 16,1	6	d. None	
Qs. 12. Find the roots of a. 10,-2	f equation x ² -8x-20=0 b10,2	c. 10,2	d. None	of these.	
Qs. 13. Find the roots of a. 10,-2	f equation x ² -12x+20=0 b10,2	c. 10,2	d. None	e of these.	
Qs. 14. Find quadratic e a. x ² +16x-59=0	quation whose roots ar b. x ² -1	e (8+V5), (8-V5) i 6x+59=0	s c. x ² +16x+59=0	d. Non	e
Qs. 15. Roots of quadra a. 35/8	tic equation 5kx ² -3x ² +1 b. 38/5	8x-13kx+35=0 ar c. 39/5	e reciprocals of e	ach other. Find d. None of the	k. above
Qs. 16. Roots of quadra a. 41/24	tic equation 15kx ² -13x ² b. 24/41	-35px+2x-9k+28=	0 are reciprocals c. 41/42	of each other. d. Non	Find k. e of the above

CA FOUNDATION MATHS

DD-26		By CA VINOD REDDY		
Qs. 17. R	Roots of quadratic equa	tion 8x ² -35x+22k-13x ² +32=0 are	equal. Find k.	d. None of the above
a. 8	88/373	b373/88	c88/373	
Qs. 18. R	Roots of quadratic equa	tion 15x ² -13kx ² +8px-32x+3px-8k	:+3p-63=0 are equal b	ut opposite in sign. Find p.
a. 3	32/33	b. 32/11	c. 11/32	d. None of the above
Qs. 19. li	f p,q are roots of 10x ² ->	-7=0. Find quadratic equation w	hose roots are (p+q),	pq.
a. 2	10x ² +6x-7=0	b. 100x ² +60x+7=0	c. 100x ² +60>	k-7=0 d. None
Qs. 20. F a. 2	Find quadratic equation 15x ² +19x+10=0	whose roots are -2/3 & 5/17. b. 15x ² +19x-10=0	c. 51x ² +19x-10=0	d. None

DD-26

Qs.	Answer	Qs.	Answer
1	С	11	В
2	С	12	А
3	А	13	С
4	D	14	В
5	С	15	В
6	С	16	А
7	А	17	В
8	А	18	В
9	В	19	С
10	С	20	С

By CA VINOD REDDY

Qs. 1. Find quadratic equation a. $4x^2+7x+3=0$	whose roots are -1/5 & 3 b. 40x ² -7x-3=0	3/8. c. 41x ² +3x-7=0	d. None	2
Qs. 2. Nature of roots of an eq a. Real, Rational, Unequal c. Real, Rational, Equal	uation 5x ² +8x-1=0 are	b. Real, Irratio d. Complex/Im	nal, Unequal aginary	
Qs.3. Nature of roots of an eq a. Real, Rational, Unequal c. Real, Rational, Equal	uation x ² -1=0 are	b. Real, Irratio d. Complex/Im	nal, Unequal aginary	
Qs.4. Nature of roots of an eq a. Real, Rational, Unequal c. Real, Rational, Equal	uation 25x ² +10x+1=0 are	b. Real, Irratio d. Complex/Im	nal, Unequal aginary	
Qs.5. Nature of roots of an equal a. Real, Rational, Unequa c. Real, Rational, Equal	uation 2x ² -2x+50=0 are al	b. Real, Irratio d. Complex/Im	nal, Unequal aginary	
Qs.6. Nature of roots of an eq a. Real, Rational, Unequal c. Real, Rational, Equal	uation 7x ² -9x-20/7=0 are	b. Real, Irratio d. Complex/Im	nal, Unequal aginary	
Qs.7. Nature of roots of an eq a. Real, Rational, Unequal c. Real, Rational, Equal	uation 8x ² +5x=0 are	b. Real, Irratio d. Complex/Im	nal, Unequal aginary	
Qs.8. Find the roots of equatio a. 2/3, 3/8	n 8x ² -15x+4.50=0. b. 3/2, 8/3	c. 2/3, 8/3	d. 3/2,	3/8
Qs.9. Find the roots of equatio a. p, q	n x ² -2px+p ² -q ² =0. b. (p+q), (p-q)	c. (q-p), (p-q)	d. None	e of these.
Qs. 10. Find the quadratic equa a. 90x ² +1=0 b. 3x ² +	ation whose roots are $1/3$ +1 = 0 c. $9x^2$ -2	3, -1/3. 1=0	d. 3x ² -1 = 0	
Qs. 11. Find the quadratic equa a. 9x ² +81=0	ation whose roots are 9, b. x ² -81 = 0	-9. c. 9x ² -1=0	d. 9x ² +:	1 = 0
Qs.12. Find the roots of equati a. 44,44	on x ² -44x+484=0. b. 22, 22	c. 1,22	d. 0,44	
Qs. 13. Find the quadratic equa a. x(x-19)=0	ation whose roots are 0, b. x ² -19x = 0	19. c. x²=1	9x	d. All of the above
Qs. 14. Find the quadratic equa a. x(x-8)=0	ation whose roots are -8, b. x ² +8x = 0	0. c. x ² =8	x d. All o	f the above
Qs. 15. Find the quadratic equa a. x ² +5x-50=0	ation whose roots are -10 b. x ² +10x+50 =	0,5. 0 c. x ² =1	0x	d. None of the above
CA VINOD REDDY	CA FOUNDAT	TION MATHS	V	VWW.SWAPNILPATNI.COM

DD-27	By CA VINOD	WWW.SWAPNILPATNI.COM	
Qs. 16. Find the sum of roots o a. 0	f the equation x ² -25=0 b25	c. 25	d. None of the above
Qs. 17. Find the sum of roots o a. 0	f the equation 5x ² -33kx b33k/5	+85p-125=0 c. 33k/5	d. None of the above
Qs. 18. If p,q are roots of quad	ratic equation 3x ² -x-3=0	, find the value of 2p+2q	ne of the above
a. 2/3	b1 c. 1/3	d. Nor	
Qs. 19. If p,q are roots of quad	ratic equation 3x ² -x-3=0	, find the value of p ³ +q ³	d. None of the above
a. 27/28	b28/27	c. 28/27	
Qs. 20. If p,q are roots of quad	ratic equation 3x ² -19x-1	=0, find the quadratic eq	uation whose roots are p/q; q/p
a. 3x ² -19x-1=0	b. 3x ² +367x+3=0	c. 3x ² +367x-3=	0 d. None

DD-27

Qs.	Answer	Qs.	Answer
1	В	11	В
2	В	12	В
3	A	13	D
4	С	14	В
5	D	15	А
6	В	16	А
7	А	17	С
8	D	18	А
9	В	19	С
10	С	20	В

By CA VINOD REDDY

Qs. 1. Inequalities repr a. x>0, y>0	esenting 4 th quad b. x>0,	drant are - y<0	с. x<0, y<0	d. None		
Qs. 2. Equation of Y ax a. x=0	kis is b. y=0	c. x- y = 0	d. x+y=0			
Qs.3. The point (8, k) l a36 b36,	ie on the line 3x- /5	5y=60, Find the c. 36/5	value of k	d. None of these		
Qs.4. The point (16,-31 a103/39	k) lie on the line 8 b39/	8x-13y=25, Find /103	l the value of k c. 25/8	d. None of these		
Qs.5. On solving two lin straight lines is -	Qs.5. On solving two linear equations simultaneously, if we get x=25 and y = 0, then point of intersection of two straight lines is - a. $(25, 25)$ b. $(0, 25)$ c. $(0, 0)$ d. $(25, 0)$					
a. (23,23)	D. (0,23)	C. (0,0)	u. (23,0)			
Qs.6. The lines 3x-y=20 a. 1 st b. 2 nd	0, 5x+2y=30 inter c. 3 rd	rsect in <u></u> d. 4 th	quadrant			
Qs.7. Find roots of x ² -7 a. 9,-2	/x-18=0 b. 9,2	c2,-	9	d. Complex/Imaginary		
Qs.8. Standard format a. ax ² +by+c=0	of a quadratic ec b. ax ² +	uation is - -bx+c=0	c. ax ² -by-c=0	d. ax+by+c=0		
Qs.9. Sum of roots of a a. –c/a	quadratic equat b. c/a	ion is -	c. –b/a	d. b/a		
Qs. 10. Sum of roots of a. –c/a	f a cubic equation b.c/a	n is -	c. –b/a	d. b/a		
	-					
Qs. 11. Product of root a. –d/a	s of a cubic equa b. c/a	tion ax ³ +bx ² +c>	k+d=0 is - c. −b/a	d. b/a		
Qs.12. Product of roots a. –c/a	s of a quadratic e b.c/a	quation is -	c. –b/a	d. b/a		
Qs. 13. Roots of the qu a. b^2 -4ac = 0	adratic equation b. a=c	are equal , the	n c. b=0	d. None of these		
Qs. 14. Roots of the qu a. b^2 -4ac = 0	adratic equation b. a=c	are equal but o	opposite in sign , th c. b=0	en d. None of these		
Qs. 15. Roots of the qu a. b^2 -4ac = 0	adratic equation b. a=c	are reciprocals	s of each other , the c. b=0	en d. None of these		
Qs. 16. Cubic equation a. x ³ -4x ² +2=0	whose roots are b. 3x ³ -4x ² +	2,5,-8 is 3x-2=0	c. x ³ +x ² -46x+80=	0 d. None of these		
CA VINOD REDDY		CA FOUNDA	TION MATHS	WWW.SWAPNILPATNI.COM		

DD-28	By CA VINOD R	EDDY	WWW.SWAPNILPATNI.COM
Qs. 17. Cubic equation whose roots are p,q,r is - a. x ³ -(p+q+r)x ² +(pq+qr+pr)x-pqr=0 c. x ³ +(p+q+r)x ² +(pq+qr+pr)x-pqr=0		b. x³+(p+q+r)x²+(pq+qr+pr)x+pqr=0 d. None of these	
Qs. 18. Cubic equation whose root a. x ³ -100x=0	ts are 10,-10,0 is b. x²-100x=0	c. x ³ +100x ² +x=0	d. None of these
Qs. 19. Find the roots of 6x ² -5x-21 a3/2, 7/3	=0 b3/2, -7/3	c. 7/3, -2/3	d. None of the above
Qs. 20. Find the roots of 22x ² -51x- a13/2,11/2 b.	91=0 3/2, -7/3	c7/2, -11/13	d13/11, 7/2

DD-28

Qs.	Answer	Qs.	Answer
1	В	11	А
2	А	12	В
3	В	13	А
4	А	14	С
5	D	15	В
6	D	16	С
7	А	17	А
8	В	18	А
9	С	19	A
10	С	20	D

By CA VINOD REDDY

Qs. 1. F	ind sum of roots	of the qua	adratic equatio	n 3qx²+3	5x+100	0=0		
a.	35/3q	b35/3q		c3q/35	5		d. None	
Os. 2. S	Standard format	of a quad	ratic equation i	s -				
a. ax ² +	+bx+c=0	b. x ² -(sur	n of roots)x+ p	roduct of	f roots=	0	c. Both of these	d. None
				•				
Qs.3. F	and quadratic eq	luation wh	$\cos e$ roots are o	ι, β β-0		c Roth		d None of these
a. ∧ -(u p)x up=0	5	(u p). · u ·	μ=0		c. Doth		a. None of these
Qs.4. P	roduct of roots o	of the qua	dratic equation	8x ² -7x+2	11k+19	=0 is		
a.	(11k+19)/8	b	(11k+19)/8	(c. (19k+	·11)/8		d. None of these
	nd the quadratic	equation	whose roots a	ro 3/7 _1	2/5			
a. $x^2 + 6$	59x-36=0	b. 35x ² +6	59x+36=0	c. 35x ² +6	.2/3 59x-36=	0		d. 35x ² -69x-36=0
Qs.6. F	ind the quadrati	c equatior	whose one ro	ot is (5+v	/11),(5-	√11)		
a. x ² -1	0x-14=0	b	. x ² -10x+14=0	0	c. x²+10	x+14=0	d. None	2
Qs.7. a ³	$^{3}+b^{3} =$							
a. (a-b)(a²-ab+b²)	b	. (a+b)(a²-ab-b) ²)		c. (a+b)	(a²+ab+b²)	d. (a+b)(a ² -ab+b ²)
2								
Qs.8. a ³	$b^{2}-b^{3} =$	h	(a b) ³ +2ab(a	b)		c Roth		d Nono
d. (d	a-b)(a +ab+b)	U	. (a-b) +5ab(a	-0)		ι. συιπ		u.None
Qs.9. If	p,q are the root	s of quadr	atic equation x	² +3x+7=0).Find t	he quad	ratic equation w	hose roots are (p-q) ² ,
p ² +q ²	2					2		
а. х	-24x-95=0		b. x ² +24	4x-95=0		c. x ² +24	Ix+95=0	d. None
Qs. 10.	If p,q are the roo	ots of quad	dratic equation	3x ² -7x+1	L4=0.Fir	nd the va	alue of (p-q) ²	
a.	-119/9	b	35/9			c. –539,	/27	d. None
0 44				a ² a				
QS. 11.	If p,q are the roo 119/9	ots of quad h	dratic equation	3x²-/x+1	L4=0.Fir	10 the va	alue of p ² +q ²	d None
u.	11575	5	. 33/3			C. 555	/ 27	u. None
Qs.12. I	f p,q are the roo	ts of quad	ratic equation	3x ² -7x+1	4=0.Fin	d the va	lue of p ³ +q ³	
a.	-119/9	b	35/9			c. –539,	/27	d. None
∩c 13	If n a are the roo	ots of quar	tratic equation	$3v^2 + 1/1v$	-25-0 F	ind the	value of $n^2 + a^2$	
Q3. 13. a.	496/9	bis of quat	. 346/9	27 +147	-23-0.1	c. –539	/9	d. None
Qs. 14.	If p,q are the roo	ots of quad	dratic equation	3x ² +14x-	-25=0.F	ind the	value of $(p-q)^2$	
а.	496/9	b	. 346/9			c. –539,	/9	d. None
Qs. 15.	Roots of the equ	uation 3x ² -	22x+2k-19=0 a	are equal	. Find t	he value	of k.	
a. 1	.9/24	b712/2	4		c. 24/71	12		d. 712/24
Qs. 16.	Roots of the equ	Jation 3kx	-2x+19x-3k+6	3=0 are i	recipro	cals of ea	ach other. Find t	ne value of k.
a. /	/ 10	5. 05/0		0.05/5			a. NUILE	

CA VINOD REDDY

CA FOUNDATION MATHS

By CA VINOD REDDY

- Qs. 17. Roots of the equation $3x^2$ -2kx+21x-35=0 are equal but opposite in sign. Find the value of k.a. 21/2b. 35/3c. 2/21d. None
- Qs. 18. Roots of the equation $5kx^2-22x^2+35kx-21x+2p-27=0$ are equal but opposite in sign. Find the value of k. a. 3/2 b. 5/3 c. 3/5 d. None
- Qs. 19. If x = No. of units to be produced and y = Total Cost, Total Fixed cost is 3,80,000 and Variable cost per unit is 20, then
 - a. y=3,80,000+20x b. y=3,80,000x20x c. y=3,80,000-20x d. None
- Qs. 20. If p.q are the roots of $x^2+2x+1=0$, then quadratic equation whose roots are 1/p, 1/q is a. $x^2-2x-1=0$ b. $x^2+2x+1=0$ c. $x^2-2x+1=0$ d. None

CA VINOD REDDY

DD-29

Qs.	Answer	Qs.	Answer
1	В	11	В
2	С	12	С
3	А	13	В
4	А	14	А
5	С	15	D
6	В	16	В
7	D	17	А
8	С	18	С
9	С	19	A
10	А	20	В

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

Qs. 1. What are the rea a. Time value of N c. Risk Factor, Lic	isons for payment of inte Money quidity Preference	erest - b. Inflation d. All of the	& Opportunity Cost ese			
Qs. 2. Find amount rec	Qs. 2. Find amount receivable after 42 months if `10,000 invested @14.50%p.a.s.i					
a. `15,075	a. `15,075 b. `5,075 c. `25,075 d. None					
Qs.3. Find "P" when ar a. `17,391	Qs.3. Find "P" when amount = 25,000; r = 12.50%p.a.s.i; n = 3.50 years.a. 17,391b. 42,391c. 6,609d. None of these					
Qs.4. Find amount rec	eivable after 8 years and	8 months if `75,000) invested @12.50%p.a.s.i	nese		
a. 1,65,250	b. `1,56,250	c. `1,96,25	0 d. None of th			
Qs.5. Find amount rece	eivable after 6 years, if `	10,000 invested @13	3.50%p.a.c.i.	nese		
a. `16,258	b. `21,378	c. `11,378	d. None of tl			
Qs.6. An amount invest of original sum investe	ted at S.I. becomes dout d.	ole in 20 years. How r	many years it will take to b	ecome four times		
a. 30 years	b. 60 years	c. 40 years	d. 80 years			
Qs.7. An amount invested at C.I. becomes double in 15 years. How many years it will take to become eight times of original sum invested. b. 30 years b. 90 years c. 45 years d. 120 years						
Qs.8. Amount = `80,00	0; P = `60,000; n = 6 ye	ars, then r =%	p.a.c.i			
a. 4.9117%	b. 9.4117	c. 7.9114	d.None			
Qs.9. `10,000 invested 15%p.a.c.semi-anually.	in a bank for 3 years. Fi	nd Amount receivabl	e after 3 years if rate of in	terest is		
a. 13,455	b. 14,533	c. 51,433	d. 2	15,433		
Qs. 10. Find present va	lue of `80,000 receivabl	le after 8 years, if mo	ney is 10% effective.	d. None		
a. `73,321	b. `37	7,321	c. `27,731			
Qs. 11. Discounting fac a. 1/(1+r) ⁿ	tor = ? b. r/(1+P) ⁿ		c. 1/(1+n) ^r	d. None		
Qs.12. `1,000 invested	for one year @ 12%p.a.	.c.q. Find amount rec	eivable after one year	d. None		
a. `1162	b. `1621	c.	`1126			
Qs. 13. Find effective ra	ate of interest correspor	nding to nominal rate	e of interest of 12%p.a.c.q.	d. 12%		
a. 12.55%	b. 15.22%	c. 1	11.95%			
Qs. 14. Find effective ra	ate of interest correspor	nding to nominal rate	e of interest of 18%p.a.c.h	alf yearly.		
a. 19.55%	b. 18.81%	c. 1	17.95%	d. 18%		
Qs. 15. Find effective r	ate of interest correspor	nding to nominal rate	e of interest of 26%p.a.c.w	eekly.		
a. 29.60%	b. 25.22%	c. 2	26.95%	d. 26%		

CA FOUNDATION MATHS

DD-30	Ву СА	VINOD REDDY	ww	W.SWAPNILPATNI.COM	
Qs. 16. An effective rat	e of interest of 19.708%	p.a.c.a. is equivalent	to% p.a.c.q.		
a. 19%	b. 18%	c. 18.40%	d. None		
Qs. 17. An effective rat	e of interest of 26.824%	p.a.c.a. is equivalent	to% p.a.c.mo	onthly.	
a. 26%	b. 24%	c. 25%	d. None		
Qs. 18. Amount = `85,! a. 15.70%	500; P = `20,000; n = 10 b. 17.50%	years, r =% p c. 15.07%	.a.c.semi-annually	d. None	
Qs. 19. Amount = `1,00),000; P = `40,000; n = 3	3 months, r =	_% p.a.c.quarterly	d. 34.7586%	
a. 29.7250%	b. 30.7500%	c. 3	9.2590%		
Qs. 20. A sinking fund of `20,00,000 is to be created at the end of 8 years. Find how much amount should be kept aside at the end of every year, if money is 13% effective. a. `1,56,773 b.`1,30,773 c.`1,50,000 d. None					

DD-30

Qs.	Answer	Qs.	Answer
1	D	11	А
2	А	12	С
3	А	13	А
4	В	14	В
5	В	15	А
6	В	16	С
7	С	17	В
8	А	18	С
9	D	19	D
10	В	20	A

By CA VINOD REDDY

Qs. 1. What sum of mo a. 5,32,000	ney will produce 28,60 b. 3,52,000	00 interest in 3 yea	rs and 3 months c. 2,35,000	@ 2.5%p.a.S.I. d. None of these
Qs. 2. In what time wil a. 15 years	l `85,000 amount to ` b. 18 years	1,57,675 @ 4.5% p c. 19 years	.a.S.I. d. None	
Qs.3. What sum will an a. `1,791	mount to `2,000 in 3 y b. `1,679.24	ears @ 6%p.a.C.I c. `2,609.42		d. None of these
Qs.4. Difference betwo a. 7,500	een S.I & C.I on a certa b. `7,850	in sum of money fo c. `7,2!	or 4 years @6%p 50	.a. is `168.57, what is that sum. d. None of these
Qs.5. A sum of money a. 28 years	doubles itself at C.I in ! b. 160 years	5 years, in how mai c. 25 years	ny years it will be	ecome 32 times. d. None of these
Qs.6. A person purchas Find cash down price o a. 73,376	sed computer by payin f computer, if money i b. `76,376	g`20,000 cash dov s 5% effective. c.`56,376	wn and 25 equal d. None	annual installments of `4,000. e of these
Qs.7. 2,-4,6,-8,10,-12 a a. True	re in A.P. b. False	c. Can't Say	d. Partl	y True
Qs.8. 7x+2, 11x-3, 5x+1 a. 2.50	.0 are in A.P. Find the b. 8.10 c. 1.8	value of x. 80	d.None	
Qs.9. 3x+7, 8x-2, 13x+1 a9	.0 are in A.P. Find the v b. 12	value of x. c9 or	12	d. Wrong data
Qs. 10. 24,28,32,,4 a. 1160	444. Find how many te b. 1106	erms are there in th c. 6011	nis A.P.	d. None
Qs. 11. 115,120,125, a. 1109	,5565. Find how mar b. 1901	ny terms are there c. 1091	in this A.P.	d. None
Qs.12. 200,196,192, a. 73	,-88. Find how many b. 37	terms are there in c. 88	this A.P.	d. None
Qs. 13. 1+2+3+4+ a. n(n+1)/2	. n terms = ? b. n(n+1)(2r	+1)/6	c.n ²	d. [n(n+1)/2]²
Qs. 14. 1+3+5+7+ a. n(n+1)/2	. n terms = ? b. n(n+1)(2n	+1)/6	c.n ²	d. [n(n+1)/2] ²
Qs. 15. 1 ² +2 ² +3 ² +4 ² + a. n(n+1)/2	n terms = ? b. n(n+1)(2n	+1)/6	c.n ²	d. [n(n+1)/2] ²
Qs. 16. 1 ³ +2 ³ +3 ³ +4 ³ + a. n(n+1)/2	n terms = ? b. n(n+1)(2r	+1)/6	c.n ²	d. [n(n+1)/2] ²
Qs. 17. 2+4+6+8+ a. n(n+1)/2	. n terms = ? b. n(n+1)(2r	+1)/6	c.n ²	d. n(n+1)
CA VINOD REDDY	CA	FOUNDATION MA	THS	WWW.SWAPNILPATNI.COM

DD-31	By C/	A VINOD REDDY	WWW.SWAPNILPATNI.COM.
Qs. 18. 18 ² +19 ² +20 ² a. 151010	+21 ² ······ +70 ² =? b. 115010	c. 155010	d. None
Qs. 19. 21 ³ +22 ³ +23 ^{3.} a. 234684	+24 ³ ······· +32 ³ =? b. 324864	c. 284384	d. None
Qs. 20. 1+3+5+7+ a. 261121	+511 = ? b. 65536	c.56357	d. None

CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-31

Qs.	Answer	Qs.	Answer
1	В	11	С
2	С	12	А
3	В	13	А
4	А	14	С
5	С	15	В
6	В	16	D
7	В	17	D
8	С	18	В
9	D	19	A
10	В	20	В

By CA VINOD REDDY

Qs. 1. 55,61,67,73, a. 667	.Find t ₁₀₃ b. 1249	c. 259	d. None of these
Qs. 2. 55,61,67,73, a. 667	.Find t ₂₀₀ b. 1249	c. 259	d. None of these
Qs.3. 55,61,67,73, a. 667	.Find t₃₅ b. 1249	c. 259	d. None of these
Qs.4. 57+58+59+ a. 123654	.+500 = ? b. 132650	c. 125634	d. None of these
Qs.5. 201,198,195,192 a. 54	Find t ₅₀ b405	c. 69	d. 65
Qs.6. 201,198,195,192 a. 54	2 Find t ₂₀₃ b405	c. 69	d. 65
Qs.7. Sum of first n ter a. n/2 [2a+(n-1) d	rms of A.P. is]	c. Both	d. None
Qs.8. 81+86+91+96+ a. 20175	Find sum of first 50 b. 10175	terms c. 10715	d. None
Qs.9. 215+220+225+23 a. 7910	30+ +350 = ? b. 350	c.28	d. None
Qs. 10. 79+83+87+91+ a. 19359	Find s ₂₀ b. 2340	c. 19179	d. None
Qs. 11. 79+83+87+91+ a. 19359	Find s ₈₁ b. 2340	c. 19179	d. None
Qs.12. If S _n for A.P. is . a. 252	5n ² +7n. Find t ₂₅ b. 237	c. 288	d. None
Qs. 13. t _n for A.P. is 2n a. n+9n	+8. Find S _n b. n²+9n	c.n+9	d. (n+9)²
Qs. 14. t _n for A.P. is 5n a. (5n ² +9n)/2	-63. Find S _n b. 5n²-121n	c. (5n²-121n)/2	2 d. (5n+121) ²
Qs. 15. If S _n for A.P. is a. 14n-10	. 7n²-3n. Find t _n b. 10n-14	c. 14n-	+10 d. None
Qs. 1622,-20,-18, a. 478130	,1292 Find sum of all t b. 417830	erms of A.P. c.413780	d. None
Qs. 17. Find A.M. of 65 a. 70	5 & 77 b. 71 c.72	d. 73	
CA VINOD REDDY	CA F	OUNDATION MATHS	WWW.SWAPNILPATNI.COM

DD-32	By CA V	INOD REDDY	WWW.SWAPNILPATNI.COM	
Qs. 18. Arithmetic Mear a. (x+y)/2	n of x,y is b. <u>+</u> √xy	c. 2xy/(x+y)	d. None	
Qs. 19. Harmonic Mear a. (x+y)/2	n of x,y is b. <u>+</u> √xy	c. 2xy/(x+y)	d. None	
Qs. 20. Geometric Mear a. (x+y)/2	n of x,y is b. <u>+</u> √xy	c. 2xy/(x+y)	d. None	

DD-32

Qs.	Answer	Qs.	Answer
1	А	11	А
2	В	12	А
3	С	13	В
4	А	14	С
5	А	15	А
6	В	16	В
7	С	17	В
8	В	18	А
9	А	19	С
10	В	20	В

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

Qs. 1. If a,b,c,d,e are in	A.P. then					
a. a,c,e are in A.P.		b. b,c,d are in A	.Р	c. e-d =	b-a	d. All of these
Qs. 2. Two Arithmetic N	/leans between -2	20 & 540 are				
a. 166,353	b100,2	270		c. 153.50,353.5	0 d. :	166.66666, 353.3333
	na haturaan 20	220 - **				
Qs.3. 7 Arithmetic Mea	ns between -20,	220 are h 10.40	0 70 100	130 160 190		
c. 190.160.100.70.40.10	D10	d. None	of thes	e		
	-,			-		
Qs.4. For A.P. if t_5 is 87	, t_8 is 118. Find S_1	00				
a. 52516.66666		b. 57516.33333	3	c. 5571	6.66666	d. None of these
Oc E For A D t is 100	+ is 215 Find +	c				
25.5. FOT A.P. 18 IS 100,	t13 IS -215. FILLU L5 h -257	0, 310 5 2546		c 2575 2546		d None of these
u. 2340,2373	5. 257	5,2540		0.2373,2340		d. None of these
Qs.6. If sum of first 25 t	erms of A.P. = su	m of first 30 ter	ms of A.	P. the sum of fir	st 55 terms	is
a. 0	b1		c. 55		d. 5	
Qs.7. Which of the follo	wing is correct fo	or A.P.		a thout -0		
a. If $S_m = S_n$, then S_m	+n=U +han + - 0	D. If t _m =	n & t _n =r	n, then t _{m+n} =0		
$C. \Pi \Pi X I_m - \Pi X I_n,$	lifeli (m+n – O	u. Ali ui	these			
Qs.8. t _n for G.P. is						
a. a+(n-1)d	b. 2a+(n-1)d	c. axr ⁽ⁿ⁻¹	1)	d. None		
Qs.9. 8+16+32+1	L0 terms = ?					
a. 8184	b. 8481		c.8841		d. None	
Os 10 100+50+25+12	50 Find Saa					
a. 250	b. 240		c. 200		d. None	
Qs. 11. Sum of n terms	of G.P. when r>1	. is				
a. a (r ⁿ -1)/(r-1)		b. a (1-r ⁿ)/(1-r)		c. a/(1-r)	d. I	None
Oc 12 Sum of a torme	of C. D. whom reli	i.				
Qs.12. Sum of n terms ($a = a (r^{n}-1)/(r-1)$	or G.P. when r<1	S b(1_r ⁿ)/(_1_r)		$c_{2}/(1_{r})$	d I	None
a. a(i -1)/(i-1)		5. a(1-1)/(1-1)		C. d/(1-1)	u. 1	Volle
Qs. 13. Sum of Infinite t	terms of G.P. whe	en r<1 is				
a. a (r ⁿ -1)/(r-1)		b. a (1-r ⁿ)/(1-r)		c. a/(1-r)	d. I	None
Qs. 14. Number of term	is of the series 10	+9.666666+9.33	33333+9	+8.6666666+	will amo	ount to 155
a. 30	D. 31	c. a or b		a. None of thes	e	
Os. 15. If x y z are in H.P. then $1/x$. $1/y$. $1/z$ are in						
a. A.P.	b. G.P.	,	c. H.P.		d. None	
Qs. 16. For two positive	observations G.I	M. is	_of A.M	. and H.M.		
a. A.M.	b. G.M.	c. H.M.		d. None		

CA VINOD REDDY

CA FOUNDATION MATHS

DD-33	Ву СА	A VINOD REDDY	WWW.SWAPNILPATNI.COM		
Qs. 17. Harmonic Mean is used to calculate average speed of the journey. a. True b. False c. Can't Say				d. None	
Qs. 18. Find AM, GM, H a. 75,68.70,62.49	M of 50,90 b. 72	2,76,64.29 c. 70,69.24,64.29		d. 70,67.08,64.29	
Qs. 19. For G.P. t ₅ is 64, t ₆ is 128. Find t ₁ .					
a. 4	b. <u>8</u>	c. 32	d. None		
Qs. 20. For two observations if GM is 25 and AM is 70, find HM.					
a. 9.82857	b. 8.92857		c. 7.892825	d. None	

WWW.SWAPNILPATNI.COM

By CA VINOD REDDY

DD-33

Qs.	Answer	Qs.	Answer
1	D	11	A
2	D	12	В
3	В	13	С
4	С	14	С
5	A	15	А
6	А	16	В
7	D	17	A
8	С	18	D
9	A	19	A
10	С	20	В

By CA VINOD REDDY

Qs. 1. 5+25+125 Find S11 a. 6,30,35,155 b. 1,60,35,155 c. 6,10,35,155 d. All of the	ese
Qs. 2. Find the sum of all 3 digit natural numbers divisible by 7.a. 70336b. 30776c. 73306d. None of	these
Qs.3. Find the sum of all 4 digit natural numbers divisible by 5.a. 78,95,300b. 98,95,500c. 98,75,000d. None of	these
Qs.4. Find sum of all numbers of 3 digits such that on division by 16 that number leaves rema. 31407b. 41307c. 34107d. None of	nainder of 7 these
Qs.5. Find the sum of all odd natural numbers of 2 digits.a. 4275b. 2745c. 2475d. None of	these
Qs.6. Find the sum of all natural numbers divisible by 7 between 4000 & 15000 a. 19422929 b. 14922929 c. 15522929	d. None
Qs.7. 8+88+888+8888 Find sum of 7 terms a. 8888888 b. 9876536 c. 8888888888 d. 9876536 c. 8888888888	50
Qs.8. 7+77+777+7777	None
Qs.9. First term of the ratio is known as a. Antecedent b. Consequent c. Divisor	d. Quotient
Qs. 10. Second term of the ratio is known as a. Antecedent b. Consequent c. Divisor	d. Quotient
Qs. 11. Simplest form of the ratio 700:500 isa. 70:50b. 35:25c.17.50:12.50d. None	
Qs.12. Generally ratio is expressed inform a. Simplest b. Complicated c. Historical d. 6	Critical
Qs. 13. Simplest form of the ratio 2.50:4.50 is a. 25:45 b. 250:450 c. 5:9 d. None	
Qs. 14. Ratio of 10 hours, 66 minutes is a. 100:11 b. 1:100 c. 10:66 d. 5:33	
Qs. 15. Ratio of (3 hours, 10 minutres) & (8 hours, 30 minutes) is a. 51:19 b. 19:51 c. 3.10:8.10	d. None
Qs. 16. Ratio of 4 GB & 1024 MB is a. 1:1 b. 1:4 c. 4:1 d. None	
Qs. 17. Ratio of 12 inches, 5 feets is . a. 60:66 b. 12:5 c. 5:12 d. 1:5	
CA VINOD REDDY CA FOUNDATION MATHS WWY	W.SWAPNILPATNI.COM

DD-34	By CA VINOD REDDY			WWW.SWAPNILPATNI.COM
Qs. 18. Duplicate ratio of sub-	duplicate ratio of 5:7 is			
a. 10:14	b. 25:49	c. 49:25	d. 125:343	
Qs. 19. If antecedent > Conseq a. Ratio of greater inequal c. Ratio of equality	uent then it is said to be ity b. Rat d. Nor	io of lesser ine ne of these	equality	
Qs. 20. If Antecedent < Consec	quent then it is said to be	2		
a. Ratio of greater inequal	ity b. Rat	io of lesser ine	equality	
c. Ratio of equality	d. Nor	ne of these		

Qs. 21. If Antecedent = Consequent then it is said to be

- a. Ratio of greater inequality
- c. Ratio of equality

b. Ratio of lesser inequality d. None of these

DD-34

Qs.	Answer	Qs.	Answer
1	С	11	D
2	А	12	А
3	В	13	С
4	А	14	А
5	С	15	В
6	В	16	C
7	В	17	D
8	А	18	А
9	А	19	А
10	В	20	В
		21	С

DD-35	By CA VINOD R	EDDY	WWW.SWAPNILPATNI.COM	
Qs. 1. The duplicate ratio of 9 : a. 3 : √3	3 is : b. 81 : 9	c. 3 : 9	d. None of these	
Qs. 2. The sub duplicate ratio o a.13 : 12	f 144 : 169 is b.169 : 144	c.288 : 338	d.None of these	
Qs. 3. The triplicate ratio of 7 : a.343 : 512	8 is : b.8 : 7	c.21 : 24	d.None of these	
Qs. 4. The sub triplicate ratio of a.3 : 64/3 b. 9 :	27 : 64 is 16	c.3 : 4	d. None of these	
Qs. 5. Find in what ratio will the reduction in the number of wor a. The ratio in which the total w b. The ratio in which the total w c. The ratio in which the total w d. The ratio in which the total w	e total wages of the work kers in the ratio 17 : 12 a vages increase is 24 : 29 vages decrease is 34 : 29 vages increase is 29 : 34 vages decrease is 17 : 12	ers of a factory be increand an increment in the	eased or decreased if there be a ir wages in the ratio 24 : 29.	
Qs. 6. The fourth proportional ta. 5 / 7b. 7 / 5	co 3, 8, 12 is c. 32	d. 53		
Qs. 7. Mean proportional betwee a. 13 b. 12	een 9 and 25 is : c. 14	d. 15		
Qs. 8. What least number must a. 5	be added to each one or b. 3	f 6, 14, 18 and 38 to ma c. 2	ke them in proportion? d. 4	
Qs. 9. A man 1.4 m tall casts a s Calculate the height of the built	hadow 1.2 m long at the ding :	time when a building,	casts a shadow 5.4 m long.	
a. 6.3 m b. 3.21 m	c. 4.3 m	d. 5.6 m		
Qs. 10. The incomes of X and Y then income of X and Y respect a. `6,000 and `9,000 c. `13,500 and `9,000	are in the ratio 3 : 2 and ively is : b. `4,500 and ` d. `9,000 and `	their expenditures in th 6,000 6,000	e ratio 5 : 3. If each saves 1,500	
Qs. 11. The prices of a washing more than a refrigerator, the p a. 16,000 b. 16,	machine and a refrigera rice of a washing machin 300 c. `15,3	tor are in the ratio 9 : 5 e is : 300 d. Nor	If a washing machine costs `6,800 ne of these	
Qs. 12. If Raja can walk a certai walk twice as far if he walk twice	n distance in 50 days wh e as fast and rest twice a	en he rest 9 hours each as long each day?	day,. How long will it take him to	
a. 125 days	b. 25 days	c. 50 days	d. 100 days	
Qs. 13. Two whole numbers wh a. 3 : 7 b. 4 : 1	ose sum is 100 cannot b c. 3 :4	e in the ratio :	d. 16 : 9	
Qs. 14. The duplicate ratio of 2: a. 4:125 b. 8:25	5 is c. 8:50	d. None of the	se	
CA VINOD REDDY	CA FOUNDAT	ION MATHS	WWW.SWAPNILPATNI.COM	
DD-35		By CA VINOD REDD	Y	WWW.SWAPNILPATNI.COM
--	--------------------------------------	---	-------------------------------------	----------------------------
Qs. 15. Sub-dup a. 9:225	licate ratio of 81:625 is b. 3:25	c. 25:3	d. None of thes	se
Qs. 16. Log 2 [×] is a. x .log 2	equal to b. x / L	og2 c. B	oth of these	d. None of these
Qs. 17. Ratio co a. Triplicate ratio	mpounded of a ratio an b. Sub-	d its sub-duplicate ra Triplicate ratio	tio is c. Sub-Duplicat	e ratio d. None of these
Qs. 18. 3,x,27,y a. 3	are in continued propo b. 9	ortion Find the value ortion Find the value or c. Can't say	of x d. Non	e of these
Qs. 19. Find futu a. 8319.24	re value of Rs.3000 aft b. 8320	er 9 years (12% p.a.)).56 c. 3	820.98	d. None of these
Qs. 20. Find pre a. 35,000	sent value of Annuity d	ue of `3500 for 10 ye b. `38,000	ars at the rate of 12 c. `68,791	% p.a. d. None of these

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	В	11	С
2	D	12	A
3	A	13	С
4	С	14	С
5	В	15	D
6	С	16	А
7	D	17	D
8	С	18	В
9	А	19	А
10	D	20	D

Qs. 1. The vessels conta mixture will have water a. 31:74	ain water and milk in the r and milk in the ratio. b. 31:75	ratio of 1:2 and 2:5 are	mixed in the rati	o 1:4, the resulting
0. 51.71	5.51.75			
Qs. 2. An amount of R the share of B and A	s.950 is distributed amo	ng A,B,C in the ratio of !	5:11:13, what is t	he difference between
a. 300	b. 340	c. 500	d. None of thes	e
Qs. 3. In a party of 40 a. 870	people, each shakes har b. 780	nd with others. How mai c. 890	ny hand shakes to d. None of the	ook place in a party? se
Qs. 4. The 6 th term fro a. 1/64	om end of G.P. 8,4,2,1, b. 32	,1/1024 is c. 1/32	d. None of thes	e
Qs. 5. The number of a. Variation	times a particular item c b. Cumulative frequenc	occurs in data is called as y c. Freq	s uency	d. Probability
Qs. 6. If mean of 100 m is	observations is k. if m is	added to all the observa	itions mean becc	omes k+9 then the value of
a9 b. 9	c. 81	d. None of the	se	
Qs. 7. Which of the fo a. Mean b. Med	llowing is the Best meas ian c. Mod	ure of dispersion e d. Non	e of these	
Qs. 8. 5 th Decile =	Quartile			
a. First	b. Second	c. Third	d. Fourth	
Qs. 9. 10 th percentile a. First	= Quartile b. Second	c. Third	d. None of thes	e
Qs. 10. A Batsman in his after 17 th innings?	s 17 th inning makes a scc	ere of 85 and thereby inc	creases his avera	ge by 3. What is average
a. 37	b. 35	c. 36	d. None of thes	e
Qs. 11. A person divide km/hr respectively. Fine	es his journey 3 equal par d the average speed of w	rts and decides to travel hole journey.	on 3 parts at the	speeds of 40,30,15
a. 30 km/hr	b. 24 km/hr	c. 35 km/hr	d. None of thes	e
Qs. 12. Correlation coe a. True	efficient is not unit free b. False	c. Can't say	d. None	e of these
Qs. 13. Which is furthe a. Arithmetic Mean	er not amenable for alge b. Median	braic treatment c. Mode	d. Both	(b) and (c)
Qs. 14. If r = 0 then a. There is a perfect co b. X and y are close rel c. There is negative co d. X and y are not corre	rrelation between x and atives of each other rrelation between x and elated	y y		

CA VINOD REDDY

DD-36

CA FOUNDATION MATHS

WWW.SWAPNILPATNI.COM

DD-36		By CA VINOD REDDY		WWW.SWAPNILPATNI.COM
Qs. 15. V a. True	When cost of li	ving increases, the star b. False	ndard of living improves, c. Either of these	This is d. None of these
Qs. 16. a. 15,25	If average of 2	numbers is 20 and the b. 30,10	ir standard deviation is 5 c. 20,20	. These numbers are d. None of these
Qs. 17. a. 40	Range of the b. 60	numbers 20 and 100 is c. 120	d. 80	
Qs. 18.	Find the rank	of median in 23,46,78		
a. 46	b. 1.5	c. 2	d. No	ne of these
Qs. 19.	If 2x+3y=90 a	nd range of y is 48 the	n range of x is	
a. 1	b. 2	c. 3	d. No	ne of these
Qs. 20.	Find the corre	elation coefficient betv	veen the following set of	observations
X:	102	109		
Y:	50	48		
a. 1	b1	c. 0	d. None of these	

WWW.SWAPNILPATNI.COM

Answers : DD-36

Qs.	Answer	Qs.	Answer
1	A	11	В
2	D	12	В
3	В	13	D
4	С	14	D
5	С	15	В
6	В	16	А
7	D	17	D
8	В	18	С
9	D	19	D
10	A	20	В

CA VINOD REDDY

CA FOUNDATION MATHS

DD-37	Ву	CA VINOD REDDY		WWW.SWAPNILPATNI.COM
Qs. 1. Ratio compounde	ed with that ratio is	its		
a. Sub-duplicate ratio	b. Duplicat	te ratio	c. Inverse ratio	d. None of these
Qs. 2. In case of 2 obser a. 6.4 b. 6	rvations AM=10 GM c. 4.24	l=8 then HM=? d. Non	e of these	
Qs. 3. An automobile d average speed of 20 km a. 30 b. 20	river travels to a hill ı/hr. What is the ave c. 25	station at an averag erage speed of the en d. 24	e speed of 30 km/hr ntire distance(200km	. He makes return trip at an າ)
Qs. 4. Team A : SD=2.00 Team B : SD=1.) and AM=20 80 and AM=25. The	e statement – 'Team ,	A shows more variati	ion.' is
a. Irue b. False	2 C.	Can't say	d. Insufficient data	
Qs. 5. The mean age of women is 21, then % of	combined group of men and women ir	men and women is 2 In the group is	25 years, if mean age	e of man is 26 and that of
d. 80%, 20%	0.20%,80%	C. 50%, 50%	a. None of	these
Qs. 6. Simplest form of a. 35:75	the ratio 3.50:7.50 i b. 7:25	is c. 15:7	d. 7:15	
Qs. 7. The HM of 6,14,2 a. 17.75	21 & 30 is b. 12.54	c. 17.50	d. None of	these
Qs. 8. AM of 1,2,3,4 a. n b. n(n+1)	n is c. (n+1)/2	d. Non	e of these	
Qs. 9. For the set of obs a. 79 b. 79.50	servations 30,69,45, c.	80,89,79,75,90 the v 80	alue of P ₆₂ is d. 79.58	
Qs. 10. In case of 2 obs a. True b. False	ervations GM is GM e c.	l of AM and HM Can't say	d. May be t	true
Qs. 11. Duplicate ratio a. 9:125	of 3:5 is b. 18:50	c. 27:125	d. None of	these
Qs. 12. Triplicate ratio a. 3:7	of 27:343 is b. 27 ² :343 ²	c. 13:34	d. None of	these
Qs. 13. a,b,c,d are in pr a. True	oportion if ab=cd b. False	c. Can't say	d. None of	these
Qs. 14. Which term of a. 21 st	AP 5,13,21 s 18 b. 22 nd	81 c. 23 rd	d. 24 th	
Qs. 15. If the denomina increased by 3 then the	ator of the fraction e new fraction becor	exceed the numerato mes 4/5, Find the orig	or by 4. If numerator ginal fraction	and denominator are both
a. 14/17	b. 13/17	c. 12/15	d. 1	11/15
Qs. 16. The cost of 7 kg cost of sugar and rice p	g sugar and 5 kg rice er kg.	is 234, and the cos	t of 6 kg sugar and 7	kg of rice is `263. Find the
CA VINOD REDDY	(CA FOUNDATION MA	THS	WWW.SWAPNILPATNI.COM

DD-37		By CA VINOD REDD	ŶŶ	WWW.SWAPNILPATNI.COM.
a. `17, `23.80	b. `17.50, `23	.50 c. `	18, 24	d. None of these
Qs. 17. `600 we would have got a. 28	ere divided equally amc Rs.4 more. Find the ori b. 30	ong a certain number ginal number of chilc c. 32	of poor children. H Iren d. 24	ad there been 5 less children, each
Qs. 18. If one ro a. a=b	bot of the equation ax ² + b. a=c	-bx+c=0 is reciprocal c. b=c	of other then d. a=-c	
Qs. 19. `630 were distributed among A, B,C so that the shares of A and B were as 2:3 and shares of B and C were 4:5, What is the share of C. a. `270 b. `144 c. `216 d. None of these				
Qs. 20. The pop p.a. a. 10%	ulation of the village w	as 20,000 and after 2 c. 5%	years it becomes 2 d. 6%	2,050, what is the rate of increase

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	В	11	В
2	A	12	D
3	D	13	В
4	A	14	С
5	A	15	В
6	D	16	D
7	В	17	В
8	С	18	В
9	D	19	A
10	А	20	С

Answers : DD-37

CA VINOD REDDY

CA FOUNDATION MATHS

By CA VINOD REDDY

Qs. 1. If Log _{3/2} x=3, Fir a. 9/4	nd the value of x b. 8/27	c. 27/8	d. None of these
Qs. 2. Log _{1/9} 243 = x, 1 a. 9/4	Find X b. 8/27	c. 27/8	d. None of these
Qs. 3. Log₃x ³ -2log₃x-2 a. 9	e=0 Find x b. 2	c. 3	d. None of these
Qs. 4. If $\log_2 x + \log_4 x + a$. 10	-log ₁₆ x=21/4; Then x= b. 9	=? c. 8	d. 7
Qs. 5. If log _a 3=2, log _b a a. Log ₃ 2	8=3 then log₅a =? b. Log₂3	c. Log₃4	d. Log ₄ 3
Qs. 6. Find x if log _x 10- a. 10 b. 2	+log _x 100+log _x 1000=6 c. 4	5 4 d. 6	
Qs. 7. If 2loga+3logb- a. 10 ⁴	-2 =0 then a ² b ³ = ? b. 10 c. 1	10 ² d.1	0 ³
Qs. 8. Log ₂ [log ₂ {log ₃ (lag. 1/2)	og ₃ 27 ³)}] =? b. 1	c. 0	d. 2
Qs. 9. If loga, logb, log a.a, b, c are in G.P. c.a, b, c are in A.P.	gc are in A.P. then	b. a², b², c² are in G. d. a, b, c are in H.P.	Ρ.
Qs. 10. A ratio is expre a. Simplest	essed in form. b. Complicated	c. Moderate	e d. None
Qs. 11. If 2log x = 4 log a. 16 b. 4	4 , then x is equal to c. 2	2 d. N	lone
Qs. 12. If x:y = 5:4 the v a. 13:12	value of x ² y : xy ² is b. 12:13	c. 21:31	d. None of these
Qs. 13. Inverse ratio o a. 1:1	f 1.2 : 3.6 is b. 2:3	c. 3:2	d. None of these
Qs. 14. The denominate increases by unity. The a. 5/7	or of a fraction excee fraction is b. 1/3	eds the numerator by 2. i c. 7/9	f 5 is added to numerator the fraction d. 3/5
Qs. 15. the age of the p of sum of ages of his so	person is twice the su	um of ages of their two so s	ons and five years ago his age was three times
a. 60 years	b. 52 years	c. 51 years	d. 50 years
Qs. 16. The sum of two a. 15,30	numbers is 45 and t b. 32,13	he mean proportional be c. 36,9	tween them is 18. The numbers are d. 25,20
CA VINOD REDDY	С	A FOUNDATION MATHS	WWW.SWAPNILPATNI.COM

DD-38	By CA V	/INOD REDDY	W	WW.SWAPNILPATNI.COM	
Qs.17. Duplicate ratio	of 2 : 4 is				
a. 1:4	b. 1:16	c. 4:166	d. None of thes	e	
Qs. 18. The ratio comp	ounded of 2:3 and 4:5 is				
a. 8:15.5	b. 8:15	c. 15:8	d. 12:16		
Qs. 19. The number wh	Qs. 19. The number which is subtracted from each of the terms of the ratio 19:31 reducing it to 1:4 is				
a. 15	b. 5	c. 1	d. None of abov	ve	
Qs. 20. The ratio of 2 kg a. 1:4000	gs. and 5 gms is b. 2:5000	C	c. 2000:1	d. None of these	

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	С	11	А
2	D	12	D
3	A	13	D
4	С	14	D
5	D	15	D
6	А	16	С
7	С	17	А
8	С	18	В
9	A	19	A
10	A	20	D

By CA VINOD REDDY

Qs. 1. The sub triplica a. 4:6	ate ratio of triplicate of 2 b. 4: 12 c. 8:27	:3 is	d. 2:3:3	
Qs. 2. The ratio betw of second train is	een speeds of two trains	s is 20:22 if first	train is running a	t a speed of 440 km/hr then speed
a. 484 Km/hr	b. 848 Km/hr	c. 400) km/hr	d. None of above
Qs. 3. The angles of a a. (20,30,140)	triangle are in the ratio b. (20,30,130)	of 2:3:13 then c. (20	the angles are ,20,140)	d. None of above
Qs. 4. The sub - dupli	cate ratio of 1:4 is			
a. 1:166	b. 1:2	c. 2:6	d. 12:8	
Qs. 5. First term of th a. Antecedent	e ratio is called as b. Consequent	c. Anteceden	t and consequent	d. None of these
Qs. 6. If a:b = c:d ther a. Alternendo	n a:c = b:d this property i b. Componend	is known as Io	c. Dividendo	d. None of these
Qs. 7. 4, xx , 9, 13.5 a	re in proportion then xx	is	d Nana afthaa	
а. б	D. 8	с. 9	a. None of thes	se
Qs. 8. Two numbers a	are in ratio 3:4 , If 6 is ad	ded to each of	the term then the	e new ratio will be 4:5 then the
a. 14,20	b. 17,19	c. 18,24	d. Non	e of these
Qs. 9. The mean prop a. 24.90	bortional between 5 and b. 24.89 c. 24.4	l 120 is 9	d. None of thes	se
Qs. 10. Find Inverse ra a. 2.22: 2.222	tio of 2.2 ; 2.22 b. 1.11: 1.1	c. 1.1	11 : 1.1111	d. None of these
Qs. 11. The ratio of tw a. 9	o quantities is 5:9. If the b. 45	antecedent is 2 c. 40	25, the consequen d. None of thes	it is se.
Qs. 12. The sub – dupli	icate ratio of 1250 : 50 i	S		
a. 12:16	b. 1: 5	c. 5:1		d. None of these
Qs.13. If a : b = c : d the a. Alternendo	en (a + b) / a = (c + d) /c b. Componend	is called as lo	c. Dividendo	d. None of these
Qs. 14. Ratio can be es a. Correct	xpressed without unit - t b. Incorrect	his sentence is c. Can't Say	d. Non	e of these
Qs. 15. 9 : 8 is a a. A Greater Inequal	ity b. Less Inequal	ity c. Rat	io of equality	d. None of these
Qs. 16. log (3×5×7) is e a. log 3 × log 5 × log	equal to 7 b. log 3+ log 5	+ log 7 c.	log 3 – log 5 – log ⁻	7 d. 0
CA VINOD REDDY	CA FO	OUNDATION M	ATHS	WWW.SWAPNILPATNI.COM

DD-	39	By CA V	INOD REDDY	W	WW.SWAPNILPATNI.COM		
Qs. how	(), 17. A man has only 20 paise coins and 25 paise coins in his purse. If he has 50 coins in all totaling Rs. 11.25, Now many coins of each does he have						
a.	15, 35	b. 25, 25	c. 40, 10	d. 30, 20			
Qs. a. c.	18. Good measure Capable of further Rigidly defined	of central tendency shou algebraic treatment	ıld be	b. Based on all observa d. All of these	tions		
Qs.	19. In case of group and above' the bes	ed data when the last cla st average is	ass interval is '80				
a.	Mean	b. Median	c. Mode	d. None of the	se		
Qs. i	Qs. 20. Percentiles and deciles divides the given set of observations in to						
а. с.	100 & 10 equal par 100 & 10 parts	ts	b. 10 & 100 equ d. 100 & 10 par	al parts ts			

Answers : DD-39				
Qs.	Answer	Qs.	Answer	
1	А	11	В	
2	А	12	С	
3	В	13	D	
4	В	14	А	
5	A	15	А	
6	A	16	В	
7	A	17	В	
8	С	18	D	
9	C	19	В	
10	В	20	A	

DD-40	Ву СА	VINOD REDDY	WWW.SWAPNILPATNI.COM		
Qs. 1. Among AM,GM a. AM	1 and HM the largest va b. GM	lue is of c. HM	d. None of these		
Qs. 2. The value of Q a. Mean	2 is same as b. Median	c. D ₅	d. Both (B) and (C)		
Qs. 3.There are 60 women, 40 men and 50 children in a factory. The average number of units produced by women is 70, that by men is 80 and the average by children is 50. Find combined AM.a. 66.67b. 66c. 50d. None of these					
Qs. 4. AM = 10, GM =	8 therefore 2 observat	ions are			
a. 32 & 2	b. 18 & 2	c. 16 & 4	d. None of these		
Qs. 5. Range is based a. Any 2 observations c. All the observations	on b. Hig c d. No	hest and lowest v ne of them	alues		
Qs. 6. The sum of upp of quartile deviation is	per and lower quartile i	s found to be 160	and their difference is 80. The value of coefficient		
a. 50	b. 55	c. 10	d. 0.20		
Qs. 7. Coefficient of c quartiles are	quartile deviation for ce	rtain data is o.20.	The sum of two quartiles is 100. the value of two		
4. 30,30	5.00,40	0,30	0.10,50		
Qs. 8. The coefficient a. 9.90099	of quartile deviation fo b. 10.0099	or the following da c. 55.50	ata is 55,56,45,46,51 d. 45.50		
Qs. 9. SD of x is 3 the	refore SD of 3-2.50x is				
a. 5.50	b6.50	c. 3	d. None of these		
Qs. 10. Variance of x = a. 27 b27	36. therefore variance o c. 20.	of y when 3x+4y=: 25	20 is d. 729		
Qs. 11. Find D₅ for the	following observations	- 7,9,5,4,10,15,14	,18,6,20,22		
a. 11.40	b. 12.40	c. 13.80	d. None of these		
Qs. 12. Determine first a7 b. 7	t term of A.P. with comi c. 6	mon difference of d. None of thes	3 and 7 th term being 11. Se		
Qs. 13. The values of d a. 9	eciles divides the total b. 99	number of observ c. 3	rations inequal parts d. None of these		
Qs. 14. If (7p+3q):(3p-2 a. 5:4 b. 4:5	2q) = 4:2 then p:q is c. 7:2	d. None of the	se		
Qs. 15. If $Log_{a}23 = b$ th a. $a^{23} = b$	en b. 23ª = b	c. ab =23	d. a ^b =23		

CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-40		By CA VINOD REDDY		WWW.SWAPNILPATNI.COM
Qs. 16. Which of the f a. Coefficient of cond b. Karl Pearson's pro c. Spearman's rank c d. All these including	following is the me current deviations duct moment corre orrelation coefficie Scatter diagram	asure of correlation? elation coefficient ent		
Qs. 17. Bivariate Data	a are the data colle	cted for		
a. One variable		b. M	ore than two varia	able
c. Two variables at dif	ferent points of tir	ne d. Tv	vo variables at the	same point of time
Qs. 18. If variable Y to a. Negative correlation c. No correlation	ends to increase as on	variable X decreases b. inverse co d. Positive co	, is called: rrelation prrelation	
Qs. 19. The purpose of a. Establishing relations b. Predicting one var c. Measuring the ext d. Both (a) and (c)	of correlation analy on between two va iable for a given va ent of relation betw	/sis is: riables lue of the other varia ween two variables	ble	
Qs. 20. If all the point	s in a scatter diagr	am equally distribute	d without depictin	g any pattern, the correlation
coefficient 'r' is:				
a. r=1 b.r=	0	c. r = -1	d. 0 < r < 1	
Qs. 21. If all points se a. Linear b. No	em to the near son n-dispersed c	ne curve, the correla . Skewed d	tion is called: Non-linear	
a. Karl Pearson's	d is used when it is b. Conc	s required to know or urrent Deviation	ly the direction of c.Spearman's	d.Least Square
Qs. 23. When the data a. Concurrent correla c. Spearmen's correla	a is ranked in orde ation ation	r of size, importance, b. Karl Pears d. Least squa	etc. it is called as: on's correlation re correlation	
Qs. 24. When coeffic a. Low degree	ient of correlation b. Moderate de	is between .50 to .75, gree c. High d	then it is said to b egree d. Zer	ecorrelation of: ro degree
Qs. 25. The coefficier a. Arithmetic	nt of correlation is b. Geometric	themean of two c. Ha	regression coeffic Irmonic d	cients I. None of these
Qs. 26. Product mom a. Finding the nature c. Both (a) and (b)	ent correlation coo of correlation	efficient is considerec b. Fi d. Ei	for nding the amount ther (a) and (b)	of correlation
Qs. 27. If the sum of s value of rank correlat	quares of differention coefficient?	ce of ranks, given by t	wo judges A and E	3, of 5 students in 34, what is the
a. 0.7	b. 0.87	c0.70	d. Non	e of these
Qs. 28. If variances of correlation shall be:	x and y series are	16 and 25 respective	y, and the co-varia	ance of two is 18, coefficient of
a. +0.45	D. + U.Y	C. + 4.22	a. + 1.22	

DD-40	By CA VINOD REDDY	WWW.SWAPNILPATNI.COM			
Qs. 29. Regression analysis is concerned with A. Establishing a mathematical relationship between two variables B. Measuring the extent of association between two variables C. Predicting the value of the dependent variable for a given value of the independent variable D. Both (a) and (c)					
Qs. 30. If for two variable x and y, what is the value of the correlatio	the covariance, variance of x and van coefficient?	ariance of y are 40, 16 and 266 respectively,			
a. 0.625 b. 0.01	c. 0.4 c	I. None of these			
Qs. 31. The limits of Karl Pearson' a. 0 to 1 b. 0 to -1	's coefficient of correlation are: c1 to +1 including b	ooth limits d1 to +1			
Qs. 32. When accompanied by an of another series, the correlation s	increase in the value of series, there shall be:	e is a corresponding decrease in the values			
a. Positive correlation	b. Negative c	correlation			
c. Indirect correlation	d. Spurious c	orrelation			
Qs. 33. If in the scatter diagram all the points show a straight line from left to right downwards, it shall mean:a. Perfect negative correlationc. Normal positive correlationd. Zero correlation					
Qs. 34. Find x if x/(x-2) = 3					
a. 6 b. 4	c. 3	d. 8			
Qs. 35. What is that number of what is the second se	nich fifth part exceeds fifteenth part c. 5 d. 65	: by 8?			

Qs.	Answer	Qs.	Answer
1	А	21	D
2	D	22	В
3	В	23	С
4	С	24	В
5	В	25	В
6	А	26	С
7	В	27	С
8	А	28	В
9	D	29	D
10	С	30	D
11	D	31	С
12	А	32	В
13	D	33	А
14	D	34	С
15	D	35	А
16	D		
17	D		
18	A		
19	D		
20	В		

By CA VINOD REDDY

Qs. 1 The solution of the equat a. 3, 5, 7	ion (x-3) (x-5) (x-7) = 0 is b. –3, –5, –7	 c. 3, -5, -7	d. –3, –5, 7
Qs. 2. The inequalities x < 0, y > a. First quadrant	• 0 represents b. Second quadrant	c. Third quadrant	d. Fourth quadrant
Qs. 3. The equation $5x + 7(x - 3)$ a. Quadratic equation	3) – 4(x + 10) = 0 is b. Linear equation	c. Cubic equation	d. None of these
Qs. 4. The equation $(x - a) (x - a) x = 0$	b) = 0 is satisfied by b. x = a, b	c. x =a,b	d. None of these
Qs. 5. The point of intersection a. First quadrant	between the straight lines 3x + 2 b. Second quadrant	2y = 6 and 3x – y = 12 lie c. Third quadrant	in d. Fourth quadrant
Qs. 6. The values of x for the eca. (1,12)	quation x ² +9x+18 = 6–4x are b. (–1,–12)	c. (1,-12) d. (-1,	12)
Qs. 7. The solution of the equat a. 6	tion (p+2) (p–3) + (p+3) (p–4) = p b. 7	(2p–5) is c. 5	d. None of these.
Qs. 8. Determine the value of x a. 4, 4	for the equation $x^2 - 8x + 16$ b4, -4	= 0 c. 2, 6	d. 6, 2
Qs. 9. The point of intersection a. 1st quadrant.	between the straight lines x + 2y b. 2nd quadrant.	v = 6 and 3x + y = 123 lie c. 3rd quadrant.	in d. 4th quadrant.
Qs. 10. Solve x ² -24x + 135 = 0 t a. 9,6	hen x is b. 9,15	c. 15,6	d. None of these
Qs. 11 If one root of the equati a. 1	on x ² +7x+p=0 be reciprocal of the b1	e other then the value o c. 7	f p is d. –7
Qs. 12. Find the equation of the a. x+4y+18=0	e line with slope –0.25 and (–2, – b. 2x+4y+15=0	4) on the line c. 2x+y+18=0	d. x+4xy-18=0
Qs. 13. For what value of 'K' the a. -16	e equation 9x ² – 24 x + K = 0 has b. –15	equal roots c. 0	d. 16
Qs. 14. If x-y =2 and 3x-2y=9, th a. 5	nen: x+y= b. 3	c. 8	d. none of these
Qs. 15. If 15x+23y = -10 and 3x- a2/3	+4y= -2, then: 3x+2y+2= b. 0	c. 7	d. none of these
Qs. 16. If $p^2 = 5p-3$ and $q^2 = 5q-3$ q/p is	b, where p is not equals to q, ther	the quadratic equation $2x^2 + 10x + 2 = 0$	whose roots are p/q and
Qs. 17. The equation the line h a = 4x+5y+35=0	aving y- intercept= -7, and paralle	el to the line joining the	points (2, 3) and (-3, 7) is
CA VINOD REDDY	CA FOUNDATION MA	THS	WWW.SWAPNILPATNI.COM

DD-41

Qs. 18	Qs. 18. A number 34 is to be divided into two parts such that difference between them is 8. Which is smaller one						
a.	21	b. 14	c. 13	d. None of these			
Qs. 19	. Two numbers whose su	m is 70 and whose difference is 4	40 are framed, their proc	duct is			
a.	720	b. 825	c. 550	d. None of these			
Qs. 20. $9x^2$ -34x + 36 = 0 then the sum of roots is							
a.	34/9	b34/9	c. 36/9	d. None of these			
-	- /-	1 -	/ -				

WWW.SWAPNILPATNI.COM

DD-41

Qs.	Answer	Qs.	Answer
1	А	11	А
2	В	12	А
3	В	13	D
4	В	14	С
5	D	15	В
6	В	16	С
7	A	17	А
8	А	18	С
9	D	19	В
10	В	20	A

DD-42 By CA VINOD REDDY WWW.SWAPNILPATNI.COM Qs. 1. $9x^2 - 34x + 36 = 0$ then the find the product of the roots a. -34/9 d. None of these b. -36/9 c. 36/9 Qs. 2. Calculate the number such that it is equal to three times its difference from 56 a. 32 b. 14 c. 42 d. None of these Qs. 3. There are three consecutive numbers whose sum is 162. Calculate the square of middle one a. 2809 b. 2916 c. 2601 d. 2401 Qs. 4. The sides of Right angled triangle are x, x+1, x-1 (in cms.). Its hypotenuse is d. 10 a. 6 b. 4 c. 5 Q. 5. If an integer is added to its square, sum is 90 the integer is b. -9 c. 9 or -9 d. 9 or 0 a. 9 Qs. 6. Sum of a number and its square is 18/49, the number is a. 3/2 b. 7/2 c. 5/2 d. 2/7 Qs. 7. Sum of two number is 15 and sum of their reciprocals is 3/10, the number are a. 14,1 b. 6, 9 c. 3, 12 d. 5, 10 Qs. 8. A number consist of two digits whose sum is 9 and when 9 is added to the number, the digits are reversed. Find the number a. 18 b. 45 c. 36 d. 27 Qs. 9. Weekly income of A and B are in the ratio of 3:4 and weekly expenditure in the ratio of 1:2. If each saves 1000/- per week, Find their weekly incomes. c. 3500, 4000 a. 1500, 2000 b. 2500, 3000 d. None of These Qs. 10. Solve for x - (x+3)/(x-1) = (2x+1)/(3x-5)a. {-7,2} b. {-4.7} c. {-6.7} d. {-5.-1} Qs. 11. The roots of the equation x(x+1)=6 are a. 1,6 b. -3,-2 c. 2,-3 d. 1,-6 Qs. 12. If sum of two positive numbers is 5 and sum of their squares is 17, what is the product of the numbers a. 22 d. 12 b. 8 c. 4 Qs. 13. If the difference between ages of two men is 10 years. 15 years ago, the age of the older was twice the age of younger. What are their present ages? b. 35. 40 c. 25, 35 a. 10, 15 d. 15. 25 Qs. 14. A man sells 6 radios and 4 televisions for 18480/- If 14 radios and 2 television are also sold at same amount, what is the price of television d. 3360 a. 1848 b. 840 c. 1680 Qs. 15. 5% of one number and 4% of other together amount to 16. If 6% of the first number and 8% of second add up to 24, then these numbers are resp. a. 300,250 b. 200,150 c. 100,50 d. None of these

CA VINOD REDDY

CA FOUNDATION MATHS

DD-42	By CA VINOD REDDY	W	WW.SWAPNILPATNI.COM				
Qs. 16. Determine the value of x for the equation $x^2 - 8x + 16 = 0$							
a. 4,-4	b4,-4	c. 2,6	d. None of these				
Qs. 17. If one root of the equat	ion x ² +7x+p=0 be reciprocal of th	e other then the value	of p is				
a. 1	b. –1	c. 7	d. –7				
Qs. 18. If $b^2 - 4ab = 0$, the roots	are						
a. Equal and real	b. Unequal and real	c. Complex numbers	d. Can't say				
Qs. 19. If 2x+y=5 and 3x-4y=2 then 2xy=?							
a. 4	b. 6	c. 8	d. 10				
Qs. 20. Sum of two numbers is 80. If 3 times of one number is 5 times of other number, then the numbers are							
a. 20,60	b. 50,30	c. 10,70	d. 25,55				

DD-42

Qs.	Answer	Qs.	Answer
1	С	11	С
2	С	12	С
3	В	13	С
4	С	14	D
5	А	15	В
6	D	16	D
7	D	17	А
8	В	18	D
9	A	19	A
10	A	20	В

Qs. 1. Statistics is define a. Singular sense	ed in terms of numerical d b. Plural sense	ata in the c. Either (a) or (b)	d. Both (a) and (b).	
Qs. 2. Statistics is applie a. Economics	ed in b. Business Management	c. Commerce and	d industry	d. All these.	
Qs. 3. An attribute is a. A qualitative characte c. A measurable charact	eristic b teristic c	o. A quantitative charact d. All these.	eristic		
Qs. 4. Annual income of a. An attribute	f a person is b. A discrete variable	c. A continuous v	variable	d. None of these	
Qs. 5. Nationality of a sa. An attribute	tudent is b. A continuous variable	c. A discrete vari	able	d. (a) or (c).	
Qs. 6. The data collected on the height of a group of students after recording their heights with a measuring tape					
a. Primary data	b. Secondary data	c. Discrete data		d. Continuous data.	
Qs. 7. The primary data a. Interview method	are collected by b. Observation method	c. Questionnaire	method	d. All these.	
Qs. 8. The best method a. Textual	of presentation of data is b. Tabular	c. Diagrammatic		d. (b) and (c).	
Qs. 9. The most attracti a. Tabular	ve method of data presen b. Textual	tation is c. Diagrammatic		d. (a) or (b).	
Qs. 10. 'Stub' of a table a. Left part of the table c. Right part of the table	is the e describing the columns e describing the rows	b. Right d. Left pa	part of the table art of the table	e describing the columns describing the rows.	
Qs. 11. The entire uppe a. Caption	r part of a table is known a b. Stub	as c. Box head		d. Body.	
Qs. 12. In tabulation so a. Footnote	urce of the data. if any, is a b. Body	shown in the c. Stub		d. Caption.	
Qs. 13. Out of 1000 per persons enjoyed world were industrial workers a. 260	sons, 25 per cent were ind cup matches on TV. 30 pe s. What is the number of a b. 240	dustrial workers and the r cent of the people who gricultural workers who c. 230	rest were agric o had not watch had enjoyed-w	ultural workers. 300 ned world cup matches vorld cup matches on TV? d. 250	
Qs. 14. The following da Marks No. of Students : How many students go	ata relate to the marks of a Below 10 Below 2 15 38 t marks more than 30?	a group of students: 0 Below 30 65	Below 40 84	Below 50 100	
a. 65	b. 50	c. 35		d. 433	

CA VINOD REDDY

DD-43

CA FOUNDATION MATHS

WWW.SWAPNILPATNI.COM

DD-43		By CA VINOD RED	DY	WWW.SWAPNILPATN	II.COM
Qs. 15. Find the numbe Value	r of observatior :More than 200	s between 250 and More than 250	300 from the fol More than 300	lowing data: More than 350	
No. of observation	: 56	38	15	0	
a. 56	b. 23	C.	15	d. 8	
Qs. 16. A sample study percentage of coffee dr the percentage of fema	of the people of inkers were 45 ile non-coffee d	an area revealed th as a whole and the rinkers?	nat total number percentage of ma	of women were 40% and the ale coffee drinkers was 20. What	was
a. 10	b. 15	C.	18	d. 20	
Qs. 17. The mean mont salaries paid to the mal female employees in th a. 80:20 b. 20:80 c. 50:50 d. None of these	hly salary paid t e and female en e company.	o all employees in a nployees were Rs. 6	a certain compan 20 and Rs. 520 re	y was Rs. 600. The mean monthl esp. Obtain the percentage of ma	y ale to
Qs. 18. A.M. of 5 observ wrongly instead of 11 a a. 16 b. 15 c. 14 d. 13 e. None of these	vations is 15. La nd 27. Find the	ter on it was observ correct A.M.	ed that two obse	ervations 12 and 21 were taken	
Qs. 19. Mean of 8 observere recorded instead a. 14.60 b. 14.00 c. 13.90 d. None of these	rvations is 14. B of 9 and 26. Nov	ut the record keepe v find the actual me	er came to know ean.	ater on that the numbers 6 and	25
Qs. 20. The mean annua employees is 27,000 company.	al salary of all en and `17,000 res	nployees in a comp pectively. Find the	any is `25,000. T percentage of ma	he mean salary of male and fem ales and females employed by th	ale e
a. 80%, 20%	b. 20%	, 80%	c. 50%, 50	% d. None of these	

DD-43

Qs.	Answer	Qs.	Answer
1	D	11	А
2	D	12	А
3	А	13	А
4	С	14	С
5	А	15	В
6	А	16	В
7	D	17	А
8	В	18	А
9	С	19	D
10	D	20	A

By CA VINOD REDDY

Qs. 1. The no. of measu (a) Two	res of central tendenc b. Three	c. Four	d. Five
Qs. 2. The words "mear (a) A M	n" or" average" only re	efer to	d. None
	D. 11.101		
Qs. 3 is the most	t stable of all the meas	sures of central tendency.	
a. G.M.	b. H.M.	c. A.M.	d. None
Os 1 Mean is oft	VDAS		
a. 3	b. 4	c. 8	d. 5
	-		
Qs. 5. Weighted A.M is	related to		
a. G.M	b. Frequency	c. H.M	d. None
Os 6 Frequencies are a	also called weights		
a. True	b. False	c. Both	d. None
Qs. 7. The algebraic sur	n of deviations of obse	ervations from their A.M is	S
a. 2	b1	c. 1	d. 0
Os 8 The algebraic sur	n of deviations of 8.1.6	5 from the AM viz 5 is	
a1	b. 0	c. 1	d. None
Qs. 9. A.M is never less	than G.M		
a. True	b. False	c. Both	d. None
Qs. 10. The value of the a. Standard deviation	middlemost item who b. Mean c. Mo	en they are arranged in or ode d. Me	der of magnitude is called dian
Qs. 11. Median is unaffe	ected by extreme valu	es.	d Nono
a. True	D. Faise		a. Note
Qs. 12. Median of 2,5,8	,4,9,6,1 is		
a. 9	b. 8	c. 5	d. 6
Qs. 13. The value which	occurs with the maxim	mum frequency is called	
a. Median	b. Mode	c. Mean	d. None
Qs. 14. In formula of me a. Total frequency	edian for grouped frec b. Frequency density	quency distribution N is c. Frequency	d. Cumulative frequency
Oc. 15 When all abcom	vations occur with oqu	al fraguancy doos n	at avist
a. Median	b. Mode	c. Mean	d. None
Qs. 16. Mode of the obs	servations 2,5,8,4,3,4, b. 2	4,5,2,4,4, is c. 5	d. 4
0. 17 Data 11. 2			
a. bi-modal data	b. Tri-modal data	as c. Multi-modal data	d. None of these
CA VINOD REDDY	CA	FOUNDATION MATHS	WWW.SWAPNILPATNI.COM

DD-44	By CA \	/INOD REDDY	WWW.SWAPNILPATNI.COM
Qs. 18. For the observa	tions 5,3,6,3,5,10,7,2 the	ere are modes.	
a. 2	b. 3	c. 4	d. 5.
Qs. 19. There can 2 or r	more modes for the data		
a. True	b. False	c. Can't say	d. None
Qs. 20. Mode of 2,2,2,3	,3,3 is		
a. 2	b. 3	c. Both of these	d. None of these

DD-44

Qs.	Answer	Qs.	Answer
1	D	11	А
2	А	12	С
3	С	13	В
4	А	14	А
5	В	15	В
6	А	16	D
7	D	17	С
8	В	18	А
9	A	19	A
10	D	20	D

By CA VINOD REDDY

Qs. 1. For 2 positive observa a. $GM^2 = GM \times HM$ b. G	tions M ² = AM x HM	c. HM ² = AM x	GM	d. GM ² = AM x HM x H	IM
Qs. 2 of a set of obser a. H.M. b. G	vations is defined to .M.	o be their sum, c. A.M.	divided b	y the no, of observatio d. None	ns.
Qs. 3. Simple average is som a. weighted average	etimes called b. unweighted	average	c. rela	tive average	d. None
Qs. 4. Weight represents a. Importance	b. Relative imp	ortance	c. Kilog	grams	d. Can't say
Qs. 5. Median is a. Positional average	b. Magnitude v	vise average	c. Mos	t likely observation	d. Can't say
Qs. 6. The best measure of central tendency isa. AMb. GMc. Mediand. Mode					
Qs. 7. The best measure of d a. Range	lispersion is b. Standard dev	viation	c. Quar	tile deviation	d. All of these
Qs. 8. The best measure of c a. Range	lispersion for comp b. Standard dev	arison purpose viation	is c. Quar	rtile deviation	d. None of these
Qs. 9. AM> GM >HM is true a. Same observations	for b. Different ob	servations	c. Can'	t say	d. None
Qs. 10. The most appropriate a. Mean	e measure of centra b. Median	al tendency for	open clas c. Mod	s intervals is e	d. None of these
Qs. 11. Number of mobile pl a. An attribute	nones is an example b. A discrete va	e of rriable	с. А со	ntinuous variable	d. All of these
Qs. 12. Smoking habit of a pe a. An attribute	erson is an example b. A discrete va	e of rriable	с. А со	ntinuous variable	d. All of these
Qs. 13. Which of the followin a. Primary data	ng are types of data b. Secondary da	i on the basis of ata	f collectio c. Both	on of these	d. None of these
Qs. 14. Mean of 2,4,6,7 is a. 5	b. 6		c. 7		d. None of these
Qs. 15. Median of 2,4,6,7 is a. 5.55	b. 5.00		c. 5.50		d. None of these
Qs. 16. Multiplying the value sum of weights is	es of the variable by	the correspon	ding weig	shts and then dividing t	he sum of by the
(a) Simple average	b. Weighted av	erage	c. Both		a. None
(a) A.M.	b. H.M		c. Med	ian	d. None
CA VINOD REDDY	CA FC	DUNDATION M	ATHS	WWW.	SWAPNILPATNI.COM

DD-45	I	By CA VINOD REDDY	WWW.SWAPNILPATNI.COM
Qs. 18. The marks obt 86. Find Mode	ained by 10 studen	its in an examination w	vere as follows : 70, 65, 68, 70, 75, 73, 80, 70, 83,
a. 70	b. 75	c. 74	d. None of these
Qs. 19. For the data gi Profit Per Shop 0-10 10-20 20-30 30-40 40-50	iven below, find the No. of Si	e missing frequency if t hops 10 15 30 25	he Arithmetic Mean is 33.
50-60 a. 25	b. 20	20 c. 35	d. None of these

Qs. 20. A train runs first 25 kilometres at a speed of 30 kilometres per hour, next 50 kilometres at a speed of 40 kilometres per hour, then due to repair of the track, it covers only one kilometre at a speed of 10 kilometres per hour, and finally covers the remaining distance of 24 kilometres at a speed of 24 kilometres per hour. What is the average speed in kilometres per hour?

a. 70 kms/hr b. 17 kms/hr c. 10 kms/hr d. None of These

DD-45

Qs.	Answer	Qs.	Answer
1	В	11	В
2	С	12	А
3	В	13	С
4	В	14	D
5	А	15	В
6	А	16	В
7	В	17	А
8	D	18	А
9	В	19	A
10	В	20	D

DD-46		By CA VINOD REDDY			NWW.SW	APNILPATNI.COM
Os 1 Find H M of 461	10					
a. 5.8064	10	b. 5.5087		c. 4.5076		d. None of these
Qs. 2. Find H.M. of x: 2 4	8	16				
a. 5.55	3	2 b. 4.44		c. 3.33		d. None of these
Qs. 3. Given two positiv a. True	e numb	ers a and b AM > b. False	(HM=GM ²	c. Party true		d. None
Qs. 4. The AM and GM a a. 8,4	for two o	bbservations are b. 8,2	5 and 4 respecti	vely. Find two observ c. 2,16	ations	d. None of these
Qs. 5. Measures of Disp a. The scatterness of a s c. Both (a) and (b)	ersion a set of ob	re used to meas servations	ure	b. The concentration d. Neither (a) and (b)	of a set of	observations
Qs. 6. Dispersion means a. The scatterness of a s c. Both (a) and (b)	s set of ob	servations		b. The concentration d. Neither (a) and (b)	of a set of	observations
Qs. 7. G.M of 8,4,2 is a. 4		b. 2		c. 8		d. None
Qs. 8. G.M. of 3,4,5,7,8, a. Zero	10,0,34	is b. Not defined		c. 8.875		d. None of these
Qs. 9. H.M. of 3,4,5,7,8, a. Zero	10,0,34	is b. Not defined		c. 8.875		d. None of these
Qs. 10. A.M. of 3,4,5,7,8 a. Zero	3,10,0,34	l is b. Not defined		c. 8.875		d. None of these
Qs. 11. When all observ a. Median	ations o	ccur with equal b. Mode	frequency	does not exist. c. Mean		d. None
Qs. 12. The AM and GM a. 6 and 7	l for 2 ob	oservations are 6 b. 9 and 4	5.50 and 6 respec	tively then the two ol c. 10 and 3	oservations	are d. 8 and 5
Qs. 13. If there are 2 gro AM is	oups cor	ntaining 30 and 2	20 observations a	and having 50 and 60 a	as A.means	s, then combined
a. 55	b. 56		c. 54	d. 52		e. None of these
Qs. 14. If a variable assu a. 11/3	umes the b. 5	e values 1,2,3,4,5	5 with frequencie c. 4	es 1,2,3,4,5 respective d. 4.50	ly then wha	at is A.M. e. None of these
Qs. 15. If two variable a a. 20	ire given	by y=2x-3. if the b. 40	e median of x is 2	0, what is the median c. 37	of y?	d. 35

CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-46		By CA VINC	DD REDDY		WWW.SWAPNI	LPATNI.COM
Qs. 16. If the relation of v is	ship between	two variables u	and v are given	by 2u+v+7=0 and	if AM of u is 10, 1	then the AM
a. 17	b	17	C.	-27	d. 27	7
Qs. 17. Following is the incomplete distribution having modal mark as 44. Find mean from following data:						
Marks:	0-20	20	-40	40-60	60-80	80-100
No. of Students:	5		18		12	5
a. 45	b. 4	46	C.	47	d. 48	8
Qs. 18. Following is th following data:	ne incomplete	distribution of 1	100 students ha	ving median marl	k as 32. Find mear	n from
Marks:	0-10	10-20	20-30	30-40	40-50	50-60
No. of Students:	10		25	30		20
a. 32	b. 3	31	C.	32.30	d. 3	1.50
Qs. 19. Following are	the wages of	8 workers expre	ssed in Rupees	- 82,96,52,75,70,0	65,50,70. Find the	Range
a. 96	b. !	50	с.	46	d. N	one
Qs. 20. Following are of Range.	the wages of a	3 workers expre	ssed in Rupees	- 82,96,52,75,70,6	65,50,70. Find the	Coefficent
a. 3.150	b. 3	31.50	C.	1.513	d. N	one

DD-46

Qs.	Answer	Qs.	Answer	
1	А	11	В	
2	В	12	В	
3	А	13	С	
4	В	14	А	
5	С	15	С	
6	А	16	С	
7	А	17	D	
8	А	18	С	
9	В	19	С	
10	С	20	В	
DD-47	Ву	CA VINOD REDDY		WWW.SWAPNILPATNI.COM
---	--------------------------------------	---	--	---------------------------------
Qs. 1. If 2x+3y=10 and F	Range of x is 15, wh	at would be range of y	/?	these
a. 15	b. 10	c. 150	d. None of t	
Qs. 2. If x and y are rela	ted as 4x+3y+11=0	and mean deviation c	f x is 5.40, what is m	ean deviation of y?
a. 8.40	b. 5.50	c. 10.40	d. None of t	these
Qs. 3. Find Range of foll	owing data 24, 36,	753, 738, 646, 794, 42	2, 80	
a. 770	b. 794	c. 24	d. None	
Qs. 4. Find the coefficie	nt of Range of follo	wing data 24, 36, 753	, 738, 646, 794, 422,	80
a. 94.13	b. 100	c. 770	d. 818	
Qs. 5. The coefficient of a. 20	f variation is 25 and b. 25	mean is 20, Find the s c. 100	S.D. d. None of t	these
Qs. 6. If AM and coeffic a. 100	ient of variation of b. 1600	x are 10 and 40 respective c. 16	ctively, what is the v d. None of t	ariance of (15-2x) these
Qs. 7. If mean and varia what are the remaining	nce of 5 observations.	ons are 4.80 and 6.16 i	espectively. If 3 of t	he observations are 2,3 and 6,
a. 4 and 9	b. 14 and 19	c. 10 and 3	d. None of t	these
Qs. 8. Prakash bought 2	5 chairs at Rs.150 e	ach, 15 chairs at Rs.14	40 each. The average	e price of the chair is:
a. 140	b. 139	c. 108	d. None of these	
Qs. 9. Which measures a. Mean and mode c. Mean and median	of central tendency	are not affected by e b. Mo d. HN	xtreme values de and median and GM	
Qs. 10. Among the follo	wing measures of c	entral tendency whicl	n can give more thar	n one value?
a. HM	b. AM	c. Median	d. Mode	
Qs. 11. Average monthl	y income of all wor	kers in a factory is Rs.	600 and that of 16 s	upervisors is Rs.3000/ If
average monthly salary	of the workers is R	s.550,the number of v	vorkers leaving aside	e supervisor, in the factory is
a. 824	b. 802	c. 768	d. 744	e. None of these
Qs. 12. Shift of origin ha a. Range	as no impact on b. Mean deviation	c. Standard dev	iation d. All these	
Qs. 13.A. The geometric a. 10.48 b. 52.93	c mean of 0,5,35,69 1 c.	is O	d. 10	
Qs. 13.B. In a frequency	v distribution, mid v	ralue of a class is 16 ar	nd class interval is 4.	The lower limit of a class is
a. 15	b. 12	c. 13	d. 14	
Qs. 14. If AM of 6 numb	ers is 35. If one of t	he numbers is exclud	ed, their mean is 36.	The excluded number is
a. 18	b. 30	c. 25	d. 35	
Qs. 15. The combined n	nean of three group	os is 12 and combined	mean of first two gr	oups is 3.If first, second and
third groups have 2,3,5	items respectively,	then find the mean o	f third group:	
a. 21	b. 15	c. 12	d. 13	
CA VINOD REDDY	(CA FOUNDATION MAT	THS .	WWW.SWAPNILPATNI.COM

DD-47	By CA \	VINOD REDDY	WWW.SWAPNILPATNI.COM
Qs. 16. Coefficient of m	ean deviation about mea	an of first 9 natural numb	ers is
a. 44.44	b. 22.20	c. 22.22	d. None of these
Qs. 17. The appropriate	measure of dispersion f	or open end classificatio	nis
a. Standard deviation		b. Mean deviation	
c. Quartile deviation		d. All these measures	
Qs. 18. If profits of the o	company remain same fo	or last 10 months is then	standard deviation of profits is
a. `1000	b. 10 Months	c. Can't say	d. Zero
Qs. 19. Harmonic mean	of 4,6,10 is		
a. 0.15	b. 0.52	c. 5.81	d. 2.50
Qs. 20. The method of p a. Tabulation	presenting the classified b. Graphic Presentatior	data is: c. Diagrammati	al presentation d. All of above

DD-47

Qs.	Answer	Qs.	Answer
1	В	11	С
2	D	12	D
3	А	13 A	С
4	А	13 B	D
5	D	14	В
6	D	15	А
7	А	16	А
8	D	17	C
9	В	18	D
10	D	19	С
		20	D

DD-48	By CA	VINOD REDDY	WWW.SWAPNILPATNI.COM
Qs. 1. Class interval of a. 9.5	following class is of 0-9 b. 10	10-19 20-29 30-3 c. 9 and 10 both	9 d. None
Qs. 2. Which of the sta a. HM	tistical average is calcula b. GM	ated by cumulative frequence c. AM	ncy d. Median
Qs. 3. Find sum of all o a. 9800	bservations if mean and b. 98000	standard deviation of 100 c. 3280) items are 98 and 4 respectively d. 2322
Qs. 4. If standard devia a. 28	ntion of x is 4, What is the b. 20	e variance of (19-7x) c. 7/4	d. 4/7 e. None of these
Qs. 5. Out of three give numbers is 88, then th	en numbers, the first one e difference between fir	e is twice of second and th st and third is	ree times of third. If the average of these
d. 40	U. 72		u. 32
the relation R_x and R_y denotes the relation R_x and R_y	h 2p – 2p	e 20. – 20.	d D = 2D
a. $R_x = R_y$	D. $2R_x = 3R_y$	$C. 3R_x = 2R_y$	$0. \mathbf{R}_{\mathbf{x}} = 2 \mathbf{R}_{\mathbf{y}}$
Qs. 7. Mean and stand taken as 26 in place of	ard deviation of 30 item: 38.Find the correct mea	s are found as 28 and 2, bi n	ut while calculating them one item was
a. 248	b. 15.40	c. 28.40	d. None of these
Qs. 8. If Q ₃ =52 and Q ₁ = a. 62.50	12, coefficient of quartil b. 40	e deviation shall be c. 0.40	d. 64 e. None of these
Qs. 9. The mean salary	for a group of 40 female	e workers is 5200 per mon	th and that for a group of 60 male
a. 6500	b. 6200	c. 6160	d. 6100
Qs. 10. The standard d	eviation of, 10, 16, 10, 1 b. 6	6, 10, 10, 16, 16 is c. 3	d. 0
Qs. 11. If there are 3 ol	oservations 15, 20, 25 th	en the sum of deviation o	f the observations from their AM is
a. 0	b. 5	c. –5	d. None of these.
Qs. 12. If the profits of profits for these ten m	a company remains the onths would be ?	same for the last ten mor	ths, then the standard deviation of
a. Positive	b. Negative	c. Zero	d. (a) or (c)
Qs. 13. 'Stub' of a table	e is thepart of the ta	able describing the	
a. Left, Columns	b. Right, Columns	c. Right, Rows	d. Left, Rows
Qs. 14. Usually a Median	is the best measure	of central tendency.	d G M
		c. mean	0. 0.101
Qs. 15. What is the value a. 17	ue of the first quartile fo b. 16	r observations 15, 18, 10, c. 12.75	20, 23, 28, 12, 16? d. 12

CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-48	By CA VINOD	REDDY	www	.SWAPNILPATNI.COM
Qs. 16. What is the coe	fficient of range for the followi 75, `70, `72, `85. b. `20	ng wages of 8 work c. 30	kers? d. 20	
Qs. 17. For any two nur a. Twice the range.	mbers SD is always b. Half of the range.	c. Squar	e of the range.	d. None of these.
Qs. 18. For any two nur a. Twice the SD	mbers Range is always b. Half of the SD	c. Squar	e of the SD	d. None of these.
Qs. 19is an ab a. Range	solute measure of dispersion. b. Mean Deviation	c. Standard Do	eviation d. Al	ll these measures
Qs. 20. What is the me a. 6	dian for the following observat b. 7	ions - 5, 8, 6, 9, 11, c. 8	, 4. d. None of	these.

DD-48

Qs.	Answer	Qs.	Answer
1	В	11	А
2	D	12	С
3	А	13	D
4	E	14	С
5	С	15	С
6	С	16	D
7	С	17	В
8	А	18	А
9	С	19	D
10	C	20	В

DD-49	By CA VINOD RED	DY	WWW.SWAPNILPATNI.COM
Qs. 1. The third decile for the n a. 13	umbers 15, 10, 20, 25, 18, 1 b. 10.70	1, 9, 12 is c. 11	d. 11.50
Qs. 2. If the range of x is 2, wha a. 2	t would be the range of –3> b. 6	< +50 ? c. −6	d. 44
Qs. 3. What is the standard dev a. 14	iation of 5, 5, 9, 9, 9, 9, 10, 5, b. 42	10, 10? c. 4.50	d. 2.16
Qs.4. In case of an even number a. Any of the two middle-most b. The simple average of these c. The weighted average of the d. Any of these.	er of observations which of value. two middle values. ese two middle values.	the following is median ?	
 Qs. 5. If all the observations ar a. SD would be increased by 10 b. Mean deviation would be in c. Quartile deviation would be d. All these three remain unch 	e increased by 10, then D. creased by 10. increased by 10. anged.		
Qs. 6. Mode of 0,3,5,6,7,9,12,0, a. 6	2 is b. 0	c. 3	d. 5
Qs. 7. Tally marks determines_ a. Class width	b. Class boundary	c. Class limit	d. Class frequency
Qs. 8. The harmonic mean for t a. 2.00	he numbers 2, 3, 5 is b. 3.33	c. 2.90	d. –3.30
Qs. 9. The coefficient of mean of a. 200/9	deviation about mean for th b. 80	e first 9 natural numbers is c. 400/9	d. 50
Qs. 10. If there are two groups the combined arithmetic mean	containing 30 and 20 obser is	vations and having 50 and	60 as arithmetic means, then
a. 55	b. 56	c. 54	d. 52
Qs. 11. If all the observations a a. New SD would be also multi b. New SD would be increased	re multiplied by 2, then plied by 2. by 2.	c. New SD would be d.New SD would be o	half of the previous SD. decreased by 2.
Qs. 12. The median of 27,30,26 a. 30	,44,42,51,37 is b. 42	c. 44	d. 37
Qs. 13. A Qualitative characteri a. An attribute.	stic is known as b. A variable.	c. A discrete variable.	d. A continuous variable.
Qs. 14. A Quantitative characte a. An attribute.	ristic is known as b. A variable.	c. A discrete variable.	d. A continuous variable

CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-49	By CA VINOD R	EDDY	WWW.SWAPNILPATNI.COM
Qs. 15. For a set of observation the median.	s, the sum of absolute de	eviations is when	n the deviations are taken from
a. Zero	b. Maximum	c. Minimum	d. None of these
Qs. 16. The mean weight for a gkg. What is the combined mean	group of 40 female stude n weight?	ents is 42 kg and that for	a group of 60 male students is 52
a. 46	b. 47	c. 48	d. 49
Qs. 17. The wages of 8 workers	expressed in rupees are	42,45,49,38,56,54,55,47	7. Find median wage.
a. 47	b. 48	c. 49	d. 50
Qs. 18. Quartiles are values div	iding a given set of obser	vations into	_equal parts.
a. Two	b. Four	c. Six	d. Ten
Qs. 19. The data are known to l or agency.	beif the data,	as being already collecte	ed, are used by a different person
a. Primary	b. Secondary	c. Specialized	d. Subsidiary
Qs. 20. The mean salary for a g workers is `6000 per month. V	roup of 20 female worke Vhat is combined mean s	rs is `5000 per month a alary?	nd that for a group of 30 male
a. ` 5400	b.`5500	c. ` 5600	d. `5700

DD-49

Qs.	Answer	Qs.	Answer
1	В	11	А
2	В	12	D
3	D	13	А
4	В	14	В
5	D	15	С
6	В	16	С
7	D	17	В
8	С	18	В
9	С	19	В
10	С	20	С

DD-50	Ву СА	A VINOD REDDY		www.sv	VAPNILPATNI.COM
1. If y = 2 +1.50x and (a) 24.50	l mode of x is 15, what (b) 26.50	is the mode of y? (c) 28.50	? (d) :	30.50	
2. Find the GM of 3, 6 (a) 3 (b) 6	6, 12 (c) 12	(d) None			
3. Find the GM for the	e following distribution.				
Х	2	4		8	16
F	2	3		3	2
(a) 3.66	(b) 4.66	(c) 5.66	(d)6	.66	
4. Find the HM for $4,6$	and 10		(-1) ।	- 01	
(a) 2.77	(D) 3.77	(C) 4.77	(a) :	0.81	
5 Find the GM tor the	following distribution	_			
X	2	4	8	1	6
F	2	2	2	2	-
(a) 2.44	(b) 3.44	(c)4.44	(d) {	5.66	
6. Compute AM, GM and HM for the number 6, 8, 12, 36 (a)15.5, 12, 7.93(b)15.5, 11, 8.93(c)15.5, 12, 9.93(d) 15.5, 14, 10.937. Find the weighted AM and weighted HM of first n natural numbers, the weights being equal to the squares of the corresponding numbers x. 1 2 3n w: 1^2 2^2 3^2 \dots n^2					
(a) [3n(n+1)]/[2(2n+1)] (c) $(3n+2)/(2n+1)$; (n+	2)/3	(d) Nc	one (20+1); (r	1+1)/3	
8. Given two positive (a) True (b) Fa	numbers a and b, their Ise (c) B	⁻ AM / HM = GM ² oth	(d) None		
9. The AM and GM for two observation are 5 and 4 respectively. Find the two observations(a) 8 and 2(b) 7 and 3(c) 6 and 4(d) None					
10. Find the mode an	d median from the follo	owing data:			
	Less than 10 Less	tnan 20 Les	ss than 30	Less than 40	Less than 50
(a) 20 and 23	(b) 23.4 and 24	(c) 21.34 and 2	23	(d) None	30
11. Following are the salaries of workers of a firm expressed in thousand rupees 5, 17, 12, 23, 7, 15, 4, 18, 106, 15, 9, 8, 13, 12, 2, 12, 3, 15, 14. The firm gave bonus amounting to Rs 2,000, Rs 3,000, Rs 4,000, Rs.5,000and Rs 6,000 to the workers belonging to the salary groups 1000-5000, 6000-10000 and so on and lastly21000-25000. Find the average bonus paid per employee.(a) 3,250(b) 3,550(c) 3,650(d) 3,750					
12. Following are the coefficient of range	wages of 8 workers ex	pressed in rupee	s. 82, 96, 52,	, 75, 70, 65, 50, 70	0. Find the

(a)21.35 (b) 34.55 (c)31.51 (d)None

CA VINOD REDDY

DD-50		By CA VINOD REE	DDY		www.s	SWAPNILPATNI.COM
13. What is the co	efficient of Range fo	or the following dis	tribution of	weights?		
Weights in kas	50-54	55-59	60-64	1	65-69	70-74
No. of students	12	18	23	•	10	3
	(1) 00 05	10	25	(1) 04 01		5
(a)21.03	(D) 22.95	(C)20.16		(d) 24.0	5	
14. If the relations the range of y. (a) 15	hip between x and y (b) 12	r is given by 2x + 3 (c) 10	3y = 10 and	the range of (d)9	of x is Rs. 1	5. what would be
15. What is the mo (a) 1.62	ean deviation about (b) 1.67	mean for the follo (c) 1.74	wing numb	ers 5, 8, (d) 1.56	10, 10, 12, 9	9
16. Mean Deviation	on about Mode is a	rr	neasure of c	lispersion		
(a) Absolute	(b) Relative	(c) conce	entric	(d) None	ż	
					-	
17 Compute the	noon doviation abov	it the arithmetic ~	oon for the	following d	ata	
T7. Compute the r		at the anthimetic m			ลเล	
X	-	3	5	/		9
Ť	5	8	9	2		1
(a) 3.88, 44.33	(b) 2.99, 45.67	(c) 4.83,	23.87	(d) None	e	
18. Compute the c	coefficient of mean of	leviation about me	edian for the	e following c	distribution.	
Weights in kgs.	40-50	50-	-60	60-	-70	70-80
No. of students	8	1	2	20	0	10
(a) 60 kg	(b) 62 kg	(c) 61.5k	g	(d) 62.5	kg	
19. If x and y are r y? (a) 7.20	related as 4x + 3y + (b) 4.20	11 = 0 and mean (c) 5.20	deviation o	f x is 5.40. \ (d) 8.20	What is the	mean deviation of
20. Find the stand (a) 2.45, 40.83	ard deviation and co (b) 3.45, 48.92	pefficient of variati	on for the fo c) 2.65, 46.	ollowing nur 25 (mbers 5, 8, 9 (d) None	9, 2, 6

DD-50

Qs.	Answer	Qs.	Answer
1	А	11	В
2	В	12	С
3	С	13	С
4	D	14	С
5	D	15	В
6	С	16	А
7	А	17	А
8	В	18	D
9	А	19	A
10	С	20	A

DD-51 By C		/INOD REDDY		WWW.SWAPNILPATNI.COM
Qs. 1. The mode has all of the (a) A data set may have no m (b) The mode is unduly affect (c) A multimode data set is di (d) Every value in a data set n	e following disadva odal value ted by extreme valu ifficult to analyze. nay be a made.	ntages except ue.		
Qs.2. Measures of central ten (a) Averages (b) D	ndency are known a lifference	as (c) Both	(d) Non	e of these.
Qs.3. Neeraj bought 14 chairs rupee is equal to: (a) `149 (b) `:	s at `150 each, 15 195	chair at `140 ea (c) `165	ch. The average (d) Non	price of a chair to the nearest e of these
Qs.4. The words 'mean' or 'av (a) A.M. (b) G	verage' refer to i.M.	(c) H.M.	(d) Non	e of these.
Qs.5. Which Measure of Cen (a) Arithmetic mean and med (c) Median and mode	tral tendency is no lian	t affected by the (b) Mode and a (d) Geometric	e extreme values irithmetic mean mean and harmo	? nic mean
Qs.6. Measures, of central ter (a) The scatterness of the obs (c) Both (a) and (b)	ndency for a given servations	set of observati (b) The central (d) None of the	on measures location of the o se	bservations
Qs.7. Among the following w (a) H.M. b. A.	hich measure of ce M.	entral tendency o c. Mode	an give' more th d. Median	an one value
Qs.8. Which of the following (a) Mean is rigidly defined (b) Mean is not affected due t (c) Mean has some mathema (d) All of these.	statements is wror to change in extrer atical properties	ng? me observations		
Qs.9. The average has relevan (a) Homogeneous population (c) Both (a) and (b)	nce for n	(b) Heterogene (d) None of the	eous population ese.	
Qs.10. The geometric mean of (a) 10 b. 52	of: 0, 5, 35, 69 is: 2.91	c. 5	d. None of thes	e
Qs.11. When all values occur (a) Mode b. Mo	with equal frequer ean	ncy, there is no c. Median	d None of these	2
Qs.12. Median can be easily c (a) Cumulative frequency cur (b) Histogram	obtained through ves	c. Frequency p d. Frequency c	olygon urve	
Qs.13. A measure of central t (a) central value b. Lo	endency tries to es wer value	stimate the c. Upper value	d. None	e of these

CA FOUNDATION MATHS

DD-51	Ву	CA VINOD REDDY	WWW.SWAPNILPATNI.COM
Qs.14. The average mon the average monthly sa (a) 868	nthly income of all v lary of workers is `5 b. 779	vorkers in a factory is 550, the number of w c. 744	Rs. 600 and that of 16 supervisors is `3,000. If orkers, leaving aside supervisor, in the factory is: d. None of these
Qs.15. Weight A.M is re	lated to		
(a) G.M.	b. Frequency	c. H.M.	d. None of these.
Qs.16. If 0-10, and 11-2 (a) 10-20	0 groups are to be r b. 11-21	nade in exclusive for c. 10.50-19.50	m the second group will be: d. 10.50-20.50
Qs.17. The number of m	neasures of central t	tendency is	
(a) Two	b. Three	c. Four	d. Five.
Qs.18. The most commo	only used measure o	of central tendency is	
(a) A.M.	b. Median	c. Mode	d. Both G.M and H.M.
Qs.19. Average rate of s	speed is calculated b	by:	
(a) Geometric mean	b. Median	c. Mean	d. Harmonic mean
Qs.20. More laborious r	numerical calculatio	ns involve in G.M. th	an A.M.
(a) True	b. False	c. Both	d. None of these

WWW.SWAPNILPATNI.COM

Answers : DD-51

DD-51

Qs.	Answer	Qs.	Answer
1	В	11	А
2	А	12	А
3	D	13	A
4	A	14	D
5	С	15	В
6	В	16	D
7	С	17	D
8	В	18	А
9	В	19	D
10	D	20	A

CA VINOD REDDY

CA FOUNDATION MATHS

WWW.SWAPNILPATNI.COM

profits for these ten months wou	ld be?		le sume re						
a. Positive b. Negat	ive	c.	Zero		d. Can	not be pre	dicted		
Qs. 2. If x and y are related as 3 a. 9 b. 10	x+4y=20	and the c.	quartile d 8	eviation	of x is 12, ⁻ d. 12	then the qu	uartile c	deviation	of y is
Qs. 3.The mean deviation about a.a.22.44b.44.44	ıt mean	for the fir c.	rst 9 natur 22.22	al numbe	ers is d. Nor	ne of these			
Qs. 4. Which measure of disper a. Standard deviation	sion is b o. Mean	ased on a deviation	ill the obse c. C	ervations Quartile c	? leviation	d. (a) and	d (b) bu	t not (c)	
Qs. 5. Which measure of disper a. Standard deviation I	sion is b o. Mean	ased on a deviation	ill the obse c. (ervations Coefficie	? nt of varia	tion c	d. All		
Qs. 6. If the mean and standard a1 b. 1	deviatio	on of x ar c.	e a and b r ab	respectiv	ely, the sta d.a/b	andard Dev	viation o	of is (x-a)	/ b is
Qs. 7. The appropriate measure a. Standard deviation b. N	es of disp ean dev	ersions f iation	or open - e c. Quart	end class ile devia	ification is tion	d. All	these m	neasures	
Qs. 8. Which of the following concerned?	ompanie	s A and B	is more c	onsistent	t so far as	the payme	nt of di	vidend ar	e
Dividend paid by:	5	9	6	12	15	10	8	10	
Dividend paid by B.	4	8	7	15	18	9	6	6]
a. A b. B		C.	Both (a) a	and (b)		d. Neithe	er (a) no	or (b)	
a. A b. B Qs. 9. The standard deviation for a. 2.561 b. 2.501	or the da	c. ta: 7, 9, 1	Both (a) a 11, 13, 15 c. 2	and (b) is: 2.701		d. Neithe	er (a) nc d. 2.828	or (b)	
a.Ab. BQs. 9.The standard deviation for a.2.561b. 2.501Qs. 10.For any two numbers state a.Twice the rangeb. Half or	or the da ndard d the ran	c. ita: 7, 9, 1 eviation i ge	Both (a) a L1, 13, 15 i c. 2 s always c. 5	and (b) is: 2.701 Square of	f the range	d. Neithe	er (a) nc d. 2.828 d. None	or (b) of these	
a.Ab. BQs. 9.The standard deviation for a.2.561b. 2.501Qs. 10.For any two numbers state a.Twice the rangeb. Half or b. Half or b. 36Qs. 11.If the standard Deviation b. 36	or the da ndard d the ran of x is 3	c. ita: 7, 9, 1 eviation i ge , what is t	Both (a) a L1, 13, 15 i c. 2 s always c. 5 the varian c. 1	and (b) is: 2.701 Square of ce of	f the range (5 — 2x)?	d. Neithe c	er (a) nc d. 2.828 d. None d. 9	or (b) of these	
a.Ab. BQs. 9.The standard deviation for a.2.561b. 2.501Qs. 10.For any two numbers state a.Twice the rangeb. Half or b. Half or b. 36Qs. 11.If the standard Deviation a.6b. 36Qs. 12.Disadvantages of using t a.It is heavily influenced by ext b.the can change drastically from c.Qs. 11.If the standard Deviation b. 3610	or the da ndard d the ran of x is 3 he range reme val one sam oints in	c. Ita: 7, 9, 2 eviation i ge , what is t e as a mea ues uple to the the data s	Both (a) a L1, 13, 15 i c. 2 s always c. 5 the varian c. 1 asure of di e next set	and (b) is: 2.701 Square of ce of spersion	f the range (5 — 2x)? include al	d. Neithe	er (a) nc d. 2.828 d. None d. 9 owing e	of these except	
a.Ab. BQs. 9.The standard deviation for a.2.561b. 2.501Qs. 10.For any two numbers state a.Twice the rangeb. Half or b. Half or OrQs. 11.If the standard Deviation a.6b. 36Qs. 12.Disadvantages of using to a.1t is heavily influenced by extra b. It can change drastically from c.1t is difficult to calculate d.Qs. 13.If Rx & Ry denote ranges of the relation between x and y?1t is difficult to calculate d.	or the da ndard d the ran of x is 3 he range reme val one sam oints in of x and y	c. hta: 7, 9, 1 eviation i ge , what is f e as a mea ues hple to the the data s respecti	Both (a) a L1, 13, 15 i c. 2 s always c. 5 the varian c. 1 asure of di e next set vely wher	and (b) is: 2.701 Square of ce of spersion e x and y	f the range (5 — 2x)? include al are relate	d. Neithe	er (a) nc d. 2.828 d. None d. 9 owing 6	or (b) of these except	ould be
a.Ab. BQs. 9.The standard deviation for a.2.561b. 2.501Qs. 10.For any two numbers state a.Twice the rangeb. Half or b. Half or OrQs. 11.If the standard Deviation a.6b. 36Qs. 12.Disadvantages of using t a.1t is heavily influenced by extr b. It can change drastically from c.1t is determined by only two pQs. 13.If $R_x & R_y$ denote ranges of the relation between x and y? a.R_x=R_yb. 3 R_x=2	or the da ndard d the ran of x is 3 he range reme val one sam oints in f x and y Ry	c. Ita: 7, 9, 1 eviation i ge , what is t e as a mea ues ople to the the data s respecti	Both (a) a L1, 13, 15 i c. 2 s always c. 3 the varian c. 1 asure of di e next set vely wher c. 2	and (b) is: 2.701 Square of ce of spersion e x and y 2 R _x =3 R _y	f the range (5 — 2x)? include al are relate	d. Neithe c e c l of the foll	er (a) nc d. 2.828 d. None d. 9 owing e 2y+1=0, d. None	or (b) of these except , what wo of these	ould be

DD-52

DD-52	By CA VI	NOD REDDY	WWW.SWAPNILPATNI.COM					
Qs. 14. Mean and standard deviation of 30 items are found as 28 and 2, but while calculating them one item was taken as 26 in place of 38. Find the correct mean?								
a. 24.8	b. 15.4	c. 284	d. None of these					
Qs. 15. Ratio obtained deviation were taken is	d on dividing the absolute known as:	measure of dispersion by the av	verage value from which					
a. Relative dispersion	b. Absolute dispe	ersion c. Central value	d. Error					
Qs. 16. What is the val	ue of mean deviation abo	ut mean for the following numb	pers? 5, 8, 3, 4					
a. 5.20	b. 7.20	c. 1.50	d. 2.23					
Qs. 17. Find value of Q	₃ if coefficient of Quartile	deviation = 0.39 and Q_1 = 23.26:						
a. 53.24	b. 21.07	c. 35.24	d. None of these					
Qs. 18. If Q₃ is 52 and 0	Q_1 is 12, coefficient of qua	rtile deviation shall be:.						
a. 62.50	b. 40	c. 0.4	d. None of these					
Qs. 19. Best average fo	r qualitative measuremer	nts is:						
a. Median	b. Harmonic mea	an c. Arithmetic m	ean d. Geometric mean					
Qs. 20. If two samples what would be the SD o	s of size 30 and 20 have m f the combined sample of	eans as 55 and 60 and variance	s as 16 and 25 respectively, then					
a. 5.30	b. 5.06	c. 5.20	d. 5.35					

DD-52

Qs.	Answer	Qs.	Answer
1	С	11	В
2	А	12	С
3	D	13	D
4	D	14	D
5	D	15	А
6	В	16	С
7	С	17	А
8	А	18	А
9	D	19	A
10	В	20	В

DD-53	By CA VI	NOD REDDY	WWW.SWAPNILPATNI.COM			
Qs. 1. The mean of Y ha variable is equal to:	ving 50 observations is 4	5. If a new variable is defined	as Z = Y + 5, the mean of the new			
a. 50	b. 45	c. Cannot be calculated	d. None of these			
Qs. 2. In a frequency dis the following measures	stribution table, when on of dispersion can be used	e or both the terminal classe d?	s are undefined, then which one of			
a. Range	b. Mean deviation	c. Quartile deviation	d. Standard deviation			
Qs. 3. To compare the v measure usually used is	ariability between two se the:	eries which also differ on thei	r unit of measurements, the			
a. Standard deviation		b. Mean deviation				
c. Coefficient of variation	วท	d. Inter quartile range				
Qs. 4. Dispersion means	5:					
a. The scatterness of a c. Both of these	set of observations	b. The concentration d. None of these	of a set of observations			
Qs. 5. Range in used in:	atral tendencies	h Determining the li	mits of variations			
c. Correlation		d. Regression				
Qs. 6. If one were to div	vide the standard deviatio	on of a population by the mea	an of the same population and			
a. Standard score	b. Variance	c. Standard deviatior	d. Coefficient of variation			
Qs. 7. Which is the posi	tional measure of dispers	ion?				
a. Quartile deviation	b. Standard devi	ation c. Correlatio	n d. None of the above			
Qs. 8. If the Quartile de quartile is	viation of a data set is 16.	.875, and value of first quarti	le is 16.25 then value of third			
a. 40	b. 50	c. 625	d. None of these			
Qs. 9. If mean and Stand mistaken as 25, then wh	dard deviation of a series hat would be the correct s	of 20 items were 20 and 5.5 S.D.?	respectively but an item 15 was			
a. 5.48	b. 19.5	c. 1.95	d. None of these			
Qs. 10. A shift of origin	has no impact on					
a. Range	b. Quartile deviation	c. Standard deviation	n d. All these			
Qs. 11. Find total value a. 980	of items if mean and Star b. 9800	ndard deviation of 100 items c. 3280	are 980 and 4 respectively. d. None of these			
Os 12 When it comes	to comparing two or mo	re distributions we consider				
a. Relative measures o	f dispersion	b. Absolute measure	s of dispersion			
c. Both (a) and (b)		d. Either (a) or (b)				

DD-53		By CA VI	NOD REDD	1		WWW.SV	WAPNILP	ATNI.(
Qs. 13.	What is the mean devia	tion about mear	n for the foll	owing distri	bution?			
	Variable	5	10	15	10	25	30	
	Frequency	3	4	6	5	3	2	
a. 6.00	b. 5.84		c. 6.07		d. 7.20			
Qs. 14. Which measures of central tendency is useful in open-end series? a. Mean deviation b. Standard deviation c. Quartile deviation d. None of these								
Qs. 15. a. Stan	The square root of the V Idard deviation	ariance is know o. Covariance	n as c. C	uartile dev	iation	d. No	ne of the	se
Qs. 16. a. Regr	The amount of deviation ression	of the observat	tions from ce c. S	entral tende kew ness	ency is know d. C	n as: Correlation	1	
Qs. 17. a. Mea	Standard deviation is de an	fined as the roo o. Mode	t mean squa c. N	re deviatior 1edian	n from the. d. N	None of the	ese	
Qs. 18. a. Mea deviatio	Which is the absolute me an deviation l on	easurement of d p. Variance	ispersion c. C	ovariance	d. C	Coefficient	of Quarti	le
Qs. 19. a. 28.6	If Quartile deviation is 7.	4, Q₃ = 36, then b. 21.2	Q ₁ is c. 1	1.4	d. 1	14.4		
Qs. 20.	What is the standard de	viation for the f	ollowing dat	a?	10	25	20	1
Variable		5	10	12	10	25	30	-

Frequency	3	4	6	5	3	2
a. 7.88	b. 7.98	c. 6	.43	d. 7.	43	

DD-53

Qs.	Answer	Qs.	Answer
1	А	11	D
2	С	12	А
3	С	13	В
4	А	14	D
5	В	15	А
6	D	16	В
7	А	17	А
8	В	18	А
9	A	19	В
10	D	20	D

DD-54 By CA VINOD REDDY WWW.SWAPNILPATNI.COM 1. The duplicate ratio of 9:3 is: 3 : √3 d. None of these b.81:9 c.3:9 2. The sub duplicate ratio of 144 : 169 is 13:12 b.169:144 c.288:338 d. None of these 3. The triplicate ratio of 7:8 is: 343 : 512 d. None of these b.8:7 c.21:24 4. The sub triplicate ratio of 27 : 64 is 3:64/3 b. 9 : 16 c.3:4 d. None of these 5. Find in what ratio will the total wages of the workers of a factory be increased or decreased if there be a reduction in the number of workers in the ratio 17: 12 and an increment in their wage rate per worker in the ratio 24 a. The ratio in which the total wages increase is 24 : 29 b. The ratio in which the total wages decrease is 34 : 29 c. The ratio in which the total wages increase is 29 : 34 d. The ratio in which the total wages decrease is 17 : 12

6. The fourth proportional to 3, 8, 12 is d. 53 5/7 b.7/5 c. 32 a.

7. Mean proportional between 9 and 25 is : 13 b. 12 c. 14 d. 15 a.

8. What least number must be added to each one of 6, 14, 18 and 38 to make them in proportion? a. 5 b. 3 c. 2 d. 4

9. A man 1.4 m tall casts a shadow 1.2 m long at the time when a building, casts a shadow 5.4 m long. Calculate the height of the building :

6.3 m b. 3.21 m c. 4.3 m d. 5.6 m a.

10. The incomes of X and Y are in the ratio 3 : 2 and their expenditures in the ratio 5 : 3. If each saves `1,500 then income of X and Y respectively is :

6,000 and `9,000 a.

а.

a.

a.

a.

: 29.

- ` 4,500 and `6,000 b.
- 13,500 and 9,000 C.
- d. 9,000 and 6,000

11. The prices of a washing machine and a refrigerator are in the ratio 9 : 5. If a washing machine costs 6,800 more than a refrigerator, the price of a washing machine is :

16.000 b. 16,300 c. 15,300 d. None of these а.

12.	If Raja can wa	alk a certain distance in 5	0 days when he rest	9 hours each day	. How long will it take him to walk
twic	e as far if he	walk twice as fast and res	t twice as long each	day?	
a.	125 days	b. 25 days	c. 50 days	d.100 days	

13.	Two whole numbers	s whose sum is	100 cannot be in the ratio	:		
a.	3:7	b. 4 : 1	c. 3 :4	d.	16	: 9

CA VINOD REDDY

CA FOUNDATION MATHS

DD-54	By CA VINOD REDDY	WWW.SWAPNILPATNI.COM
15. Sub-duplicate ratio of 81:625 is a. 9:225 b. 3:25	c. 25:3	d. None of these
16. Log 2 ^x is equal to a. x .log 2 b. x / Log2	c. Both of these	d. None of these
17. Ratio compounded of a ratio and its sua. Triplicate ratiob. Sub-Triplicate ratioc. Sub-Duplicate ratiod. None of these	ib-duplicate ratio is	
18. 3,x,27,y are in continued proportion Fi	nd the value of x	
a. 3 b. 9 c.	. Can't say d. None of thes	e
19. The vessels contain water and milk in t will have water and milk in the ratio.	the ratio of 1:2 and 2:5 are mix	red in the ratio 1:4, the resulting mixture
a.31:74 b. 31:75 c.	. 30:77 d. None of thes	е
20. An amount of `950 is distributed amo share of B and A	ong A,B,C in the ratio of 5:11:1	3, what is the difference between the
a.300 b. 340 c.	. 500 d. None of thes	e

DD-54

Qs.	Answer	Qs.	Answer
1	В	11	С
2	D	12	А
3	А	13	С
4	С	14	С
5	В	15	D
6	С	16	А
7	D	17	D
8	С	18	В
9	А	19	A
10	D	20	D

DD-55		By CA VINOD R	EDDY	WWW.SWAPNILPATNI.COM
1. A Batsman in his 17 after 17 th innings?	7 th inning makes a	a score of 85 and	I thereby increases h	nis average by 3. What is average
a. 37 b. 35		c. 36	d. None of these	
2. A person divides his respectively. Find the a a. 30 km/hr b.24 km	s journey 3 equal average speed of m/hr	parts and decide whole journey. c. 35 km/hr	es to travel on 3 part d. None of these	s at the speeds of 40,30,15 km/hr
 Ratio compounded Sub-duplicate ratio 	with that ratio is i b. Dupl	ts licate ratio	c. Inverse r	atio d.None of these
4. An automobile drive average speed of 20 k a. 30 b. 20	er travels to a hill m/hr. What is the c. 25	station at an ave average speed d. 24	rage speed of 30 km of the entire distanc	n/hr. He makes return trip at an e(one way distance =200km)
5. Simplest form of the a. 35:75	e ratio 3.50:7.50 i b. 7:25	s c. 15:7	d. 7:15	
6. Duplicate ratio of 3: a.9:125 b. 18:5	5 is 50	c. 27:125	d. None of	these
7. Triplicate ratio of 27 a. 3:7 b. 27 ² :	/:343 is 343²	c. 13:34	d. None of these	
8. a,b,c,d are in propo a. True b. Fals	rtion if ab=cd se c. Can'	t say	d. None of these	
9. If the denominator of by 3 then the new fract a. 14/17	of the fraction exc ion becomes 4/5 b. 13/17	eed the numerat , Find the origina c. 12/1	or by 4. If numerator I fraction 5 d. 11/15	r and denominator are both increased
10. The cost of 7 kg sugar and rice per kg. a 17 23.80	gar and 5 kg rice $h^{17} 50^{23}$	is `234, and the	cost of 6 kg sugar a	nd 7 kg of rice is `263. Find the cost of
11. 600 were divided e have got 4 more. Find a. 28 b. 30	equally among a of the original num c. 32	certain number c ber of children d. 24	f poor children. Had	there been 5 less children, each would
12. `630 were distribute What is the share of C a. `270 b. `14	ed among A, B,C 4 c. `216	so that the share	es of A and B were a	s 2:3 and shares of B and C were 4:5,
13. If Log _{3/2} x=3, Find th a.9/4 b. 8/27	e value of x c. 27/8	d. None of thes	e	
14.Log _{1/9} 243 = x, Find a.9/4 b. 8/27	X c. 27/8	d. None of thes	e	
15. Log ₃ x ³ -2log ₃ x-2=0 F a.9 b. 2	Find x c. 3	d. None of thes	e	

CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-55

By CA VINOD REDDY

16. lf log ₂ x + le a.10 b. 9	og₄x+log ₁₆ x=21/4; c. 8	Then x=? c	1. 7	
17. If $log_a 3=2$, a.Log ₃ 2	log _b 8=3 then log _b b. Log ₂ 3	a =? c	. Log₃4	d. Log₄3
18. Find x if lo a.10 b. 2	g _x 10+log _x 100+log c. 4	l _x 1000=6 c	1. 6	
19. lf 2loga+3 a.10 ⁴	logb-2 =0 then a ² ^{b.} 10	b ³ = ? c. 10 ²	^{d.} 10 ³	
20.Log ₂ [log ₂ {l a. ¹ ⁄ ₂	og ₃ (log ₃ 27 ³)}] =? b. 1	c. 0	d. 2	

DD-55

Qs.	Answer	Qs.	Answer
1	А	11	В
2	В	12	А
3	В	13	С
4	D	14	D
5	D	15	А
6	В	16	С
7	D	17	D
8	В	18	А
9	В	19	С
10	D	20	С

1. A Ratio is expresse a.Simplest	ed in form. b. Complicated	с	. Moderate		d. None	
2. If 2log x = 4 log 4 , t a.16 b. 4	then x is equal to c. 2		d.None			
3. If x:y = 5:4 the value a.13:12	e of x²y : xy² is b. 12:13	с	. 21:31		d. None of thes	e
4. Inverse ratio of 1.20 a.1:1 b. 2:3	: 3.60 is c. 3:2	d	I. None of these	Э		
5. The denominator of	a fraction exceeds	the num	nerator by 2. if	5 is add	ed to numerator	the fraction increases by
a.5/7 b. 1/3	c. 7/9	d	I. 3/5			
6. The age of the pers	on is twice the sum	of ages	of their two so	ns and f	ive years ago hi	s age was three times of
a.60 years	s, his present age i b. 52 years	s c	. 51 years		d. 50 years	
7. The sum of two num a. 15,30 B. 3	nbers is 45 and the 32,13 C. 36	mean pi ,9	roportional betv D. 2	ween the 25,20	em is 18. The nu	imbers are
8. Duplicate ratio of 2	: 4 is					
a.1:4 b. 1:16	c. 4:166	d	I. None of these	9		
9. The ratio compound a.8:15.5	ed of 2:3 and 4:5 is b. 8:15	с	. 15:8	d. 12:10	6	
10. The number which i a.15 b. 5	s subtracted from e c. 1 d	each of tl I. None c	he terms of the of above	ratio 19	0:31 reducing it to	o 1:4 is
11. The ratio of	of 2 kgs.					
12and 5 (a.1:4000	b. 2:5000	с	. 2000:1		d. None of thes	e
12. The sub triplicate ra a. 4:6 b. 4: 1	ntio of triplicate of 2: 2	3 is .8:27		d. 2:3:3	3	
13. The ratio between s	peeds of two trains	is 20:22	2 if first train is I	running	at a speed of 44	0 km/hr then speed of
second train is a. 484 Km/hr	b. 848 Km/hr	с	. 400 km/hr	_	d. None of abov	ve
14. The angles of a tria a. (20,30,140)	ngle are in the ratio b. (20,30,130)	of 2:3:1 c	3 then the angl . (20,20,140)	es are	d. None of abov	ve
15. The sub - duplicate a.1:166 b. 1:2	ratio of 1: 4 is c. 2:6	d	l. 12:8			
16. First term of the rati a.Antecedent	o is called as b. Consequent	с	. Antecedent a	nd cons	equent	d. None of these
17. If a:b = c:d then a:c a.Alternendo	= b:d this property b.Componendo	is knowr c	n as 2. Dividendo		d. None of thes	e
18.4, xx , 9, 13.5 are in a.6 b. 8	proportion then xx c. 9	is d	I. None of these	e		
CA VINOD REDDY		CA FOU	INDATION MAT	THS	V	NWW.SWAPNILPATNI.COM

DD-56	Ву	CA VINOD REDDY	WWW.SWAPNILPATNI.COM
19. Two number	s are in ratio 3:4 , If 6 is add	ed to each of the term the	en the new ratio will be 4:5 then the numbers
a.14,20	b. 17,19	c. 18,24	d. None of these
20. The mean pr	oportional between 5 and 1	20 is	
a. 24.90	b. 24.89	c. 24.49	d. None of these

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	A	11	D
2	A	12	A
3	D	13	А
4	D	14	В
5	D	15	В
6	D	16	А
7	С	17	A
8	А	18	А
9	В	19	С
10	A	20	С

DD-57

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

Find Inverse ratio of 2.2 : 2.22 1 a.2.22: 2.222 b. 1.11: 1.1 c. 1.111 : 1.1111 d. None of these 2. The ratio of two quantities is 5:9. If the antecedent is 25, the consequent is a. 9 b. 45 c. 40 d. None of these. 3. The sub - duplicate ratio of 1250 : 50 is 12:16 b. 1: 5 c. 5:1 d. None of these a. 4. If a : b = c : d, then (a + b) / a = (c + d) / c is called as b. Componendo Alternendo d. None of these c. Dividendo a. 5. Ratio can be expressed without unit - this sentence is a. Correct b. Incorrect c. Can't Say d. None of these 9:8 is a 6 c. Ratio of equality d.None of these a.A Greater Inequality b. Less Inequality 7. $\log(3\times5\times7)$ is equal to a. log 3 × log 5 × log 7 b. log 3+ log 5 + log 7 c. log 3 - log 5 - log 7 d. 0 8. A man has only 20 paise coins and 25 paise coins in his purse. If he has 50 coins in all totaling Rs. 11.25, how many coins of each does he have a. 15, 35 b. 25, 25 c. 40, 10 d. 30, 20 If (7p+3q):(3p-2q) = 4:2 then p:q is 9. a.5:4 b. 4:5 c. 7:2 d. None of these 10. If $Log_{a}23 = b$ then $a.a^{23} = b$ b. $23^{a} = b$ c. ab =23 d. a^b =23 11. If $a^2+b^2=45$, and ab=18 then, (1/a)+(1/b) = ?b. 2/3 c. 1/2 d. None of these 1/3a. 12. Third proportional to 15 and 20 is d. None of these a. 80/3 b. 80 c. 80/7 13. The value of $Log_3(1/81)$ is d. None of these b. 2 c. -4 4 a. 14. If $a^2 = b^3 = c^5 = d^6$, then Log_dabc = c. 31/5 d. 16/5 3/5 b. 1/5 а 15. If 3x=4y=12z then x:y:z is equal to a. 3:2:4 b. 4:3:1 c. 6:4:3 d. 3:4:2 16. A mixture contains milk and water in the ratio of 5:2. on adding 5 litres of milk, the ratio of milk and water becomes 3:1 The quantity of water in the original mixture is 25 litres b. 10 litres c. 22.75 litres d. 32.50 litres a. 17. Log(1+2+3) is exactly equal to $\log 1 + \log 2 + \log 3$ b. log(1 x 2 x3) c. Both (a) and (b) d. None of these a. 18. If $a^2 x \log_3 X = b x \log_{27} X$ then b. 3a²=b c. b²=3a d. None of these a. a=3

CA VINOD REDDY

CA FOUNDATION MATHS

DD-57

WWW.SWAPNILPATNI.COM

19. Mr.A says to his son 'seven years ago I was seven times as old as you were, and three years later I shall be three times as old as you will be ' Find the present age of Mr.A's son d. 7 Years

b. 15 years c. 5 Years 12 years a.

20. The compounded ratio of 4:3 and 3:4 is

4:4 b. 3:4 c. 4:3 d. None of these

CA VINOD REDDY

CA FOUNDATION MATHS

DD-57

Qs.	Answer	Qs.	Answer
1	В	11	С
2	В	12	А
3	С	13	С
4	D	14	С
5	А	15	В
6	А	16	В
7	В	17	С
8	В	18	В
9	D	19	A
10	D	20	A

DD-5	58				By CA \	/INOD REDDY			WWW.SWAPNILPATNI.COM	N
1. a.	One third c 480	of one ha	alf of thr b. 520	ee fourth	of a nui c. 500	mber is 60, the d. Non	number is e of thes	s e		
2. a.	One half of 2420	one nir	nth of thi b. 2430	ree eighte)	eenth of	a number is 22 c. 2440	.50 , the d. None	number is e of these		
3. a.½∣	lf x ² + y ² = Log(x+y)	14xy th	en : 2Lo b. 2 Lo	g4+Logx g (x+y)	+Logy =	c. Log (x+y)		d. None of t	hese	
4. a.2(L	lf b ² = ac t .og₃b) (Log₀	hen Log b)	g₀b + Lo	g _c b = ? b. 2(Loç	g₅a) (Loį]ьС)	c. 2 Lo	g _b (ac)	d. None of these	
5. a.1	Log ₂ Log ₂ Log b. 8	$\mathrm{pg}_2\mathrm{x}=\mathrm{C}$) then x = c. 16	=?	d. 4					
6. a.a²	Log _a x = a t b. 2a	hen x =	? c. a ^a		d [.] None	of these				
7. Tł a. 5/	ne fourth pro 7	portion b. 32	al of 3,8	,12 is c. 7/5		d. 53				
8. Tł	ne duplicate a. 18:1	ratio of	9:1 is b. 729:	1		c. 3:1	d. 81:1			
9. If ! The 12	5 women ar work of 2 w	nd 9 girl omen b	s could e equal	do a piec to that of	e of woi 3 girls?	rk in 17 days, in	how mai	ny days could	d 9 women and 12 girls do it.	
d. 12	uays		D. 13 U	ays		c. 15 uays				
10. v prop	What numb ortion	er shou b. 2	ld be su	btracted c. 3	from ea	ch of the numbe d. 4	ers 17, 25	o, 31, 47 so tr	hat the remainders are in	
11. A a. 10	and B can b. 11	togethe	er finish c. 12	a work ir	i 8 days. d. None	If A alone can e of these	do it 24 d	lays. B alone	will finish the work in	
12. a. Ye	Given that	Log (1+ b. No	·2+3) = I	og1 + log c. Can't	g2 +log3 Say	, Is it TRUE? d. A ar	nd B			
13. A	person co	vers 12	km at 3	km/hr , 1	8 km at	9 km/hr and 24	km at 4	km/hr. Find tl	he Average Speed in	
cove a.	ring the who 4.5 km / hr	ole dista	ance b. 5 k	km / hr		c. 10 km / hr		d. None of t	hese	
14. 5	Six boys and	d 5 girls	are to b	e seated	in a rov	v such that no 2	girls and	l no 2 boys si	it together. Find the no. of	
ways a.	86400		b. 8500	00		c. 85400		d. None of t	hese	
15. Т а.	he ratio of 1 5:3	the sum	and the	e differen b. 4:3	ce of two	o number is 7:1 c. 4:5	. Find the d. None	e ratio of two e of these	numbers	
16. T diffei	he differen ence of 2 d	ce betw	een a 2	digit nun ber.	nber and	I the number ob	tained by	/ interchangir	ng the digit is 54. What is the	
a.	4	b. 3		c. 6		d. None of thes	se			
17. lí a.	f log ₂x + log 8	g ₈ x + lo b. 5	9 ₃₂ x = 2	23/50 the c. 2	n the va	lue of x is d. None of thes	se			

CA FOUNDATION MATHS

DD-58		By CA VINOD REDDY	WWW.SWAPNILPATNI.COM
18. The average average reduces	e age of 24 students ar s by one year. What is	nd the class teacher is 16 ye the age of class teacher	ears. If the class teachers age is excluded the
a. 50 years	b. 40 years	c. 60 years	d. None of these
19. The sum of is the middl	three consecutive ever e number	numbers is 15 less than th	ree-fourth of 60. What
a. 15	b. 10	c. 12	d. None of these
20.Five years as son .How old 50,20	go I was thrice as old a l are we now? b. 45,15	s my son and ten years late c. 65,25	er I shall be twice as my d. None of these

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	A	11	С
2	В	12	A
3	В	13	А
4	A	14	A
5	D	15	В
6	С	16	С
7	В	17	D
8	D	18	В
9	D	19	В
10	С	20	A
DD-59		By CA VINOD REDDY	WWW.SWAPNILPATNI.COM
--	--	--	--
1. The compound a. 4:25	ed ratio of 4:3 ,9:13 , b. 16:25	26:5 and 2:15 is c. 18:27	d. None of these
2. If the sum of num a. 13 b.	nber and its square is 14 c. 15	s 182,what is the numbe d. none of thes	ır? Se
3. A bag contains o ,find the number of a. 200,280,360	ne rupee ,50 paise a coins of each kind b. 280,;	nd 25 paise coins in the 300,360 c. 360	e ratio 10:14:18.If the total amount in the bag is `430 ,280,200 d. None of these
4. Father is six time ages are	es as old as his son .l	Four years hence he wil	I be four times as old as his son. Then the present
a. 42,0	D. 30,0	C. 40, 10	u. None of these
5. If log3 = 0.48 and a2.26	d log7 = 0.84,then the b3.26	e value of log(0.03 / 0.70 c1.36	0) is d. None of these
6. Evaluate (0.5173 a. 0.8480) ^{1/4} b. 0.8210	c. 0.64	d. None of these
7. A ratio compound a. Duplicate ratio	ded on itself is called b. Tripli	l icate ratio	c. Sub duplicate ratio d. None of these
8. Log of any numb a. Unity	er to the same base b. Zero	is c. Infinite	d. Can't say
9. The decimal part a. Characteristic	of log is called b. Man	tissa c. Botl	n d. None
10. Anand earns `8 a.32:21	0/- in 7 hours and Pi b. 23:12	ramod `90/- in 12 hours c. 8:9	. Ratio of their earning per hour is - d. None
11. P,Q,R are 3 citi average temperatur	es. The ratio of avera re of Q,R 27·22	age temperature of P,Q	is 11:12 and that of P, R is 9:8. Find the ratio of
u.zz.z/ 0. z	_/	0. 02.00	
12. If x:y = 3:4, the a.13:12 b.	value of x ² y + xy ² :) 12:13	x ³ + y ³ is c. 21:31	d. None
13. 2s:3t is the dup a.p ² = 6st b. p	licate ratio of (2s-p) : p = 6st	: (3t-p), then c. 2p = 3st	d. None
14. A = B/2 = C/5, t a.3 : 5 : 2 b. 2	then A : B : C is 2 : 5 : 3	c. 1 : 2 : 5	d. None
15. If p/q = r/s = 25 a.3/5	/15, then ps : qr b. 1/1	c. 5/3	d. None
16. If x:y = z:w = 2 a.1:1	5:15 then (x+z) / (y+ b. 3:5	w) is c. 5:3	d. None
17. If (5x - 3y) / (5y a.2:9	y - 3x) = 3/4 then x : b. 7:2	y is c. 7:9	d. None
18. If x / 2 = y / 3 = a.6/23 b. 2	z / 7, then (2x - 5y + 23/6	4z) / 2y is c. 3/2	d.None

CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

19. 14, 16, 35, 42 are not in proportion. The 4th term for which they will be in proportion isa. 45b. 40c. 32d. None

20. If a:b = c:d then (a+b)/a = (c+d)/c a. True b. False c. Can't Say d. None

DD-59

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	В	11	В
2	A	12	В
3	A	13	A
4	В	14	С
5	С	15	В
6	А	16	С
7	A	17	D
8	А	18	D
9	В	19	В
10	А	20	А

By CA VINOD REDDY

1.lf a:b = 4:1 th a.5/2	en √a/b	o + √b/a b. 4	is		c. 5			d. None				
2.x ^{a-b} . x ^{b-c} . x ^{c-a} a.x	is equa b. 1	l to		c. 0			d. None	e				
3.(2p ² q ³ /3xy) ⁰ a.0	is equal b. 2/3	to		c. 1			d. None	e				
4.Which is true $a.2^{\circ} > (1/2)^{\circ}$	b. 2	2 ⁰ < (1/2)	0	c. 2 ⁰ =	(1/2) ⁰		d. None	e				
5.If $x^{1/p} = y^{1/q} =$ a.1	z ^{1/r} , an b. 0	d xyz = 1	, then va c. ½	alue of (p + q + r d. None) is e						
6.(x ^a /x ^b) ^{a+b} x (a.1 b.	(x ^b /x ^c) ^{b+c}	x (x ^c /)	(^a) ^{c+a} = c. 2	?	d. None	e						
7.a ^x = b, b ^y = c, a.1	c ^z = a, b. 2	then xyz	: = ? c. 3		d. None	e						
8. Log 6 + log 5 a.log 30	= ?	b. log 1	1	c. log 5	5/6	d. None)					
9. Log 6 x log 5 a.log 30	= ?	b. log 1	1		c. log 6	/5		d. None				
10. Log of 0.06 a.4	25 to the b. 5	e base 2	is equal	to c. 1			d. None	e				
11. Log 2 = 0.3 a.0.9030	010, log	3 = 0.47 b. 0.954	71, log 6 12	6 is	c. 0.778	31		d. None				
12. Log 2 = 0.3 a.3.3010	010, the	en log 0.0	02 is b. 2.301	10		c. 0.301	10		d. None			
13. Log 5 = 0.6 a0.7781	990, log	3 = 0.47 b1.27	71. Find 81	log (50	/300) c1.69	90		d1.778	31			
14. Log 2 = x, le a.x-y+1	og 3 = y b. x +y	r, then lo +1	og 60 = ?	c. x+y-	1		d. x-y-1					
15. log (1/81) to a.2	o the bas b. ½	se 9 is e	qual to	c2			d. None	e				
16. log _{2 3} 17	28 is eq	ual to										
a. 2 3	b. 2		c. 6		d. None	e of these	Э					
17. The sum of ages are (45.50.55)	the age	es of 3 pe	ersons is b (40 6	150 yea	ars. 10 y	ears ago	their ag 5 70)	jes were i	in the rat	tio 7:8:9).Their pro	esent
18. On simplific a1 b.0	cation [a	a ^m / a⁻ ^m]r c. 1	esults in:	d. None	e of thes	е	•,••)				-	
19. If a:b = 2:5, a.2:3	b:c = 1 b. 3:19	5:46, c:d 2	= 92:200	0 then, F c. 2:20	=ind a:d 0	d. None	of these	e				
CA VINOD REDI	ΟY			CA FC	DUNDAT	ION MAT	ſHS		W	WW.SV	VAPNILPA	ATNI.COM

20. Average strength of eleven members = 11.0. Average strength of the first six members = 10.5. Averagestrength of the last six members = 11.5. The average strength of the sixth member is:a. 9.5b. 11.5b. 11.5c. 11.0d. 10.0

WWW.SWAPNILPATNI.COM

Answers : DD-60

Qs.	Answer	Qs.	Answer
1	A	11	С
2	В	12	A
3	С	13	A
4	С	14	В
5	В	15	С
6	А	16	С
7	A	17	A
8	А	18	D
9	D	19	D
10	D	20	С

CA VINOD REDDY

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

1. a.	The mean p 40	roportior b. 50	nal between	25,81 is c. 45			d. None	e of these	
2. a.	$lf \log_4(X^2 + X) = 16$	 k) - log₄(λ b. X = λ 	< + 1) =2 the 4	en x is equal c. X =	to 8		d. None	e of these	
3. giv	Find the nu ven that log 5	mber of 04 = 2.7	zeros betw 02	een the dec	imal poin	it and th	ne first s	significant figure in	the value of (0.0504) ¹²
a.	15	D. 12	C.	10		u. 8			
4. Δv	A train cove	red the f	irst 5 km. of ain was [.]	its journey	at a spee	d of 30	km./hr a	nd next 15km. at a	speed of 45 km./hr. the
а.	38 km/hr		b. 40 km/h	r	c. 36 kn	n/hr		d. 42 km/hr	
5. a.	A,B,C,D are 2:3 b. 3	four nur 3:2	nbers so tha	at A:B = 2:3, c. 1:3	B:C = 4:5	5, C : D d. 3	= 5:8, th 3:1.	en A:D is	
6. a.	lf 2 ^x -2 ^{x-1} =4 tl 2	hen the v b. 1	value of x ^x is	c. 64			d. 27		
7. a.	Log₅5.Log₄9 2).Log₃2 b. 1		c. 5			d. 3/2.		
8. a.	The number 6	is 7.328 b. 0	. Find the c	haracteristic c6			d. None	e of these	
9. ho	A scooter co urs. The ratio	overs a c o of their	distance of 2 speeds is	200 km in 2	hour 40 r	ninutes,	while a	motorcycle covers	the same distance in 2
а.	2:3		b. 5 : 4	c. 4 : 5	i		d. 3 : 4		
10 he a.3	. If a family s ads by 40,30 33 per cent	pends or and 20	n food, hous per cent res b. 28 per c	ing and clot pectively, th ent	hing in the le family b c. 27 pe	e ratio o oudget v er cent	f 5:3:2 a vill be in	and experiences the creased by: d. None of these	rise in prices of these
11 a.	. A ratio equi 3 : 9;	valent to	3 : 7 is: b.6 : 10;		c. 9 : 21		d.18 : 4	19	
12 а	. The ratio 35 .5 : 7;	5 : 84 in s	simplest forr b .7 : 12;	n is:	c .5 : 12). -;		d .none of these	
13 а	. In a class tł .4 : 3;	nere are 2	20 boys and b .3 : 4;	l 15 girls. Th	ne ratio of c .4 : 5;	boys to	girls is:	d .none of these	
14 a	. Two numbe .49;	ers are in	the ratio 7 : b .72;	9. If the sur	n of the n c .63;	umbers	is 112, ⁻	then the larger num d .42	ber is:
15 а	. The ratio of .1 : 15;	⁻ 1.5 m to	o 10 cm is: b .15 : 10;		c .10 : 1	5;		d . 15 : 1	
16 а	. The ratio of .1 : 12;	¹ hour to	o 300 secor b .12 : 1;	nds is:	c .1 : 5;			d .5 : 1	
17	17. In 4 : 7 : : 16 : 28, 7 and 16 are called a .extreme terms: b .middle terms: c .Middle and Extreme term: d None of these								
а	. In 4 : 7 : : If .extreme terr	6 : 28, 7 ns;	and 16 are b	called .middle term	IS;	c .Midd	le and E	xtreme term;	d .None of these
а 18 а	. In 4 : 7 : : 1 .extreme terr . The first, se .36;	6 : 28, 7 ms; econd an	and 16 are b d fourth terr b .28;	called .middle term ns of a prop	ns; ortion are c .48;	c .Midd 16, 24 a	le and E and 54 r	Extreme term; espectively. Then th d .32	d .None of these ne third term is:

CA VINOD REDDY

DD-61	By CA \	/INOD REDDY	WWW.SWAPNILPATNI.COM
19. If 12, 21, 72, 126 are i a .12 × 21 = 72 × 126; c .12 × 126 = 21 × 72;	n proportion, then:	b .12 × 72 = 21 × 126; d .none of these	
20. If x, y and z are in pro	portion, then:		
a.x:y::z:x;	b.x:y::y:z;	c.x:y::z:y;	d .x : z : : y : z

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	С	11	С
2	A	12	С
3	A	13	A
4	В	14	С
5	С	15	D
6	D	16	В
7	В	17	В
8	В	18	А
9	D	19	С
10	А	20	В

1. 7 : 12 is equivalent a.28 : 40;	to: b.42 : 71;	c.72 : 42;	d.42 : 72
2. The length and breat	adth of a rectang	le are in the ratio 3 : 1. If	the breadth is 7 cm, then the length of
a.14 cm;	b.16 cm;	c.18 cm;	d.21 cm
3. The value of m, if 3 a.6;	, 18, m, 42 are in b.54;	proportion is: c.7;	d. none of these
4. Length and width or a.100 m;	f a field are in the b.80 m;	e ratio 5 : 3. If the width of c.50 m;	the field is 42 m then its length is: d.70 m
5. In a library, the ratio story books was 1248	o of number of sto . When some mo	ory books to that of non-s are story books were boug	tory books was 4:3 and total number of ght, the ratio became 5:3. Find the
a. 312	b. 321	c. 936	d. 1560
6. `8400 is divided an D are in the ratios of 2	nong A, B, C and 2:3, 4:5 and 6:7 re	D in such a way that the espectively. The share of	shares of A and B, B and C, and C and A is \mathbf{A}
a. 1280	b. 8400	c. 8210	d. 1320
7. The ratio of the proof 9:4. The present ac	esent age of fathe	er to that of son is 7:2. Af s	ter 10 years their ages will be in the ratio
a. 35 years	b. 40 years	c. 30 years	d. 25 years
8. What is the fourth a. 40	proportional to th b. 20	ne numbers 2, 5, 8. c. 15	d. 10
9. Ajay and Raj toge	ther have `1050.	On taking `150 from Aja ots with Aiay and Bai initi	y, Ajay will have same amount as what
a. 3:4	b. 7:1	c. 1:3	d. 4:3
10. Price of each arti	cle of type P, Q, io 3:2:3 in `6480.	and R is ` 300, `180 and . How many articles of tyr	`120 respectively. Suresh buys articles be Q did he purchase?
a. 8	b. 14	c. 20	d. None of the above
11. The ratio of mark family is 5:4. Find the	et prices of whea ratio of expenditu	at and paddy is 2:3 and th ure of wheat and paddy.	e ratio of quantities consumed in a
a. 6:5	b. 5:6	c. 1:1	d. 8:15
12. The ratio of numl is 212, determine the	bers of girls and I number of boys r	boys participating in sport participating in the sports.	s of a school is 4:5. If the number of girls
a. 256	b. 265	c. 251	d. 263
13. The three number numbers is 36. Find the	ers are in the ration	o 1/2 : 2/3 : 3/4. The differ	ence between greatest and smallest
a. 72, 84, 108	b. 60, 72, 96	c. 72, 84, 96	d. 72, 96, 108
CA VINOD REDDY		CA FOUNDATION MATHS	WWW.SWAPNILPATNI.COM

DD-62	Ву СА \	/INOD REDDY		WWW.SWAPNILPATNI.COM		
14. If A:B = 2:3, B:C a. 18:24:30:35	= 4:5 and C:D = 6:7, t b. 16:24:30:35	hen A:B:C:D is	c. 16:22:30:35	d. 16:24:15:35		
15. If a:b = 5:7 and o	c:d = 2a:3b, then ac : b	od is				
a. 20:38	b. 50:147	c. 10:21	d. 50:151			
16. If x:y = 3:4, then a. 5:2 b. 4:3	(7x+3y):(7x-3y) is equ c. 11:3	ial to d. 37:19				
17. The product of two positive numbers is 4752 and their ratio is 11:12. The smaller of these numbers is						
a. 72	b. 60	c. 66	d. 75			
18. Two numbers are in ratio 2:3. If 2 be subtracted from the first and 2 be added to the second, the ratio becomes 1:2. Find the sum of the numbers						
a. 30	b. 28	c. 24	d. 10			
19. How to divide 3395 in ratio of 42 : 32 : 23?						
a. 1470, 1120 and 80	5	b. 1550, 1235	and 610			
c. 1245, 1150 and 10	00	d. 1764, 1022	and 529			
20. $a:b = 3:7$ and $b:c$	c = 9:5. What is a:b:c?	0.2.7.5	4 07.60.0	5		
a. J. 10.0	D. 21.10.40	0. 0.7.0	u. 27. 03.3			

WWW.SWAPNILPATNI.COM

DD-62

Answers	:	DD-62
---------	---	-------

Qs.	Answer	Qs.	Answer
1	D	11	В
2	D	12	В
3	С	13	D
4	D	14	В
5	А	15	В
6	А	16	С
7	A	17	С
8	В	18	А
9	D	19	A
10	A	20	D

CA VINOD REDDY

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

WWW.SWAPNILPATNI.COM

1. Income ratio of Ramesh and Suresh is 5:6. Their spending ratio is 7:9. Ramesh saves 4000 and Suresh saves 3000. Income and spending respectively of Ramesh and Suresh are a. Ramesh - 25000, 21000; Suresh - 30000, 27000 b. Ramesh - 36000, 32000; Suresh - 30000, 27000 c. Ramesh - 30000, 27000; Suresh - 36000, 32000 d. None of the above 2. a:b = 5:2. What is the value of (8a + 9b): (8a + 2b)? a. 22:29 b. 26:61 c. 29:22 d. 61:26 3. Find the mean proportional between 7 and 63? a. 35 b. 21 c. 27 d. 30 4. Find A:B:C:D when A:B = 2:3 ; B:C = 7:9 ; C:D = 5:7 a. 70 : 105 : 135 : 189 b. 105 : 115 : 236 :189 c. 70 : 124 : 155 : 201 d. 12 : 78 : 256 : 189 5. What is 4th proportional in 9, 13 and 153? a. 251 b. 181 c. 175 d. 221 6. Ratio of two numbers is 3:8. On adding 5 to both numbers, the ratio becomes 2:5. Which is the smaller number out of the two? a. 64 b. 120 c. 45 d. 105 7. The 3rd proportional to 18 and 54 is? a. 144 b. 72 c. 162 d. 972 8. 285 is summation of 3 numbers. Ratio between 2nd and 3rd numbers is 6:5. Ratio between 1st and 2nd numbers is 3:7. The 3rd number is? a. 135 b. 150 c. 124 d. 105 9. Which of the following two ratios is greater 17:18 and 10:11? a. 17/18 b. 10/11 c. Both are same d. Cannot determine 10. Two numbers are in the ratio of 6 : 8. If 10 is subtracted from each, the new numbers are in the ratio 16 : 32. Find the smaller number. a. 22 b. 12 c. 38 d. 15 11. It was intended that 585 be divided among P, Q and R in the ratio of 4 : 3 : 2, but by mistake the distribution was made in the proportion of 1/4 : 1/3 : 1/2. How much does 'R' gain by the error? a. `99 b. 126 c. 140 d. 152 e. None of these 12. If a : b = 3 : 5, b : c = 4 : 3 and c : d = 4 : 5, a : d = ?b. 16 : 25 c. 64 : 25 d. None of these a. 4 :5

CA FOUNDATION MATHS

DD-63	By CA V	/INOD REDDY	WWW.SWAPNILPATNI.COM		
13. By giving 50 to amounts with A and M a. 7:4	M, A would have the a / is `650. What is the b. 5 : 3	amount equal to what I ratio of the amount wit c. 2 : 1	M had earlier. If the sum of the h A to that with M earlier? d. 7 : 6		
14. By giving `50 to amounts with A and M a. 7 : 4	M, A would have the a / is `650. What is the b. 5 : 3	amount equal to what I ratio of the amount wit c. 2 : 1	M had earlier. If the sum of the h A to that with M earlier? d. None of these		
15. A housewife wishes to purchase three articles A, B and C from a sum of 200. The unit prices of the articles A, B and C are 20, 35 and 25 respectively. If she spends the entire amount by purchasing 5 numbers of articles of type C, what is the ratio of the number of articles purchased of type A to that of, type B2					
a. 1 : 2	b. 2 : 1	c. None of these	d. Cannot be determined		
16. Shruti purchased several number of three articles P, Q and R in the proportion 3 : 2 : 3. If the unit costs of the articles P, Q and R are 200, 90 and 60 respectively, how many articles of Q must have been purchased in the total purchases of 4800? a. 8 b. 10 c. 12 d. 14 e. None of these					
17. If a : b = 2 : 3, fir a. 2 : 7	nd the value of (3a + 5 b. 7 : 1	b) : (3a - b) c. 2 : 5	d. 4 : 9		
18. In what ratio should the profit of `8000 be divided if X starts a business with an investment of `20000, Y invests `7500 for 4 months and Z invests `15000 after 3 months from the start of the					
a. 16 : 2 : 3	b. 8 : 3 : 6	c. 16 : 2 : 9	d. 6 : 9 : 1		
19. The ratio of two numbers.	numbers is 5:9. If eacl	n number is decreased	by 5, the ratio becomes 5:11. Find the		
a. 30, 19	b. 21, 37	c. 15, 34	d. 15, 27		
20. Two kinds of rice in which the 2 types a	e, 1st costs `13 per kg are mixed so that the n	and 2nd costs `19 penixture costs `14.2 pen	r kg are mixed together. Find the ratio [.] kg?		
a. 3:1	b. 4:1	c. 3:4	d. 4:3		

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	A	11	С
2	С	12	В
3	В	13	D
4	A	14	D
5	D	15	В
6	С	16	В
7	С	17	В
8	D	18	С
9	A	19	D
10	D	20	В

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

1. Null set is represented by d. None of these a. {Φ} or 0 b. { } or Φ c. Φ or {0} 2. If A and B are any two sets then $(AUB) \cap B$ equals to b. A c. A U B d. Null set a. B 3. If f(x) = x+3 and $g(x) = x^2$ then $f(x) \cdot g(x)$ is c. $x^2 + 3x^2$ a. $(x+3)^2$ b. x^2+3 d. None of these 4. The domain of $\{(2,5), (3,7)\}$ is c. (5,7) a. (3,5) b. (2,3) d. (1,2) 5. If C and D are two non empty sets n(C) = 3, n(D) = 7, n(CUD) = 9 then a. C and D are disjoint sets c. C and D are mutually exclusive sets b. Both (a) and (b) d. None of these 6. If M and N are two sets then $(M \cup N)^{c} \cap M$ is a. Null set b. M c. N d. None of these 7. The set {2x: x is any positive rational number} is a a Finite set b Infinite set c. Null set d. None of these 8. $A \cap A^c$ is a. A b. Φ c. U d. None of these 9. $A \cap A$ is d. A^C c. U a. A b. Null set 10. If E is a set of all positive odd numbers and O is set of all positive even numbers then (EUO) is a. Set of natural numbers b. Set of rational numbers c. Set of whole numbers d. Empty set 11. If $A \cap B$ is null set, then $B \cap A'$ is d. A' a. B b. A c. B' 12. $\{1-(-1)^x\}$ for all integers x is the set d. {0,2} a. 0 b. {0} c. { 2 } 13. The number of subsets of {6,8,10} is a. 9 b. 6 d. None of these c. 8 14. A U A is equal to a. A b. E c. Φ d. 2A 15. A $\cap \Phi$ c. Φ a. E b. A d. None of these 16. If A \triangle B = (A-B) U (B-A) and A = { 1,2,3,4 } B={ 3,5,7 } then A \triangle B is equal to a. { 1,2,4,5,7} b. { 3 } c. { 1,2,3,4,5,7 } d. None of these 17. If R is the set of isosceles right angled triangles and I is set of isosceles triangles, then a. R = I b. $R \supset I$ c. R⊂ I d. None of these

CA VINOD REDDY

CA FOUNDATION MATHS

DD-64		By CA VINOD REDDY	WWW.SWAPNILPATNI.COM
18. After qualifying ou assistants. There wer and 14 in both industri get any of these.	ut of 400 profes re 32 who were ry and assistant	sionals 112 joined ind in both practice and s tship. There were 12 v	ustry, 120 started practice, 160 joined as paid ervice,40 in both practice and assistantship tho did all the three. Find How many could not
a. 82	b. 244	c.122	d. None of these
19. Find f $^{-1}(x)$, if f(x) =	= x ²		
a. 1/x ²	b . <i>x</i>	c. 2x	d. None of the above
20. If V={x:x+2=0}, R= a2	={x:x ² +2x=0} ar b. 2	nd S={x:x ² +x-2=0} are c. ½ d. Nor	equal to each other, then: x = ? e of these

WWW.SWAPNILPATNI.COM

Answers : DD-64

Qs.	Answer	Qs.	Answer
1	В	11	A
2	A	12	D
3	D	13	С
4	В	14	А
5	D	15	С
6	А	16	А
7	В	17	С
8	В	18	А
9	A	19	В
10	A	20	A

CA VINOD REDDY

DD-65 By CA VINOD REDDY WWW.SWAPNILPATNI.COM 1. A set has 20 elements, B has 30 elements and (AUB) has 45 elements, then the number of elements in (A \cap B) is c. 10 a. 15 b. 5 d. None of these 2. Which of the following is null set a. $A = \{x : x \text{ is } > 1 \text{ and } x \text{ is } < 1\}$ b. $B = \{x : x + 3 = 3\}$ d. D = $\{x : x > 1 \text{ and } x < 1\}$ c. $C = \{8\}$ 3. In a population of 50,000 of a town, 28,000 read newspaper X and 23,000 read Y while 4,000 read both. Then number of persons who read neither X nor Y is a. 2,000 b. 3,000 c. 2,500 d. None of these 4. If A [x : x^2 - 5x+6 = 0}, B = {2, 4}, C={4, 5}, then A x (B \cap C) is b. [(4, 2), (4, 3)] a. [(2, 4), (3, 4)] c. [(2, 4), (3, 4), (4, 4)] d. [(2, 2), (3, 3), (4, 4), (5, 5)] 5. If f(x) is a linear function such that f(0)=2 and f(1)=5 then f(x)=?b. 5x+2 c. 3x+2 d. None of these a. 2x+5 6. If $f(x)=x^2+x+1$ and f(x+1)=f(x) then x=? d. None of these a. -1 b. 0 c. 1 7. If f(2x+3)=12x Find f(x)a. 8x-9 b. 2x+3 c. 7x+2 d. None of these 8. If f(x)=5-4x, where $-2 \le x \le 4$, then the Range of the function f is given by b. $0 \le f(x) \le 13$ a. $-11 \le f(x) \le 0$ $c.-11 \le f(x) \le 13$ d. None of these 9. If $f(x) = \log [x + (1 + x^2)^{1/2}]$, then the function f is d. None of these a. Even b. Odd c. Neither odd nor even 10. If $f(x) = x^2$. log [(1+x)/(1-x)], then the function f is c. Neither odd nor even d. None of these a. Even b Odd 11.If A={ 1,2,3 } and B={ 3,4 } and C={ 5,6 } then (AxB) U (BxC) = b. $\{(1,3),(2,4),(3,3)\}$ c. $\{(3,3),(4,5),(4,6)\}$ d. None of these a. {3,4} 12. The number of non-empty subsets of a set {0,1,2,3,4} is a. 120 b. 30 c. 31 d. 32 13. A survey shows that 74% of Indians like grapes, whereas 68% like bananas. What % of Indians like both grapes and bananas? a. 44% b. 42% c. 46% d. None of these 14. The number of proper subsets of the set {6,8,11,14} is a. 9 b. 6 d. None of these c. 8 15. Given A = $\{2,3\}$, B= $\{4,5\}$, C= $\{5,6\}$ then A x (B \cap C) is a. {(2,5),(3,5)} b. {(5,2),(5,3)} d. None of these c. {(2,3),(5,5)} 16. If set A has 32 elements, B has 42 elements and (AUB) has 62 elements, then the number of elements in $(A \cap B)$ is d. None of these a. 12 b. 74 c.10 CA VINOD REDDY CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

By CA VINOD REDDY

17. If f(x)=1 / (1-x) and g(x)=(x-1)/x then (g.f)(x)=a. x-1 b. x c. x+1 d. 1/x

18. If A={1,2,3,4,5} and B={2,3,6,7} then the number of elements in the set (AxB) \cap (BxA) is equal to a. 4 b. 5 c. 10 d. 20

19. Null set is also called a . Empty set	as: b. Void set	c. Both A a	and B	d. None of these.
20. If f(x)=3x+4 for all x, t a. (12x-1) / 7 b. (3	:hen f ⁻¹ (x)= 3x-1) / 4	c. (x-3) / 4	d. (x-4) / 3	

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	В	11	D
2	A	12	С
3	В	13	В
4	A	14	D
5	С	15	A
6	А	16	А
7	D	17	В
8	С	18	А
9	В	19	С
10	В	20	D

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

1. If $h(x)=10^{1+x}$ where $0 \le x \le 9$, then the Range of the function h is given by b. $0 \le h(x) \le 10^{10}$ c. $10 \le h(x) \le 10^{10}$ a. $1 \le h(x) \le 10$ d. None of these 2. If $f(x)=e^{x}$ then : f(p+q)=a. f(p) + f(q)b. f(p) - f(q)c. $f(p) \times f(q)$ d. f(p) / f(q)3. If f(x) and g(x) are two functions of x such that $f(x) + g(x) = e^x$ and $f(x) - g(x) = e^{-x}$ then, a. f(x) is odd function b. q(x) is odd function c. f(x) is even function d. Option (b) and (c) 4. If y=h(x)=(px-q)/(qx-p) then x=? d. None of these a. h(1/y) b. h(-y) c. h(y)5. A set of intelligent students in a class is a. A null set b. A singleton set c A finite set d. Not a well-defines collection 6. In a group of 1000 people, there are 750 who can speak Hindi and 400 can speak Bengali. If everyone speaks atleast one of two languages, then the number of people who can speak both Hindi and Bengali is a. 150 b. 600 c. 250 d. None of these 7. In a group of 1000 people, there are 750 who can speak Hindi and 400 can speak Bengali. If everyone speaks atleast one of two languages, then the number of people who can speak only Hindi is a. 150 c. 250 b. 600 d. None of these 8. In a group of 1000 people, there are 750 who can speak Hindi and 400 can speak Bengali. If everyone speaks atleast one of two languages, then the number of people who can speak only Bengali is a. 150 b. 600 c. 250 d. None of these 9. In a class of 100 students, 60 play cricket, 50 play Hockey, and 30 play both. Then the number of students who play only one of two games is b. 50 d. None of these a. 80 c. 30 10. If f(x+1) = f(x-1), where $f(x)=x^2-2x+3$, then x=? a. 1 b. 2 d. None of these c. 3 11. If f(x+1) = f(x+2), where $f(x)=1+x-x^2$, then x=? a. -2 b. 0 c. 1 d. -1 e. None of these 12. If $f(x-1) = x^2$, where f(x+1)=?a. x²+2x+1 b. $x^{2}+4x+1$ c. $x^{2}+4x+4$ d. None of these 13. If f(x) = 3x+4 then f(x-4/3)=?d. None of these a. 1 b. x c. 0 14. If f(x) = 2x-5 then $f^{-1}(x)$ is a. 2x+5 b. -2x+5 c. (x+2)/2 d. None of these 15. If y is f(x) = (3x+1) / (8-3x) then $f^{-1}(3)$ is a. 23/12 b. 3/8 c. -5/3 d. None of these 16. If A and B are any two sets, then A \cup (A \cap B) is equal to b. B c. A' d. None of these a. A CA VINOD REDDY CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-66		By CA VINOD REDDY	WWW.SWAPNIL	PATNI.COM
17. A and B ar	e two sets then A	\cap (A \cup B)' is equal to		
а. В	b. 4	с. ф	d. None of these	
18. In a school hockey and ba play all the thr a. 45 b. 4	21 students play b sket-ball, 15 play h ee games, what is t 4 c. 3	asket ball, 26 students h ockey and football and 1 he total number of playe 4 d. 43	ockey and 29 play football. 14 stude 2 play football and basketball. If 8 st rs?	nts play udents
19. The domai a. (1, 6)	n of (1,7), (2,6) is b. (7, 6)	c. (1, 2)	d. (6, 7)	
20. If x is an i a.{0,1,2,3,4,5}	nteger, then the set b. {1,2,3,4}	{x: o <x<5}=? c. {1,2,3,4,5}</x<5}=? 	d. None of these	

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	С	11	D
2	С	12	С
3	D	13	В
4	С	14	D
5	D	15	А
6	А	16	А
7	В	17	С
8	С	18	D
9	В	19	С
10	А	20	В

WWW.SWAPNILPATNI.COM

DD-67

By CA VINOD REDDY

1.	A group has 20 persons, 8	drink tea but not coffe	e and 13 drink tea	a. The number of persons who drink
a.	6	b. 7	c. 1	d. None of these
2. a.	If f(x+1)=4x+5, then f(x)= 3x+4	b. 4x+1	c. 4x+3	d. None of these
3. a.	Let U = {1, 2, 3, 4, 5, 6, 7, B'	8, 9, 10} A = {1, 2, 5} , b. A	B = { 6, 7 } Then a c. A'	A ∩ U is d. B
4. a.	If $f(x) = 3x+5$ and $g(x) = 6$ 16x+200	x+100, Find g[f(2x)] b. 9x-300	c. f(x)	d. None of these
5. a.	Let S={0,1,5,4,7} then the 64	total number of subset b. 32	ts of S is c. 40	d. 20
6. a.	Let A and B are two sets t A' \cap B'	hen (A \cap B) is equal t b. A' \cup B'	o c. A ∩ B	d. A \cup B
a.	7. If $A \subseteq B$ then $A' \subseteq B'$	b. A' = B'	c. B' ⊆ A'	d. None of these
8. a.	$f'(x) = 3X^2 + 2$ and $f(1) = 3$	3 then f (0) is b. 1	c. 2	d. 0
9. a.	If A is any set then A \cup A'= Φ	b. A ∪ A' = U	c. A \cap A' = U	d. None of these
10 a.). If A= {0,1} B = {1,0} then {0,1,1,0}	n AXB is equal to b. {(0,1),(1,0)}	c. {0,0} d.	{(0,1),(0,0),(1,1),(1,0)}
11 а.	. If f(x-1) = 2x -2, then valu 16 b.	e of f(16) is 15	c. 32 d.	Can't find from given information
12 a.	A \cap Bb. A' \cap	B c. A C	∩ B' d.	A' ∩ B'
13 a.	8. Let X = {1,2,3,4,5,6,7,8,9, { 5, 8, 9, 10} b. { 2, 4	10} be the universal se 5, 6, 8, 9,I0 }	et & A={2, 4, 6 }, B c. {1,3,5,7,8,9,10	$\begin{array}{llllllllllllllllllllllllllllllllllll$
14 a.	4. If $f(x) = x^3+3$ then the in $f^{-1}(x) = (x - 3)^{1/3}$	verse of function is b. $f^{-1}(x) = (x - 3)^{-1/3}$	c. f ⁻¹ (x) =	(x + 3) ^{1/3} d. None
15	5. If $f(x) = e^{ax^2 + bx + c}$ the f'(x)is		
a.	e^{ax^2+bx+c} b. e^{ax^2+bx+c} . (2a)	x+b) c. 2ax-	⊦b d. None	e of these

CA VINOD REDDY

WWW.SWAPNILPATNI.COM

Answers : DD-67

Qs.	Answer	Qs.	Answer
1	В	11	С
2	В	12	С
3	В	13	А
4	D	14	А
5	В	15	В
6	С		
7	С		
8	D		
9	В		
10	D		

CA VINOD REDDY

CA FOUNDATION MATHS

1. If the value of correlation coefficient is positive, then the points in a scatter diagram tend o cluster.

a. From lower left corner to upper right corner.

b. From lower left corner to lower right corner

c.From lower right corner to upper left corner

d. From lower right corner to upper right corner.

2. Product moment correlation coefficient may be defined as the ratio of

a. The product of standard deviations of the two variables to the covariance between them.

b. The covariance between the variables to the product of the variances of them.

c. The covariance between the variables to the product of their standard deviations.

d. Either (b) or (c)

3. Since Blood Pressure of a person depends on age, we need consider

a. The regression equation of Blood Pressure on age

b. The regression equation of age on Blood Pressure

c.Both (a) and (b)

d. Either (a) or (b)

4. If cov(x, y) = 15, what restrictions should be put for the standard deviations of x & y?

a. No restriction

b. The product of the standard deviations should be more than 15

c.The product of the standard deviations should be less than or equal to 15

d. The sum of the standard deviations should be less than 15

5. If the sum of squares of difference of ranks, given by two judges A & B, of 8 students is 21, what is the value of rank correlation coefficient?

a. 0.70 b. 0.65 c. 0.75 d. 0.8

6. If the rank correlation coefficient between marks in management and mathematics for a group of student is 0.6 and the sum of squares of the difference in ranks is 66, what is the number of students in the group?

a. 10 b. 9 c. 8 d. 11

7. While computing rank correlation coefficient between profit and investment for the last 6 years of a company the difference in rank for a year was taken 3 instead of 4. What is the rectified rank correlation coefficient if it is known that the original value of the rank correlation coefficient was 0.4? a. 0.30 b. 0.20 c. 0.25 d. 0.28

8. For 10 pairs of observations, no. of concurrent deviations was found to be 4. What is the value of the coefficient of concurrent deviation?

a. √0.2 b. - √0.2 c. 1/3 d. -1/3

9. Given the regression equations as 3x+y=13 and 2x+5y=20, which one is the regression equation of y on x?

a. 1st equation b. 2nd equation c. Both d. None of these

10. Formula of coefficient of determination isa. r^2 b. $1-r^2$ c. $(1-r)^2$

11. Formula of coefficient of non-determination is

a. r^2 b. $1-r^2$ c. $(1-r)^2$ d. None of these

12. For a two way frequency table having $(m \times n)$ classification the total number of cells is: a. m b. n c. m + n d. mn

CA VINOD REDDY

CA FOUNDATION MATHS

WWW.SWAPNILPATNI.COM

d. None of these

DD-68	By CA VINOD REDDY W			ww	w.sw/	APNILP#	ATNI.COM	
13. For a (m x n) to w a. 1	ay or bivariate f b. 2	frequency table c. m +	e, the m n	aximum numbe	r of mai d. m.n	rginal d	istributi	on is
14. If r = 0, then a. There is a perfect of b. There is a positive	correlation betw correlation betw	veen x & y ween x & y		c. x & y are not d. Do not exist.	correla	ated		
15. If covariance (x, y a. Positive	y) < 0; then the b. Negative	relation betwe	en two c. (a) c	variable is or (b)		d. Non	e of the	ese
16. Consider the two a. x = 4 & y = 7	regression line b. x = 7 & y = 4	es 3x + 2y = 26 4	& 6x + c. x = {	y = 31. Find the 5 & y = 6	mean	values d. Non	of x and e of the	d y. ese
17. Consider the two and y. a. 0.5	b regression line	es 3x + 2y = 26 c. 0.6	& 6x +	y = 31. Find the d. None of thes	correla se	ition co	efficien	t of x
18. The two regressi a. 4	on lines are 5x b. 5	= 22 + y & 64x c. Cannot det	= 24 + ermine	45y. Find the St d. None	andard of the	Deviat se	ion of y	' .
19. Find the coefficier	nt of correlation	between the f	ollowing	set of observat	ion :	x :	69 70	85 87
a. 1	b1	c. 0	d. Nor	e of these		у.	70	07
20. Find the coefficier	nt of correlation	between the f	ollowing	set of observat	ion :	x : y :	102 50	109 48
a. 1	b1	c. 0	d. Non	e of these				

WWW.SWAPNILPATNI.COM

Answers : DD-68

Qs.	Answer	Qs.	Answer
1	A	11	В
2	С	12	D
3	A	13	С
4	В	14	С
5	С	15	В
6	А	16	А
7	В	17	В
8	D	18	С
9	В	19	А
10	А	20	В

CA VINOD REDDY

By CA VINOD REDDY

 For the bivariate data 0 	ata [(x,y)] = [(20,5), (2 b. 1	(1,4), (22,3)], the correla c1	ation coefficient between x and y is d. 0.5
2. The regression of statement is:	y on x is 2y + 3x = 4 &	& the correlation coeffici	ent between x & y is 0.8.The
a. True	b. False	c. Can't say	d. None of these
3. The correlation coestatement is :	efficient of 3x and -2y	is the same as the con	elation coefficient of x & y. This
a. True	b. False	c. Can't say	d. None of these
4. The value of spear 2/3. The sum of squa pairs.	man's rank correlatio res of differences bet	n coefficient of a certain ween the correspondin	n number of observations was to be g ranks was 55. Find the number of
a. 10	b. 12	c. 11	d. None of these
5. The equation of tw	o lines of regression	is 4x + 3y + 7 = 0 & 3x ·	+ 4y + 8 =0. The correlation coefficient
a. 1.25	b. 0.25	c0.75	d. None of these
 6. The co-variance be a. Always positive 	etween the two variab b. Always ne	iles is gative c. Always zer	od. Either positive or negative or zero
7. Two regression co a. True	efficients b _{xy} & b _{yx} are b. False	e 1.2 & -0.5. This is c. Either (a) r (b)	d. None of these
8. In case of 'Product a. Positive	tion and price per uni b. Negative	ť - correlation is c. Zero d. Nor	e
9. The correlation co a. A.M.	efficient r is the b. G.M.	of the two regression of two regressions of the two regressions of two regres	coefficients d. None
10. If variable Y tends a. Negative correlation	s to increase as varial on b. Inverse co	ole X decreases, is calle rrelation c. No	ed: correlation d. Positive correlation
 11. The purpose of constraints a. Establishing relations b. Predicting one variants c.Measuring the extend. d. Both (a) and (c) 	orrelation analysis is: on between two variat iable for a given value nt of relation between	bles e of the other variable two variables	
12. If all the points in	a scatter diagram eq	ually distributed withou	t depicting any pattern, the correlation
a. r = 1	b. r = 0	c. r = -1	d. 0 < r < 1
13. When r = 0 then c a. +1	cov (x,y) is equal to b1	c. 0	d. None of these
14. Which method is a. Karl Pearson's	used when it is requi b. Concurrent Dev	red to know only the dir iation c. Spearma	ection of the movement of variables? an's d. Least Square
CA VINOD REDDY	CA F	OUNDATION MATHS	WWW.SWAPNILPATNI.COM

DD-69	By CA V	WWW.SWA	APNILPATNI.COM			
15. Which of the following is the measure of correlation?a. Coefficient of concurrent deviationsb. Karl Pearson's product moment correlation coefficientc.Spearman's rank correlation coefficientd. All these including Scatter diagram						
 16. When coefficient of correlation is between .50 to .75, then it is said to becorrelation of: a. Low degree b. Moderate degree c. High degree d. Zero degree 						
17. Spearman's Rank	king method of finding	correlation is used whe	en we deal with	_characteristics		
a. Quantitative	b. Qualitative	c. Both a & b above	d. Either a or b	above		
18. If the sum of squares of difference of ranks, given by two judges A and B, of 5 students in 34, what is						
a. 0.7	b. 0.87	c0.70	d. None of the	se		
19. If variances of x and y series are 16 and 25 respectively, and the co-variance of two is 18, coefficient						
a. + 0.45	e. b. + 0.9	c. + 4.22	d. + 1.22			
20. If the relation between the two variables is $2x + 3y = 4$, then the correlation coefficient between them is:						

is: a. -1 b. 1 c. - 2/3 d. None of these

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	С	11	D
2	В	12	В
3	В	13	С
4	А	14	В
5	С	15	D
6	D	16	В
7	В	17	С
8	В	18	С
9	В	19	В
10	A	20	A

DD-70	By CA	VINOD RED	DY		W	WW.SW	APNILP/	ATNI.COM
1. If the mean deviation of a distribution is 20.20, the standard deviation of the distribution is:a. 12.15b. 25.25b. 25.25c. 20.20c. 20.20d. None of these								
2. If for two variable \times respectively, what is t	2. If for two variable x and y, the covariance, variance of x and variance of y are 40, 16 and 266 respectively, what is the value of the correlation coefficient?							
a. 0.023	0.0.01	0.0.4			u. Non		550	
3. The limits of Karl P a. 0 to 1	Pearson's coefficient of b. 0 to -1	f correlatio c1 to +	n are: 1 including t	ooth limi	ts	d1 to	o +1	
4. The regression equivariance of profit is (9 profits is:	uation of profit (x) on s //16)th of the variance	ale (y) of a of the sale	a certain firm . The coeffic	n is giver cient of c	n by 3y correlati	- 5x + ⁻ on betv	108=0. ⁻ ween sa	The les and
a. 0.6	b. 0.7	c. 0.8		d. 0.5.				
 5. If in the scatter diagram all the points show a straight line from left to right downwards, it shall mean: a. Perfect negative correlation b. Perfect positive correlation c. Normal positive correlation d. Zero correlation 						l mean:		
 When cost of living a. True 	j increases, the standa b. False	ard of living c. Either	g improves, of these	This is	d. Non	e of the	ese	
7. Rank correlation co	pefficient of following s	set is R	ank of x -	3	4	5	1	2
a. 1 b. 0	c1	R	ank of y - d0.8	3 30	2	1	5	4
8. The coefficient of 16, then the standard a. 18.75	correlation between tw deviation of Y is given b18.75	vo variable n by: c. 16	es X and Y i .75	is 0.48.	The Co d. Non	v (X,Y) e of the	= 36, S	SD of X =
9. If x and y satisfy the relationship $y = -5 + 7x$, the value of r is a. 0 b1 c.+1 d. None of these								
10. In a regression analysis problem, the following data is given; The regression lines are: $x + 2y - 5=0$, $2x + 3y = 8$ and variance of $x = 12$. The value of variance of y is: a. 2 b. 3 c. 5 d. 4.								
11.For finding the degree of agreement about beauty between two Judges in a Beauty,Contest, we use								
a. Scatter diagramc. Coefficient of correct	elation		b. Coeffic d. Coeffic	ient of ra ient of co	ank corr oncurre	elation nt devia	ation	
12. AM of x = 65, AM of y = 67, SD of x = 2.50, SD of y = 3.50, $b_{xy} = 0.571$ the value of r is : -a. 0.6b. 0.7c. 0.8d. 0.9								
13. If there is a decreaa. Hyperbolac. A convex curve	ase in a series at cons	stant rate, t	the graph wi b. A straig d. None o	ill be a: ght line fi f these.	rom left	top to I	right bol	ttom.

DD-70	By CA	VINOD REDDY	WWW.SWAPNILPATNI.COM		
 14. Given is the follow Arithmetic mean Standard deviation Coefficient of correlation a. 1.422 	wing information: X Y 6 8 5 40/3. tion between X and Y= b. 1.322	=8/15. The regression o c. 2.422	coefficient of Y on X is: d. 2.322.		
15. The rank accordi $R_{1:}$ 1 2 R_{2} : 5 4 The Spearman's rate a. 1.00	ng to two attributes in 3 4 5 3 2 1 ank correlation coefficie b 1.00	a sample are given be ent is: c. 0.50	low: d 0.50		
16. The regression li coefficient between > a0.6	ne of y on x is 5y + 3x c and y is: b. 0.6	= 5 and that of x on y i c0.7	is 3y + 5x = 2. The correlation d. 0.7		
17. Regression coeff a. b _{xy}	ficient of x on y is: b. b _{xy} . b _{yx}	c. r	d. None of these		
18. If $u + 5x = 6$ and $3y - 7v = 20$ and the correlation coefficient between x and y is 0.58 then what would be the correlation coefficient between u and v?a. 0.58b0.58c 084d. 0.84					
19. The correlation I the brakes is a. Negative	between the speed of b. Zero	an automobile and th c. Positive	e distance travelled by it after applying d. None of these		
20. Karl Pearson's coefficient of correlation between two variables X & Y is 0.52 , their covariance is +7.8If the variance of X is 16, then the standard deviation of Y series is:a. 2.85b. 3.25c. 1.25d. 3.75					

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	В	11	В
2	D	12	С
3	С	13	В
4	С	14	А
5	А	15	В
6	В	16	А
7	С	17	A
8	D	18	В
9	С	19	С
10	D	20	D

By CA VINOD REDDY

1. lf r =0.40,Me a. x = 17 + 0.2	ean of x = 25,mean of 20y b. Y =17 + 0.2	y = 40,SD of x 0x	=2,SD of y = 4. Fi c. Both of these	ind regression line of x on y d. None of these	
2. If Regression a8/5	on line of y on x is 8x+ b5/8	5y =33 find reg c. 33/5	ression coefficien d. 5/33	t of y on x	
 Bivariate Da a. One variabl c. Two variable 	ata are the data collec e es at different points o	ted for f time	b. More than two d. Two variables	variable at the same point of time	
 If all points a. Linear 	seem to the near som b. Non-disper	e curve, the co sed	rrelation is called: c. Skewed	d. Non-linear	
 When the d Concurrent Spearmen's 	ata is ranked in order correlation s correlation	of size, importa b. Karl d. Lea	ance, etc. it is calle Pearson's correla st square correlati	ed as: ation on	
 6. Product mo a. Finding the c. Both (a) and 	ment correlation coeff nature of correlation d (b)	icient is consid	ered for b. Finding the an d. Either (a) and	nount of correlation (b)	
 Regression a. Establishing b. Measuring to c.Predicting the d. Both (a) and 	analysis is concerned g a mathematical relat the extent of association e value of the depend d (c)	l with ionship betwee on between two ent variable for	n two variables o variables a given value of t	he independent variable	
 When acco values of anot a. Positive cor c. Indirect corr 	mpanied by an increas her series, the correla relation relation	se in the value tion shall be:	of series, there is b. Negative corre d. Spurious corre	a corresponding decrease in the elation elation	
9. If b _{xy} = 0.60 a. 0.60 x 10.50	and b _{yx} = 10.56 then 6 b. 6.33	find the value	of 'r' c. 1	d. Incorrect data	
10. If AM and 2.50x)	coefficient of variatior	n of x are 10 an	d 40 respectively,	what is the variance of (15.45 -	
a. 9	b. 10	c. 11	d. None c	of these	
 Which of t Coefficient of Karl Pearso C.Both of abov None of abov 	he following is the me of concurrent deviation on's correlation coeffici e ove	asure of regres ns ient	sion		
12. x=0.85y ar is:	nd y=0.89x are two eq	uations of regre	ession lines. If SD	of $y = 3.0$, then the value of SD of x	
a. 2.73	b. 2.93	c. 2.83	d. 2.63		
13. If the amo other variable,	unt of change in one v then correlation is sa	variable tends t id to be	o bear a constant	ratio to the amount of change in the	
a. Non-linear	b. Line	ar	c. Both	d. None	
CA VINOD REDE	γ	CA FOUNDAT	ION MATHS	WWW.SWAPNILPATNI.COM	
DD-71	By CA \	/INOD REDDY	WWW.SWA	APNILPATNI.COM	
---	--	--	---	-----------------------------	--
 14. Which of the following statements is false in relation to Regression equations & Regression coefficients: a. The two regression lines perpendicular to each other. b. The geometric mean of the two regression coefficients is equal to the correlation coefficient. c.If one of the regression coefficient is greater than unity, the other must be less than unity. d. The arithmetic mean of the regression coefficients is less than correlation coefficient. 					
15. For some bive value of Y = 27.9 , 0.2. Find the most a. 17.7 b.	15. For some bivariate data, the following results were obtained: the mean value of X = 53.2, the mean value of Y = 27.9, the regression coefficient of Y on X = -1.5 and the regression coefficient of X on Y = -0.2. Find the most probable value of Y when X = 60 a. 17.7 b. 15.89 c. 71.78 d. None of the above.				
16. In a Bivariate terms n is: a. 9 b. 8	distribution if the rank co c. 7	orrelation coefficie d. 10	ent R 0.1785, Σd² = 46. The	n the number of	
17. You are given SD of y = 8 and r a. 25.93	n the following data for the = 0.66. The value of x whe b. 26.93	e variables and y en y = 75, is: c. 24.93.	. AM of x = 36, AM of y = 8 d. 27.93	5, SD of x = 11,	
18. Given the foll AM of X = 5, A a. 4Y = 5X	owing data on two variable M of Y = 4, b _{yx} = 0.8, the re b. 5X = 4Y	es X and Y : egression equatio c. 3X = 4Y	n of Y on X is : d. 5Y = 4X.		
19. Sale of cold de a. Positive	rinks and temperature. The b. Negative	e correlation is c. Zero	d. None		
20. The equation $3y + 9x = 46$. The a1/2 3 b2	s of two regression lines correlation coefficient bet 3 c1 3	s obtained in a c ween x and y is : d. 1/2	correlation analysis are: 3x	+ 12y = 9 and	
21. For a given s b_{xY} = -0.2. The mo a. 53.6	et of bivariate data, the for st probable value of X who b. 52.6	bllowing results w en Y = 20 is: c. 55.6	ere obtained: AM of X = 53 d. 54.6	, AM of Y = 28,	
22. On a correlation 0.8; SD of x = 2.5 a. 2.40 b. 3	on study of two variables Then the value of SD of y 3.05 c. 3.50	x and y, the follov v is:) d	ving values are obtained . 2.04	b _{yx} = 1.12, r =	
23. Two regressio a. r = 0	n lines coincide when b. r = 2	c. r = ± 1	d. None		

CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

WWW.SWAPNILPATNI.COM

Answers : DD-71

Qs.	Answer	Qs.	Answer
1	A	13	В
2	A	14	D
3	D	15	А
4	D	16	С
5	С	17	В
6	С	18	D
7	D	19	А
8	В	20	А
9	D	21	D
10	D	22	С
11	D	23	С
12	В		

CA VINOD REDDY

DD-	72	Ву СА у	VINOD REDDY	WWW.SWAPNILPATNI.COM
1.	lf a² + b² = 45 an	d ab = 18, then (1/a)+	(1/b) = ?	d. None of these.
a.	1/3	b. 2/3	c. ½	
2.	One third of a nu	mber is greater than o	ne fourth of its succes	sor by 1. Find the number.
a.	51	b. 21	c. 15	d. None of these
3. a.	[(0.7214 x 20.37) 1.5948) / 69.80] ^{1/3} b. 0.5949	c. 0.2348	d. None of these
4. a.	Find the average 77.50	e of first 30 multiples of b. 87.50	⁵ . c. 75	d. None of these.
5.	lf a, b, c, d, e are	5 consecutive odd int	egers, then their avera	nge is
a.	a+5	b. abcde/5	c. 5(a+b+c+d+e)	d. a+4
6.	A cricketer score	ed 180 runs in first test	and 258 runs in secon	d. How many runs he should score in d. 334
thirc	I test so that his a	verage score in three	tests would be 230.	
a.	219	b. 242	c. 252	
7. the a.	When a number ratio between first 1:2	is added to another nu t and second number. b. 1:3	mber, the total becom c. 2:3	es 150% of second number. What is d. None of these
8.	Sum of two numl	bers is 14 and their dif	ference is 10. Find the	product of two numbers.
a.	24	b. 30	c. 36	d. None of these.
9.	Find the number	, when multiplied by 36	6 is increased by 1050	d. None of these
a.	40	b. 30	c. 50	
10. spe a.	A number of mer nt was Rs. 15,625 110	n went to a hotel and e 5, find the no. of men. b. 125	ach spent as many rup c. 145	d. None of these.
11.	Sum of two numl	ber is75 and their diffe	rence is 20. Find the d	ifference of their squares.
а.	1500	b. 1600	c. 1550	d. None of these
12.	Difference betwe	en squares of two con	secutive numbers is 3	7. Find the numbers.
a.	19,18	b. 20,19	c. 10,9	d. None of these
13. are	A number consis reversed. The nu	ting of two digits is fou mber is:	r times the sum of its o	digits and if 27 be added to it the digits
а. 14. а.	lf 3x+2y = 9 and 1,4	x + 3y = 10 then x and b. 2,1.50	l y are c. 3,0	d. 1,3
15.	Calculate the nu	mber such that it is equ	ual to one-third of its di	ifference from 56.
a.	32	b. 14	c. 42	d.None of these
16. а.	What is the solution 3x + 2y + 17 = 0 x = 3, y = 2	on of the system of sin & 5x – 6y – 9 = 0; b. x = -3, y = 4	nultaneous linear equa c. x = 3, y = -4	tions d. x = -3, y = -4

CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-72	Ву СА	/INOD REDDY	WWW.SWAPNILPATNI.COM
 Sheikh chili says years later I shall be a. 12 years 	s is to his son, "Seven y three times as old as y b. 15 years	years ago I was seven times a ou will be." Find the present a c. 5 years	s old as you were, and three ge of Sheikh chili's son. d. 7 years
18. A number consist the number formed b Find the number	at of three digits of which y interchanging the firs	ch the middle one is zero and the third digits is more than	the sum of the other digits is 8. the original number by 396.
a. 306	D. 206	C. 305	d. None
19. X and Y each ha But if Y gives `10 to a. `54, `62	X, then X will have thr b.`62, `34	given ` 30 to Y, then Y will ha ice as much as is left with Y. T c. ` 72, ` 44	ave twice the money left with X. Then X and Y have respectively. d. `34, `62
20. The set of simulation $x = 1$, $y = 2$ as so	aneous equations 4x -	+ 2y = 5 and 6x + 3y = 10 has	:

b. x = 0, y = 0 and x = 1, y = -2 as solutions c. x = 0, y = 0; x = -1, y = 2 and x = 1, y = -2 as solutions d. An infinite number of solutions

A B

В

WWW.SWAPNILPATNI.COM

В

В

D

Answers : DD-72					
Qs.	Answer	Qs.	Answer		
1	С	11	А		
2	С	12	А		
3	В	13	С		
4	A	14	D		
5	D	15	В		
6	С	16	D		
7	А	17	А		

18

19

20

Answers : DD-72

8

9

10

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

A two-digit number is such that the product of the digits is 8. When 18 is added to the number, the 1 digits are reversed. Find the number c.81 d.42 18 b.24 a. 2. If the slope of the line passing through the points (2,3) and (5,k) is 5/3 then k=? b. 6 c. 7 d. 8 а. 5 3. If the points (-3,4), (-14,12) and (8,k) are collinear then k=? -3 b. -4 а. c. 4 d. 12 If a line makes equal intercepts on X and Y axes then the slope is 4. b. 0 c. -2 d. 1 a. -1 The equation of the line joining the point (3,5) to the point of intersection of the lines 4x+y-1=0 and 5. 7x+3v-35=0 is 2x-y=1 b. 3x+2y=19 c. 12x-y-31=0 d.None of these a. 6. The point of intersection of the lines 3x+2y=6 and 3x-y=12 lies in quadrant а. 1 b. 2 c. 3 d. 4 7. The equation of the line having x-intercept = 4 and slope = -3 is 3x+y+2 = 0b. 3x+y=12 c. X+3y=12 d. None of these a. A line passes through the point (2,2) and it is perpendicular to the line 3x+y=3. Its y-intercept is 8. b. 2/3 c. 1 d. 4/3 а. 1/3 Slope of the line passing through the points (1,1) and (100,100) is 9. c. Not defined b. 0 1 d. Can't sav a. 10. $x^2-5x+6 = 0$, roots of this guadratic equation are a. 3.-2 b. -3.-2 c.3.20 d. None of these 11. Find out the equation of the line passing through (3,6) (8,11)a. y = 2xb. x + 3 = yc. y - 3 = xd. Both (B) and (C) 12. Y intercept of 3x + 7y = 350 is c. 350/3 a. 55 b. 50 d. None of these 13. If x + 8y = 19 and 2x + 11y = 28 then x, y are a. 2.3 b. 3.2 c. 3.3 d. 2.2 14. I am three times old as my son. Five years later, I shall be 2.5 times as old as my son. How old am I? a. 35 years b. 15 years c. 20 years d. 45 years 15. Find x if 9x + 1 = 5x + 17d. None of these a. -4 b. 3 c. -3 16. (12x+1)/4 = (13x-1)/5 + 3 is true for b. x = 2 d. x = 51/8a. x = 1/8 c. x = 5/817. If equation of the line is -y = -8x + 16, its slope is c. 16 8 b. -8 d. Can't Say a.

CA VINOD REDDY

CA FOUNDATION MATHS

DD-73	Ву СА	VINOD REDDY	WWW.SWAPNILPATNI.COM
18. 2x + 5y = 25, 5x -	• ky = 45, has no solu	tion if	d. None of these
a. k = 12	b. k = 12½	c. k = 13	
19. The values of x a a. 3,2	nd y satisfying the pai	r (x/2)+(y/3)=2,	x+2y=8 are given by the pair.
	b2,-3	c. 2,3	d. None of these
20. Equations kx+2y	= 5, 3x+y=1 has uniq	ue solution if	d. None of these
a. k = 6	b. k ≠ 6	c. k = ±6	

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	В	11	D
2	D	12	В
3	В	13	В
4	A	14	D
5	D	15	D
6	D	16	D
7	В	17	A
8	D	18	D
9	A	19	С
10	D	20	В

Answers : DD-73

CA VINOD REDDY

CA FOUNDATION MATHS

DD-	74	Ву СА у	VINOD RE	DDY	١	WWW.SWAPNILPATNI.COM
1. a.	For what value of k, th 28/9	e equations 9x+4 b. 36/7	4y = 9 an c. 23/9	ld 7x+ky = 5 l	has no solution d. 7	n.
2. Hov	A lady has only 25 pai many of each type do	se and 50 paise es she have?	coins in l	her purse. If i	n all she has 4	10 coins following `12.75.
a.	18,23	b. 30,8	c. 29,11		d. None of t	hese
3. digit a	A number consist of 2 is are reversed, the nur	digits is 7 times mber is b 36	of sum o	f digits. Wher	n 27 is subtrac	ted from the number, the
4. the a.	A train travel a distanc journey would have tak 25 km/hr b. 28	ce of 300 km at a ten 2 hours less. 3 km/hr	constan The orig c. 27 kr	t speed. If spe inal speed of n/hr	eed of train is the train is d. None of t	increased by 5 km/hr, hese
5. a.	The equation of the lin x + y = 80 b.2x	ne passing throug + 3y = 30	jh is (3,5 c.8x + {) and (5,3) is 3y = 64	d.x - y = 2	
6. a.	Slope of the line paral Zero b. N	lel to X- axis is ot defined	c. 2	d. 3		
7. a.	Slope of the line perpe Zero b. N	endicular to to ot defined	Y- axis i c. 2	is d. 3		
8. a. 2	The equation of a line x + 3y + 7 = 0	through (4, 5) an b. 2x - 3y = 7	nd paralle	el to the line 2 c. 2x - 3y + 7	2x- 3y - 5 = 0 is = 0	d. None of these
9. a.	(2,8), (10,0), (-15,k) ai 10	re collinear. Find b. 5	'k'	c. 25		d25
10.	The sum of two digit nu	umber and number	er obtain	ed by reversi	ng the digits is	s 121, and digits differ by
3. Т а.	he number is 37	b. 47		c. 58		d. 69
11. а.	By selling a car at a pr `84,000	rice of `72,000 a b. `72,000	person r	nade profit of c. `50,000	20% on cost. d. `6	Find cost of the car? 0,000
12. а.	Divide 78 in two parts 52,26	such that their pi b. 62,16	roduct is	1512. c. 42,36	d. 72	2,6
13. a.	The sum of three num 2,5,8	bers in ascendin b. 8,5,2	g order 1	5 and their p c. 1,4,7	roduct is 80. fi d. No	nd the numbers one of these
14. a. F c. R	If b ² -4ac=25 then the Real, rational, Imaginary eal, rational. Equal	roots of the quad y b.Real d. Rea	ratic equ I, rationa II, rationa	ation are - I, irrational II, distinct		
15. а.	The cubic equation x^3 (1,-1, 2) b.(-	$+2x^{2} - x - 2 = 0$ 1, 1,-2)	has 3 ro c.(-1, 2	ots namely. 2,-2) d.	. (1, 2, 2)	
16. a.	If b ² > 4ac then roots a Real, Unequal	are b. Imaginary		c. Real, Com	plex	d. Real, Unequal, even
CA ۱	/INOD REDDY	CA FC	DUNDATIO	ON MATHS		WWW.SWAPNILPATNI.COM

By CA VINOD REDDY

17. Two numbers are such that their sum is 15 and difference is (1/5)th of their total. The numbers area. 12,3b. 11,4c. 9,6d. 14,1

18. Two numbers are such that the sum is 19 and their product is 8 times the greater number , the numbers are

a. 12,7 b. 11,8 c. 13,6 d. 14,5

19. If the sum of 2 natural numbers is 9 and sum of their squares is 5 times their sum less 4. The numbers are

a. 2,7 b. 1,9 c. 3,6 d. 4,5

- 20. Difference of two numbers is 5 and difference of their squares is 45. The numbers are
- a. 13,8 b. 12,7 c. 2,7 d. 14,9

DD-74

Qs.	Answer	Qs.	Answer
1	А	11	D
2	С	12	С
3	А	13	А
4	А	14	D
5	С	15	В
6	А	16	А
7	А	17	С
8	С	18	В
9	С	19	D
10	В	20	С

DD-	75		By CA VINOD	REDDY	w	WW.SWAPNILPATNI.COM
1. a.	What is the slope -3/5,9	e and Y intercep b. 9,-3/10	pt of line 7x+5 c. 7/	y=10 5,-10	d7/5,2	
2. a.	If x ³ -25x ² -2000x= 15,20,10	=0 then the root b. 17,-19,5	ts of the equat c. 10,	ion are 19,-7	d. None of the	ese
3. a.	lf x ³ -2x ² -8x+16=(1,-2,-3	0 then the roots b. 2,5,-5	of the equation of the equation c. 1,6	on are ,-7	d. None of the	ese
4. a.	If points (2,3),(3, 120/5	2) and (p,-19) a b. 24/5	are collinear th c. 244	en the value of d. 2/3	p is	
5. a.	The slope of the -2/5	line perpendicu b. 5/2	ular to the line c. 1/3	e 2x+5y-7=0 is . d. 2/5		
6. a.	The slope of the 0	line passing the b. Not defined	rough (2,4) an c. Infi	d (5,4) is nity	d. Parallel to 2	K-axis
7. den a.	If 1 is added to th ominator it becon 2/5	he denominator nes ½ then the t b. 3/7	r of a certain fi fraction is c. 2/6	raction it becom d. 3/10	es 1/3 and if 1	s subtracted from the
8. a.	The points (3,-2) -3	, (p,1) and (-5,4 b2/5	1) are collinea c. 3	ar then the value d1	e of p is	
9. a.	What is the slope	e of the line per b1	pendicular to c. ½	the line passing d½	I through the po	ints (1,2) and (2,1)
10. а.	The perimeter of 25m	rectangle is 82 b. 16m	m and its area c. 9m	a is 400 m². cal d. 20m	culate the bread	th of rectangle
11. а.	For what value o	of k, the equation b. 4	n x²+4kx+k+2 c2	=0 has one of the d1⁄2	ne root as 'zero	,
12. a.	The factors of the (x-2m) and (x-7n	e quadratic equ ı) b. (x+2	ation whose r 2m) and (x-7n)	oots are 2m an c. (x-2	d -7n are ?m) and (x+7n)	d. None of these
13. mid	The sum of three	e consecutive p	ositive even n	umbers is 15 le	ss than three-fo	ourth of 60. What is the
a.	15	b. 10	c. 12	d. None of the	ese	
14. a.	If p and q are roo 5/2	ots of the quadra b5/28	atic equation 2 c. 10	2x²-5x+7=0, the d.10/2	en value of (2p+	2q) is
15. а. с.	If b ² = 4ac in a q Roots are imagir Roots are not ec	uadratic equatio nary qual	on then b. Ro d. Ro	ots are equal ots are reciproc	als of each oth	er
16. a. 5	If one root of 5x ² b5	+ 13x + p = 0 t c.1/5	be reciprocal o d	of the other ther 1/5	the value of p	is
17. а.	If the equation x ² ±1	²-(p+4)x+2p+5= b. ±2	0 has equal ro c. 2	oots, then p=? d2		
CA V	INOD REDDY		ca founda	TION MATHS	١	WWW.SWAPNILPATNI.COM

DD-	75	В	y ca vinod r	EDDY	WWW.SWAPNILPATNI.COM
18.	If one root of the	equation x(x-6)=	3k(1-x) is ne	gative of other, Then valu	ue of k is
a.	1	b. 2 c	2. 3	d. None of these	
19. a.	x,x-4,x+5 are the x ³ +2x ² -x-2=0	factors of the lef b. x ³ +x ² -	ft-hand side c ·20x=0	of the equation c. X ³ -3x ² -4x+12=0	d. None of these
20.	Equation of a line $a \cdot 3x + 2y - 2 = 0$	e perpendicular t	o 3x -2y + 5 =	= 0 and Passing through	(1, 0) is
a.) b. 2x + 3	3y – 2 = 0	c. 2x + 3y + 2= 0	d. None .

DD-75

Qs.	Answer	Qs.	Answer
1	D	11	С
2	D	12	С
3	D	13	В
4	А	14	D
5	В	15	В
6	А	16	А
7	А	17	В
8	D	18	В
9	A	19	В
10	В	20	В

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

1. a.	If 4x ³ +8x ² -x-2=0 then 2 4,-1,2	x+3=? b4,2,1	c. 2,-4,-1	d. None of these
2.	The distance between t	the points A(a,2) and B	(3,a) is 5 units, Then a	=?
a.	1 or 4	b2 or 3	c1 or 6	d. None of these
3. `1,0 a.	If the Total cost of prod 02,000. Find the Fixed C `88,000 b. `80	ucing 1000 units is `10 Cost - 0,000 c. `80	0,000 and total cost of ,800 d. `20	producing 1100 units is ,000
4.	If a and b are roots of 3	3x ² -5x+6=0 then the val	lue of a²+b² is	
a.	25/9 b4/9	9 c11/9	d. 11/9	
5. a.	What is the slope of the -1 b. 1	e line passing through (c. ±1 d. Nor	8,9) and (9,10) ne of these	
6. a.	Two numbers are such 30,6 b. 4,3	that their difference is 2 0 c. 15,39	24 and product is 180. d. 1,25	The numbers are
7. a.	The slope of the line pa 3/6 b1/2	arallel to 3x+6y=5 is 2	d. None of these	
8.	The equation of the line	e passing through (2,3)	and perpendicular to 2	x+9y=789 is
a.	9x-2y=120	b. 2x+9y=12	c. 2x+9y=31	d. None of these
9.	The equation of the line	e having slope of -5 an	d passing through the	point (8,8) is
a.	5x+y=84 b. 5x+	⊦y=48 c. 5x-y	/=32 d. Nor	ne of these
10.	If the points (2,-2),(-2,2)) and (7,P) are collinea	r find P	d. P=11
a.	P=-7	b. P= 7	c. P= 9	
11.	The equation of the line	e passing through (8,8)	and parallel to 3x-y=0	is
а.	3x-y=88 b. x-3	y=-16 c. 3x-y	/+16=0 d. Nor	ne of these
12. mac a.	If the total cost of 10 ma chines. 25.000 b. 30	achines is `15,000 and).000 c. `35	20 machines is `20,00	00. Find the total cost of 30
13.	Find the product of slop	bes of following lines - 1	l) 3x+8y=90 2) 8x+3y	y=90
a.	1 b1	c. 9/64	d. Nor	ne of these
14.	Find the product of slop	bes of following lines - 1) 8x+3y=90 2) 8x-3	y=890
а.	1 b1	c. 9/64 d. Nor	ne of these	
15. а.	A linear equation has No root b. On	ly one root	c. Infinite no. of roots	d. Equal roots
16. а.	Roots of the Quadratic $b^2 = 4ac$	equation are imaginary b. b² > 4ac	r when c. b ² < 4ac	d. b² ≠ 4ac
17.	If a, b are the roots of x	$x^{2} - 3x + 2 = 0$ then the e	equation whose roots a	are (a + 1) and (b + 1) is
а.	$x^2 + 5x + 6 = 0$	b.x ² - 5x - 6 = 0	c.x ² + 5x - 6 =	= 0 d.x ² -5x + 6 = 0

CA VINOD REDDY

CA FOUNDATION MATHS

18. If p and q are roots of Quadratic equation $3x^2+6x+9 = 0$ then the value of p^2+q^2+2pq isa. -4b. 4c. Can't find from given datad. 9

19. Find the Quadratic equation whose roots are 5 and -5 a. $x^2 + 10x + 25 = 0$ b. x²-10x+25 = 0 c. $x^2-5 = 0$ d. $x^2-25 = 0$

- 20. If the roots of the equation $x^2 px + 8p 15 = 0$ are equal then p is equal to a. a. 3 or 5 b.2 or 5 c. 3 or 5 d. 2 or 30.

DD-76

CA VINOD REDDY

DD-76

Qs.	Answer	Qs.	Answer
1	А	11	D
2	С	12	А
3	В	13	А
4	С	14	D
5	В	15	В
6	А	16	С
7	В	17	D
8	D	18	В
9	В	19	D
10	A	20	D

DD-77	By CA \	/INOD REDDY	W	WW.SWAPNILPATNI.COM
1. Find the Quadratic eq a. $x^2 - 10x - 22 = 0$ c. $x^2 - 10x + 22 = 0$	uation whose one c	of the root is - $(5 + 7)$ b. x ² + 10x + 22 = d. Given informati	√3) 0 on is not sufficient	
2. The largest angle of tr The smallest angle in deg a. 30° b.60°	riangle is twice the s gree is c. 45°	sum of other two. T d. None of these	he smallest is one	e fourth of the largest.
3. The feasible region of a. (5,5) b. (6,4)	inequalities 4x + 5 c.(5,4)	y <u><</u> 40, 2x + y <u>></u> 10, d.(9,1)	x <u>≥</u> 0, y <u>≥</u> 0 includ	les the point
4. If the root of the equat a. m = 10 b.m = 11	ion $x^2 - 8x + m = 0$ c.m = 9) exceeds the othe d.n	er by 4 then the va n = 12	llue of m is
5. If the roots of the equa a 3 b1	ation 2x² + 8x - m³ = c. 1	0 are equal then v d2	alue of m is	
6. In a factory of product carpenter requires 3 hou and 3 hours respectively respectively. The profit o B are to be manufactured a. $x \ge 0$, $y \ge 1$, $5x + 3y \le 2$ c. $x \ge 0$, $y \ge 1$, $3x + 5y \le 3$	ing two products A urs each and in ma γ . The machine and on A and B is Rs. 6 d then the inequaliti 80, 3x + 2y \leq 50 80, 2x + 3y \leq 50	and B. In manufa inufacturing B, the d carpenter works and 8 respectively es are b. 3 d a	cturing of product e machine and ca at most 80 hours x. If x and y units $xx \ge 0, y \ge 0, 3x + 5x \ge 0, y \ge 1, 5x + 3$	A, the machine and the rpenter requires 5 hours and 50 hours per week of product A and product by ≤ 80 , $3x + 3y \leq 50$ by ≤ 80 , $3x + 2y \leq 50$
7. In a class test, 40 stumarks was 5.5. The averaa. 2.8	udents out of 50 parage marks of stude 3.0	nssed with mean m nt who failed were c.4	narks 6.0 and the : .8	overall average of class d.3.5
8. The distance between a. a b. 2a	the points (2a , 5a) a	and (2a, 4a) is : c.3	а	d.None of these
9. A firm produces two types of product A and B. The profit on both is 2 per item . Every product requires processing on machines for M1 and M2 for A, machines M1 and M2 takes 1 minute and 2 minutes respectively and that of B, machines takes M1 and M2 takes the time 1 minute and 1 minute. The machines M1 and M2 are not available more than 8 hours and 10 hours any of day respectively. If the products made x of A and y of B, then the linear constraints except $x \ge 0$, $y \ge 0$, are. a. $x + y \le 480$, $2x + y \le 600$ b. $x + y \le 8$, $2x + y \le 10$ c. $x + y \ge 4008$, $2x + y \ge 200$ d. None of these				
10. If p and q are the root a. 2b2 c. 4	ts of then x²+x+1=0 4	the values of p ³ +c d4	l ³ becomes	
11. The two Line 9x + 3y a. Parallel b.	= 11 and 5x - 2y + Perpendicular	7 = 0 are c. Oblique	d. None of the	ese
12. Points X and Y are 6 in the same direction the The speed of the bus with a. 50m/hr b. 5	60 km apart. X bus : y meet in 6 hours a h greater speed is : 20 km/hr	starts from X and a nd if they go in opp c. 30 km/hr	nother from Y at t posite directions, t d. 40 km/hr	he same time. If they go hey meet in 2 hours.

CA FOUNDATION MATHS

DD-77	By CA VINOD REDDY	WWW.SWAPNILPATNI.COM		
13. A man purchased 56 stampsWhat is the number of 50 paise ata. 38 and 18 respectivelyc. 27 and 29 respectively	of 50 paise and 1 rupee. The to nd 1 rupee stamps purchased. b. 46 and 10 respect d. None	otal amount he spent was Rs. 55.50. tively		
14. Suppose α , β are the roots of the equation $2x^2 - 5x + 7 = 0$, then the equation whose root 3β) and $(3\alpha + 2\beta)$ is : a. $2x^2 + 25x + 82 = 0$ b. $2x^2 - 25x - 82 = 0$ c. $2x^2 - 25x + 82 = 0$ d. $2x^2 + 25x - 82 = 0$				
15. A person divides his journey40,30,15 km/hr respectively. Finda. 30 km/hrb. 24 km/hr	3 equal parts and decides to tra the average speed of whole jou c. 35 km/hr	avel on 3 parts at the speeds of urney. d. None of these		
16. If Raja can walk a certain dis to walk twice as far if he walk twic a. 125 days b. 2	tance in days when he rest 9 hc e as fast and rest twice as long 5 days c. 50 days	ours each day,. How long will it take him each day? d. 100 days		
17. The sum of two numbers is 1a. 0.25b. 0.30	5 and their product is 50. sum c c. 0.20	of their reciprocals is d. 0.40		
18. If x³-25x²-50x+3000x=0 thena. 15,20,10b. 17,-19,5	the roots of the equation are c. 10,19,-7	d. None of these		
19. If $x = 2$ is solution of $x^2 + kx + a$. 2 b2	• 4 = 0, then value of K is c. 4	d4		
20. $X^4 + 9x^2 + 25$ can be factorize a. $(X^2 + x + 5) (X^2 - x + 5)$ c. $(X^2 + x + 5) (X^2 - x - 5)$	e as b. (X ² + x - 5 d. None of th	5) (X² - x - 5) lese		

DD-77

Qs.	Answer	Qs.	Answer
1	С	11	С
2	А	12	В
3	С	13	D
4	D	14	С
5	D	15	В
6	В	16	А
7	D	17	В
8	А	18	D
9	A	19	D
10	А	20	А

DD-78	Ву	CA VINOD REDDY	W	WW.SWAPNILPATNI.COM
1. If $\alpha \& \beta$ are the root a. $p^2 + 2q$	ots of the x²-px+q=0 b.p²-2q) then (α²+ β²) is, c. p(p² – 3q)	d. p ² - 4q	
2. If $\alpha \& \beta$ are the root a. 36	ots of the x ² -6x+6=0 b. 24) then value of $(\alpha^2 + \beta^2)$ c. 12	is, d. 6	
 A ball rolling up ar metres during the net a. 8 metres 	n incline covers 36 r xt and so on. How r b. 6 metres	netres during the first s nuch distance will it tra c.7 metres	econd, 32 metres vel during the 8 th s d. 9 metres	during the second, 28 second?
4. If √(x-7) +√(x-3)=2 a. 9	then what is the va b. 7	llue of x c. 19	d. 3	
5. What is the sum o a. 11/2	f the roots of the ec b11/2	quation 2x ² - 11x + 5 =0 c. 2/11)? d. 10	
 If one root of the e a = b 	equation ax ² - bx + c b. b = c	c = 0 is reciprocal of the c. a = c	e other, then d. a = - c	
7. If the sum of two r a. 2/5	umbers is 15 and th b. ¼	heir product is 60, what c. 1/5	t is the sum of thei d. 1/15	r reciprocals?
8. The roots of the eaa. 1,6	quation x (x + 1) = 6 b3,-2	o are c. 2,-3	d. 1,-6	
9. If the roots of the e a. q=3	equation px ² +qX+3= b. p=3	= 0 are reciprocals to ea c. p-q=0	ach other then, d. p+q=0	
10. The roots of the a. Real and equal	equation x ² + 6x - 5 b. Imagina	5 = 0 are ary c. Real and	lunequal	d. Rational and equal
11. If the sum of two numbers ?	positive numbers i	s 5 and the sum of thei	r squares is 17, wl	hat is the product of the
a. 22	D. 8	C. 4	a. 12	
12. If out of three nu first and third is 26, th(a) 18	mbers, the sum of t ne smallest number b. 14	first and second is 24, s is: c. 16	sum of second and d. 10	d third is 30 and sum
13. The difference b twice the age of your	etween the ages of nger. What are their	two men is 10 years.1	5 years ago, the ag	ge of the older was
a. 10,15	b. 35,40	c. 25,35	d. 15,25	
14. In a number of the number. The sum of a number?	nree digits, if the ext all the three digits is	treme digits are inter-cl s 17 and the difference	nanged, there is no of first two digits b	o difference in the be 4, what is the
a. 737	b. 535 c. 6	d. None of	these	
15. `630 were distril shares of B and C we	oution among A, B a ere as 4:5. What is t	and C, so that the share he shares of C?	es of A and B were	e as 2 : 3 and the
a. `270	b. `144	c. `216	d. None of the	se
16. The system of e a. 13/5 b13/	quations 2x + Ky = /5	11 and 5x - 7y = 5 has 14/5 d	no solution if the v 16/5	value of K is
CA VINOD REDDY	C/	A FOUNDATION MATHS	٧	VWW.SWAPNILPATNI.COM

By CA \	INOD REDDY	WWW.SWAPNILPATNI.COM
3x -4y = 2, then the va b. 6	lue of 2xy is	d. 10
airs and 1 table is `90 e is b `1050	0 and that of 5 chairs a (1100)	and 3 tables is 2100, then the cost of
numbers is 80. If three	times one number is e	equal to five times the other number,
expression $5x^2 + 6x + b$. 1	7 for x=1 is c. 18	d. 19
	By CA W 3x -4y = 2, then the value b. 6 hairs and 1 table is 90 b. 1050 humbers is 80. If three b. 50,30 expression $5x^2 + 6x + b$. 1	By CA VINOD REDDY $3x -4y = 2$, then the value of 2xy is $b. 6$ $c. 8$ tairs and 1 table is `900 and that of 5 chairs at a signal b. `1050 $c. `1100$ to the b. `1050 $c. `1100$ to the b. `50,30 $c. 10,70$ expression $5x^2 + 6x + 7$ for x=1 is $b. 1$ $c. 18$

Qs.	Answer	Qs.	Answer
1	В	11	С
2	В	12	D
3	А	13	С
4	В	14	А
5	А	15	А
6	С	16	С
7	В	17	А
8	С	18	В
9	В	19	В
10	С	20	С

DD-79 **By CA VINOD REDDY** WWW.SWAPNILPATNI.COM 1. Neeraj bought 14 chairs at `150 each, 15 chair at `140 each. The average price of a chair to the nearest rupee is equal to: c. 165 a. 149 b. 195 d. None of these 2. A man 1.4 m tall casts a shadow 1.2 m long at the time when a building, casts a shadow 5.4 m long. Calculate the height of the building : a. 6.3 m b. 3.21 m c 43m d 56m 3. An automobile driver travels to a hill station at an average speed of 30 km/hr. He makes return trip at an average speed of 20 km/hr. What is the average speed of the entire distance(200km) a. 30 b. 20 c. 25 d. 24 4. The cost of 7 kg sugar and 5 kg rice is 234, and the cost of 6 kg sugar and 7 kg of rice is 263. Find the cost of sugar and rice per kg. a. `17, `23.80 b. 17.50, 23.50 c. 18. 24 d. None of these 5. 600 were divided equally among a certain number of poor children. Had there been 5 less children, each would have got `4 more. Find the original number of children b. 30 a. 28 c. 32 d 24 6. The age of the person is twice the sum of ages of their two sons and five years ago his age was three times of sum of ages of his sons, his present age is a. 60 years b. 52 years c. 51 years d. 50 years 7. A man has only 20 paise coins and 25 paise coins in his purse. If he has 50 coins in all totaling 11.25, how many coins of each does he have a. 15,35 b. 25, 25 d. 30, 20 c. 40, 10 8. Find x if x/(x-2) = 3a. 6 b. 4 c. 3 d. 8 9. What is that number of which fifth part exceeds fifteenth part by 8? d. 65 a. 60 b. 50 c. 55 10. Calculate the value of k for which the equations 2x+3y=5 and 4x+ky=100 has infinite number of solutions. is d. 0 a. 2 b. 3 c. 6 11. One half of one ninth of three eighteenth of a number is 22.50, the number is a. 2420 b. 2430 d. None of these c. 2440 12. The equation of the line passing through (5,5) and (0,5) is a. 2x+3y-5 = 0b. 3x+8y+15 = 0c. x+y = 5 d. None of these 13. Seven person gambled sitting on a table. Four persons lost on an average 55, whereas the other three gained on an average 70.1s the information worth believing? d. None of these. a. Yes b. No c. Not certain 14. A number consists of two digits. The digits in the ten's place is 3 times the digit in the unit's place. If 54 is subtracted from the number the digits are reversed. The number is: b. 31 a. 62 c. 93 d. None of these 15. The number of even positive integers that can have three digits is equal to d. 450 c. 400 a. 550 b. 540 CA VINOD REDDY CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-79		By CA \	/INOD REDDY		WWW.SWAPNILPATNI.COM
16. A person in covering th a. 4.5 km / ł	covers 12 km a e whole distand nr	t 3 km/hr , 18 k æ b. 5 km / hr	rm at 9 km/hr ai c. 10 k	nd 24 km at 4 km/h m / hr d.	nr. Find the Average Speed
17. The differ What is the di a. 4	ence between a fference of 2 di b. 3	a 2 digit numbe gits of the num c. 6	r and the numb ber. d. None of the	er obtained by inte se	erchanging the digit is 54.
18. If the sum a. 13	of number and b. 14	its square is 1 c. 15	82,what is the r d. none of the	number? se	
19. A bag con bag is `430 ,f a. 200,280,3	itains one ruped ind the number 360 b. 280	e ,50 paise and of coins of eac ,300,360	l 25 paise coins ch kind c. 360,	in the ratio 10:14: 280,200	18.If the total amount in the d. None of these
20. Father is s the present ag 42,8	six times as old ges are b. 36,6	as his son .Fo c. 40,1	ur years hence 10	he will be four time d. None of these	es as old as his son. Then

DD-79

Qs.	Answer	Qs.	Answer
1	D	11	В
2	А	12	D
3	D	13	В
4	D	14	С
5	В	15	D
6	D	16	А
7	В	17	С
8	С	18	А
9	А	19	A
10	С	20	В

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

1. If $x^2 + 6x = -9$ then the root a3,-3	ots of the equation are b3,3	e c. 2,4	d. None of these	
 2. If one root of equation X²-7 a. 9 	7X+M=0, exceeds the b. 10	other by one then valu c. 12	e of M is equal to d. 18	
3. What is the slope of the lin a. 3/2	e passing through (5, b3/2	3) and (3,6) c. 2	d2	
4. What is the slope and y int a3/5,9/5	ersect of the line 3x+5 b. 9,-3/5	Бу=9 с. 3/5,-9	d3/5,-9	
5. If $x^3+3x^2-2x+6=0$ then root	s of the equation are			
a. 2,-2,-1	b1,2,-3	c. 1,3,-5	d, None	
6. Find a number from which a. 50	if you subtract 40, the b. 80 c. 60	e difference will be one∙ d. 46	-third of the original number?	
7. A man 50 years old has 8 sons is known to be 186 year a. 21 years	sons born at equal int rs. Calculate the age o b. 20 years	ervals. The sum of the of the eldest son, if the c. 31 years	ages of the father and the eight youngest one be 3 years old. d. 25 years	
8. If twice the son's age in ye is added to the son's age, the a. (40, 15)	ears is added to the fa e sum is 95. The ages b. (15, 30)	ather's age, the sum is of father and son in ye c. (25, 30)	70. But if twice the father's age ears are: d. None of these.	
9. A mother to said her daug out their present ages if the s a. 47 & 28	hter, "I am 8 times as sum of their age is 75 b. 42 & 33	s old as you were wher years. c. 48 & 27	n I was as old as you are." Find d. 46 & 26	
10. Present the following situ Table fans and Cooler. He h him `3600 and table fan `240	ation in terms of linea as only `57600 to inv 00.	r inequalities A dealer est and has space for	wishes to purchase a number of at most 20 items. A Cooler cost	
a. x+y <u><</u> 30 , 3600x + 2400y <u>;</u> c. x+y <u><</u> 30, 360x + 240y = 57	<u><</u> 57600 600	b. x+y <u><</u> 20 , 3600 x + d. None of these	2400y <u><</u> 57600	
11. The equation of a straigh a. $y - 3 = 0$	t line parallel to x-axis b. y + 3 = 0	and passing through t c. y – 4 = 0	he point (- 2, - 3) is: d. y + I = 0	
12. A diet for a sick person must contain at least 4000 units of vitamins, 50 units of minerals and 400 calories. Two foods F1 and P2 are available. One unit of food F1 contains 200 units of vitamins, 1 unit of mineral and 40 calories. Also one unit of food P2 contains 100 units 'of vitamins, 2 units of minerals and 40 calories. If x and y units of food F1 and F2 are taken, then the linear inequalities are a. $200x+100y,\leq4000,x+2y\leq50,40x+40y\leq400,x\geq0,y\geq0$ b. $200x+100y\leq4000,x+2y\geq50,40x+40y\leq400,x\geq0,y\geq0$ c. $200x+100y\leq4000,x+2y\geq50,40x+40y\leq400,x\geq0,y\geq0$ d. $200x+100y\leq4000,x+2y\leq50,40x+40y\leq400,x\geq0,y\geq0$				
13. If a and b roots of the equ a. $x^2 + \frac{1}{2}x + \frac{1}{2} = 0$ c. $\frac{1}{2}x^2 + \frac{1}{2}x + 1 = 0$	uation X ² + 2x+1 = 0, b. x ² + d. Nor	then the equation whose $x + \frac{1}{2} = 0$ ne of these	se roots are (1/a) and (1/b) is	

CA VINOD REDDY

CA FOUNDATION MATHS

DD-80	By CA \	/INOD REDDY		WWW.SWAPNILPATNI.COM		
14. If the sum of the r q is equal to a. $-\frac{2}{3}$	oots of the equation q b. ² 3	$x^2 + 2x + 3q =$ c. 3	0, is equal to th d 6	eir product, then the value of		
15. The equation of the line passing through $(5, -3)$ and perpendicular to the line $2x - 3y + 14 = 0$ is:a. $3x + 2y - 9 = 0$ b. $3x+2y+140 = 0$ c. $2x - 3y - 9 = 0$ d. $2x - 3y - 14 = 0$.						
16. If x = m is one of the solutions of the equation $2x^2 - 5x - 3 = 0$ the possible values of m are a. (0 2) b. (0 - 2) c. (0 1) d. (3, -1/2) .						
17. Slope of the line a. 1	passing through the po b. 0	oints (1,1) and (c. Not defined	1,0) is d. Can'i	t say		
18. Factors of quadra a3 and 2	atic equation x ² -x-6 = 0 b2 and 3) are c. (x+2) (x-3)	d. (x-2)	(x+3)		
19. The sum of two n a. 50,30	umbers, one of which b. 20,30	is 2/3 times of c c. 15,35	other, is 50.Find d. 10,40	l two numbers)		
20. Divide 300 in two a. 168,132	20. Divide 300 in two parts so that half of one part be less than the other by 48a. 168,132b. 150,150c. 140,160d. 172,128					

Qs.	Answer	Qs.	Answer
1	А	11	В
2	С	12	В
3	В	13	D
4	А	14	А
5	D	15	А
6	С	16	D
7	С	17	С
8	А	18	С
9	С	19	В
10	В	20	A

By CA VINOD REDDY

1. 1 a. X	The line x=25 will -axis	be parallel to b. Y-axis	c. Both	d. Non	e of the	se
2. a. 4	The slope of the 4/114	line 2x - 57y = 114 is b2/57	c. 2/114		d. Non	e of these
3. a. 1	Point (2,-1/2) lie st quadrant	in b. 3 rd quadrant	c. 4 th quadra	nt	d. 2 nd q	juadrant
4. a. ((The lines x+y = (),0) b. Son), x-y = 0 will intersect newhere on X-axis	at c. Somewhe	re on Y-a	ixis	d. Can't say
5. a. P	Slope of a line is arallel to X-axis	zero. That line is b. Perpendicular to Y-	-axis c. Bo	th (A) an	d (B)	d. None of these
6. a. 8	The equation of x+9y = 1	the line passing throug b. 9x+8y =72	h (0,8),(9,0) is c. 8x+9y =72	5	d. Non	e of these
7. a.	The equation of 8x+16y = 1	the line passing throug b. 16x+8y = 1	h (8,0),(16,0) 28	is c.y=	0	d. None of these
8. a.	a ³ +b ³ = (a ² +ab+b ²) (a+b)) b. (a²+ab+b²) (a-b)	c. (a²	-ab+b²) (a+b)	d. None of these
9. a.	Find the slope of 1234 / 78	f perpendicular line of 2 b. 78 / 2	2x+78y=1234 c78 / 2		d. Non	e of these
10. а.	Find the slope of 1234 / 78	f parallel line of 2x+78y b. 2 / 78	/=1234 c78 / 2		d. Non	e of these
11. а.	Find two consec 46,48	utive positive even inte b. 49,45	egers whose s c. 54,40	um is 94	d. Non	e of these
 12. A number consist of two digits of which ten's digit exceeds the unit digit by 6. The number itself is equal to 10 times the sum of digits. The number is: a. 60 b. 93 c. 71 d. None of these 						
13. Y	For the following	shaded area the linea $X=4$	r constraints			
Y=25						
a. $x + y \le 2$, $3x + 5y \le 15$, $x \le 4$, $y \le 25$ b. $x + y \ge 2$, $3x + 5y \le 15$, $x \le 4$, $y \le 25$, $x \ge 0$, $y \ge 0$ c. $x + y \ge 2$, $3x + 5y \le 15$, $x \le 4$, $y \le 25$, $x = 0$, $y = 0$ d. $x + y \le 2$, $3x + 5y \ge 15$, $x \le 4$, $y \le 25$						
u. x	+ y <u>></u> ∠, 3x + 3y <u>></u>	<u><</u> 13, x <u>></u> 4, y <u>></u> 23				

Qs.	Answer	Qs.	Answer
1	В	11	A
2	A	12	A
3	C	13	В
4	A		
5	C		
6	C		
7	С		
8	С		
9	В		
10	D		

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

1. First, Second and last term of a finite A.P are m, n and 2m respectively, then the sum of the series is a. 3mn / 2(n-m) b. 3mn / (n-m) c. 3mn /2(n+m) d. None of these 2. The first and fifth term of an A.P of 40 terms are -29 & -15 respectively. Find the sum of all positive terms of this A.P a. 1605 b. 1705 c. 1805 d. None of these 3. If mth term of A.P is 1/n and nth term is 1/m, then the sum of mn term is a. mn + 1 b. ½ (mn-1) c. $\frac{1}{2}$ (mn+1) d. None of these 4. 10th term of AP is 12 and 12th term is 10.Find 22nd term of that AP a. 22 b. 12 c. Zero d. None of these 5. If one Arithmetic Mean A and G.M.s G_1 , G_2 be inserted between any two numbers, then $G^3 + G^3$ is equal to a. 2G₁G₂ b. $2AG_1G_2$ **c.** 2AG₁ d. None of these 6. If (P+1)th term of A.P. is twice the (Q+1)th term; then the ratio of (P+Q+1)th term and (3P+1)th term is : a. 1:2 c. 1:3 d. None of these b. 2:1 7. If m times of the mth term of A.P. is equal to n times of the nth term, then its (m+n)th term is : c. 0 d. None of these. а. 1 b. -1 8. If a, b, c are in G.P., a, x, b and b, y, c are both in A.P., then a/x + c/y is equal to : a. 1 b. 0 c. 2 d. None of these. 9. The Arithmetic Mean between two numbers is 15 and their G.M is 9: then the numbers are d. None of these a. 27,3 b. 9.9 c. 16,9 10. The product of n G.M.s between the two given numbers is equal to the n power of the single G.M. between them. This statement is a. True b. False d. None of these c. Can't sav 11. In AP terms of sequence are increased or decreased by fixed number a. True b. Partly true c. False d. None 12. Three numbers a,b,c, are in AP if and only if b-a=c-b i.e. if and only if a+c=2b b. Partly true c. False a. True d. None 13. In a GP any term may be obtained by multiplying the preceding term by common ratio of GP a. True b. Partly true c. False d. none 14. If 'a' is the first term and 'r' the common ratio of finite GP consisting of m terms then nth term from the end is given by a.r^{m-n} b. Partly true c. False a. True d. None 15. Three numbers a,b,c are in GP if and only if b/a=c/b i.e. and if b²=ac a. Partly True c. False b. True d. None 16. Determine 25th term of AP whose 9th term is -6 and common difference is 5/4 a. 16 b. 18 c. 12 d 14 17. Which term of AP 5,13,21..... is 181 c. 23rd a. 21st b. 22nd d. 24th CA VINOD REDDY CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-82		By CA VINOD REDDY		WWW.SWAPNILPATNI.COM
18. Determine k so t	hat K+2, 4k-6 a	nd 3k-2 are three c	onsecutive terms of a	n AP
a. 5	b. 7	c. 9	d. 3	
19. The ratio of the 7	7 th to 3 rd term of	AP is 12:5. Find th	e ratio of 13 th to 4 th ter	m
a. 8:5	b. 9:4	С.	7:3	d. 10:3
20. If 7 times 7th terr	n of an AP is eq	ual to 11 times its	11 th term then 18 th term	n of AP is
a. 1	b. 2	c. 0 d.	3	

DD-82

Qs.	Answer	Qs.	Answer
1	А	11	А
2	В	12	А
3	С	13	А
4	С	14	А
5	В	15	В
6	А	16	D
7	С	17	С
8	С	18	D
9	А	19	D
10	А	20	C

WWW.SWAPNILPATNI.COM

1. The 4th term of an AP is equal to 3 times the first term and 7th term exceeds twice the third term by 1. Find the first term a. 3 c. 7 d. 9 b. 5 2. If third and the 13th terms of A.P. are -40 and 0 then 20th term is b. 20 a. 25 c. 28 d. 23 3. Determine the sum of first 35 terms of AP if $t_2 = 2$ and $t_7 = 22$ a. 2510 b. 2310 c. 2710 d. 2910 4. If the 5th and 12th term of an AP are 30 and 65 respectively. Find S₂₀ a. 1175 b. 1250 c. 1150 d. 1350 5. If The sum of n terms of an A.P. is $3n^2$ - n. The 10th term of A.P. is b. 54 a. 50 c. 56 d 6 6. The sum of a series in AP is 525. Its 1st term is 3 and last term is 39. Find the common difference b. 3/3 c. 2/3 d. 1/3 a. 3/2 7. Find common difference of an AP whose first term is 100 and sum of whose first 6 terms is five times the sum of next 6 terms c. -20 a. -10 b. -15 d. -5 8. Sum of the series 51+50+49.....+21 is d. 1124 a 1116 b. 1112 c. 1128 9. The nth term of the series 3, 3, 1,.....is 1/243 then n is a 12 b 13 c 14 d.15 10. The sum of a certain number of terms of an AP series - 8, - 6, - 4.... is 52. The number of terms is d. None of these a. 12 b. 13 c. 11 11. The first three terms of sequence when S_n is $n^2 - 2n$ are a. -1.0.3 b. 1. 0. 2 d. None of these c. -1. 0. -3 12. The last term of the A.P. 0.6, 1.2, 1.8, To 13 terms is c. 7.8 d. None of these a. 7.7 b. 8.7 13. If the sum of first 20 terms is equal to the sum of first 15 terms of an AP., then the sum of first 35 terms is equal to: . b. 70 c. 15 a. -35 d. None of these 14. The sides of a right-angled triangle are in A.P. The ratio of sides is : a. 3:5:8 b. 2 : 3 : 4 d. 5:8:3 c. 3 : 4 : 5 15. Which term of the G.P. 5, 10, 20, 40, is 1280? a. 11th b. 9th c. 8th d. 12th 16. If a, G, b are in G.P., then: c. G = ½ ab b. $G^2 = ab$ a. 2G = ab d. G = $\frac{1}{2}(a + b)$ 17. In a G.P., the sum of first n terms is 4095, common ratio is 2 and the last term is 2048. Find n. a. 10 d. 15 b. 11 c. 12 CA VINOD REDDY CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

18. The last teri	m of the series 1,2, 4	, to 10 terms is	
a. 512	b. 256	c. 1024	d. None of these
19. Find the sur	n of all odd numbers	of four digits which are	divisible by 9

a. 25,56,000 b. 45,54,000 c. 27,54,000 d. None of these

 20. The 6th term from end of G.P. 8,4,2,1,....,1/1024 is

 a. 1/64
 b. 32
 c. 1/32
 d. None of these
DD-83

Qs.	Answer	Qs.	Answer
1	А	11	D
2	С	12	С
3	В	13	D
4	С	14	С
5	С	15	В
6	А	16	В
7	А	17	С
8	А	18	А
9	В	19	С
10	В	20	С

1. If 1.ab.9 are in GP then the value of ab is a. 3 b. -3 c. A or B d. None of these 2. If sum of p terms of AP is the same as sum of q terms. What is sum of (p+q) terms of AP? a. Can't find b. (p+q)/2 c. 1 d. 0 3. There are 60 terms in A.P. of which first term is 8 and the last term 185 then 31st term is d. None of these a. 95 b. 98 c. 93 4. Then nth term of G.P. $\begin{array}{c} -5, 5, -5 \\ 2, 4, 8 \end{array}$ is $\begin{array}{c} 5 \\ 1024 \end{array}$ then the value of n is a. 11 b. 10 d. 4 c. 9 5. mth term of AP is n and nth term is m then rth term is a. m+n+r b. n+m-2r c. (m+n+r)/2d. m+n-r 6. 10+9 2/3 + 9 1/3 + 9 + ----- till n terms = 155. Find n. a. 30 b. 31 c. Both d. None 7. 4 arithmetic means between -2 and 23 are a. 3,13,8,18 b. 18.3.8.13 c. 3.8.13.18 d. None 8. Sum of series 3 ½ + 7 + 10 ½ + 14 +-----17 terms is a. 530 b. 535 c. 535.50 d. None 9. t₁₂ of series -128, 64, -32 is a. -1/16 b. 16 c. 1/16 d. None 10. Sum of first 20 terms of GP is 244 times of sum of first 10 terms. The common ratio is a. ±√3 c. 2√3 b. ±3 d. None 11.8,4,2,1 ----- S∞ = ? c. 16 a. 8 b. 24 d. None 12. Sum of infinite terms of GP 1, 2/3, 4/9 is a. 1/3 b. 3 c. 2/3 d. None 13. $t_4 = x$, $t_{10} = y$, $t_{16} = z$, then a. x²=yz b. z²=xy c. $y^2 = zx$ d. None 14. Sum of all natural numbers between 500 and 1000 which are divisible by 13 is a. 28,405 b. 24,805 c. 28,540 d. None. 15. If unity is added to sum of any number of terms of the 3, 5, 7, 9 then resulting sum is a. Perfect square b. Perfect cube c. Odd number d. None 16. If AM, GM of 2 numbers is 10, 5 respectively, then HM is a. 2.50 b. 25 c. 50 d. None 17. 4 Geometric means between 4 and 972 are a. 12, 36, 108, 324 b. 12, 24, 108, 320 c. 10, 36, 108, 320 d. None 18. The next term of the sequence 2, 6, 12, 20.... is a. 30 b. 24 d.28 c. 40

CA FOUNDATION MATHS

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

WWW.SWAPNILPATNI.COM

DD-84

CA VINOD REDDY

DD-	-84
-----	-----

 19. Three numbers in G.P. whose sum is 35 and product is 1000 are

 a. 5,10,20
 b. 10,15,20
 c. 5,8,25
 d. 10,20,30

20. The sum of the series $0.4 + 0.004 + 0.00004 + \dots \infty$ is

a. 0.00000004 b. 0.96 c. ∞

d. None of these

DD-84

Qs.	Answer	Qs.	Answer
1	С	11	С
2	D	12	В
3	В	13	С
4	В	14	А
5	D	15	А
6	С	16	А
7	С	17	А
8	С	18	А
9	С	19	A
10	А	20	D

DD-85	By	Y CA VINOD REDDY	WWW.SWAPNILPATNI.COM
1. The sum of the se a. 852	eries 72+70+68+ b. 952	+40 is c. 720	d. 360
2. The sum of n term a. 25	ns of an A.P. is 3n² b. 20	+ 5n. Find the number of t c. 15	the term which is equal to 152 d. 30
3. Three integers in a a. 2, 5, 8	A.P. whose sum is b. 3, 6, 9	a 15 and product is 80 are c. 2, 4, 10	d. 10, 2, 4
4. The sum of 10 ter	ms of the series	2 + 6 + 18 + is	
a. 121 (6 + 2)	b. 243 (3+1)	c. (121)/(√3-1)	d. 242 $\left(\sqrt{3} - 1\right)$
5. Which term of the a. 21 st	progression -1, -3 b. 20 th	3,-5 is -39 c. 19 th	d. None of these
6. The three geomet a. 1,16,64	ric means betweer b. 8,16,64	n 1 and 256 are c. 4,16,64	d. 1,4,16
7. Find 1+2+3+4+5· a. 5000	+ +105 b. 5560	c. 5565	d. None of these
8. If the 9^{th} term of A a. 0	AP is 99 and 99 th to b. 2	erm is 9 find 108 th term c. 4	d. 6
9. If 12 th term of AP a. 0	is -13 and sum of t b. 2	first 4 terms is 24 what is th c. 1 d. 4	ne sum of first 10 terms
10. The sum of n ter a. 5n+2	ms of an AP is 3n b. 6n+1	² +4n then find nth term c. 8n+3	d. 7n+3
11. How many term a. 33	s of AP 1,4,7 a b. 22	re needed to give the sum c. 24	n 715? d. 27
12. The first and last	term of AP are -4	and 146 and sum of AP is	7171.Find the number of terms in AP
and common differer a. 101, 3/2	b. 101, 2	c. 100, 3/2	d. None of these
13. Sum of three nur third the new numbe	nbers in G.P. be 1 rs are in A.P. The	4. If one is added to first ar smallest of them is	nd second and 1 is subtracted from the
a. 2	b. 4	c. 6	d. 8
14. The sum of squa a. 2,570	res of first twenty r b. 2,670	natural numbers is equal to c. 2,770	d. 2,870.
15. Which term of the a. 18 th	e A.P. 64, 60,56, 5 b. 17 th	2,is zero? c. 14 th	d. 15 th
16. The n th term of an a. 26	n A.P. is (3n + 5).∣ b. (3n – 2)	lts 7 th term is c. 3n + 12	d. 3n + 2.
17. The sum of all 2 a a. 4,955	digit numbers is b. 4,890	c. 3,776	d. None of these
CA VINOD REDDY		CA FOUNDATION MATHS	WWW.SWAPNILPATNI.COM

DD-85	By CA V	/INOD REDDY	WWW.SWAPNILPATNI.COM
18. How many terms	of the A.P. 3, 6, 9, 12,	15,must be ta	ken to make the sum 108?
a. 9	b. 7	c. 8	d. 36
19. The sum of first 6	0 natural even number	rs is	d. None of these
a. 1,830	b. 1,640	c. 3,666	
20. What is the sum or remainder 7	of all those terms betwo	een 100 and 800 each	of which on division by 16 leaves a
a. 19,768	b. 20,658	c. 19,568	d. 19,668

WWW.SWAPNILPATNI.COM

Qs.	Answer	Qs.	Answer
1	В	11	В
2	А	12	А
3	A	13	А
4	A	14	D
5	В	15	В
6	С	16	А
7	С	17	D
8	А	18	С
9	A	19	D
10	В	20	D

DD-86

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

1. If 1, y, 9 are in A.P., the value of y is d. None of these a. 3 b. -3 c. ±3 2. The A.M. of two numbers is 34 and their G.M. is 16. The numbers are a. 60.8 b. 64.4 c. 56,12 d. 52,16. 3. The 6th and 8th terms of an A.P. are 12 and 22 respectively. Its 2nd term is a. 9 b. -8 c. 6 d. -3. The 3rd and 5th terms of a G.P. are 12 and 48. Its second term is 4. a. 6 b. 4 c. 8 d. 2 5. The sum of p terms of an A.P. is $3p^2 + 4p$. Find the nth term b. 6n + 1 c. 8n + 3 a. 5n + 2 d. 7n + 3. 6. Find the sum of the first hundred even natural numbers divisible by 7 b. 50.560 c. 50.700 a. 50.576 d. None of these 7. Find the sum of the numbers of three digits divisible by 7 a. 17.966 b. 11,77,996 c. 70,336 d. 70.696 8. Find the 10th term of the geometric series 5 + 25 + 125 + -----a. 5¹⁰ b. 5⁹ c. 5¹¹ d. 5⁸ 9. Write down the 20th term of the G.P.1, -1, 1, -1,----a. 1 b. ±1 c. +1 d. None of these. 10. In a G.P., the first term is 7, the last term 448 and the sum 889. Find the common ratio. a. 4 b 6 c. 8 d 2 11. If the first term of G.P. is 729 and 7^{th} term is 64, determine S_7 a. 2.259 b. 3.059 c. 2.059 d. 2.459. 12. (1+2+3+4+.....+3983) / 1992 = ? c.1990 a. 1988 b. 1992 d. None of these 13. The value of $15^2 + 16^2 + 17^2 + \dots + 70^2$ is b. 1,15,780 c. 1,18,750 a. 1,17,580 d. None of these 14. The number of natural numbers divisible by 5 between 1 to 1,000 is c. 198 a. 1.197 b. 199 d. 200. 15. The sum of all odd numbers between 1 to 1,000 which are divisible by 3 is d. None of these. a. 83,667 b. 56,128 c. 90,000 16. If a. b. c are in A.P. as well as in G.P., then c. a ≠ b = c a. $a = b \neq c$ b.a≠b≠c $d_a = b = c$ 17. If 11 times of 11th term of an A.P. is equal to 14 times of 14th term, Then 25th term of an AP is a. 1 b. 0 c. 22 d. 36 18. If a, b, c are in G.P. then log a, log b, log c are in a. A.P b. G.P. c. All of these d. None of these CA VINOD REDDY CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-86	By CA	VINOD REDDY	WWW.SWAPNILPATNI.COM
19. If a,b,c,d,e,f are in a. 2(c-a)	n A.P. then e-c is equa b. 2(f-d)	al to c. 2(d-c)	d. d-c
20. The sum of the fin A.P.57,59,61 then n e a. 10	rst 2n terms of the A.F equals b. 12 c. 11	P. 2,5,8 is equal to th d. 13	e sum of the first n terms of

DD-86

Qs.	Answer	Qs.	Answer
1	D	11	С
2	В	12	D
3	В	13	В
4	А	14	В
5	В	15	А
6	D	16	D
7	С	17	В
8	А	18	А
9	D	19	С
10	D	20	С

DD-87	Ву С	A VINOD REDDY	WWW.SWAPNILPATNI.COM
1. The value of x suc	h that 8x+4, 6x-2, 2x	+7 will form an A.P. is	
a. 15 b. 2	c. ½	d. None of these	
2. The 6th and 17th t	erm of AP are 19 and	d 41 respectively find 40	th term
a. 63 b. 36	c. 87	d. 97	
3. The sum of n terr	ns of an AP is 3n ² +5	n then ,AP is	d. None of these
a. 8,14,20,26	b. 8,22,42,68	c. 22,68,114	
4. The number of nur	nbers between 7 and	d 25556 divisible by 5 is	ne of these
a. 5090 b. 509	7 c. 50	095	
5. Find 8th term of t	the series 4,-8,16,-3	2	d. 521
a512	b. 512	c521	
6. Find the sum of	the series 2+1+1/2	+1/4+1/8+	
a. 17/8 b. 9/2	c. 7/2	d. 4	
7. The sum of 4 num	bers in GP is 60 and	AM of first and last is 18	3, the numbers are
a. 4,8,16,32	b. 4,16,8,32	c. 16,8,4,20	d. None of these
8. If common differen	ice of an AP equals t	o the first term then the c. m ^{2 :} n ²	ratio of m th term to n th term is :
a. n:m	b. m : n		d. None of these
9. If $a^{x} = b^{y} = c^{z}$ and x	,y,z are in G.P then	oga,logb,logc are in	d. None of these
a. A.P.	b. G.P.	c. A.P. and G.P.both	
10. Which term of se	eries 0.004+0.02+0.1	0 is 12.50?	
a. 5 b. 10	c. 6	d. Non of these	
11. The 6 terms betv a. (35,65,95,125,15 c. (30,65,90,130,165	ween 5 and 215 are 5,185) ,190)	b. (50,99,132,166,19 d. (33,66,99,132,165	2,201) ,199)
12. The 4 terms of A	P between 5 and 22	25 are	
a. (49,93,137,181)	b. (5	4,99,132,188)	
c. (54,88,143,186)	d. (4	3,92,132,190)	
13. 4X+5, 5X+7, 8X-	1 will be in AP if X i	s	
a. 5 b. 6	c. 7	d. 4	
14. The sum of 3 nur	nbers is 24 and their	products is 304 (numbe	ers are in AP), the numbers are
a. (4,8,12)	b. (5,8,11)	c. (5,9,10)	d. None of these
15. If the 2 nd term of a. (6,36)	a GM series is 16, 1 b. (2,32)	he first and third terms c. (4,64)	are d. None of these
16. If 4,X,36 are thre	e terms of a Geome	tric series then X is equa	al to
a. 13	b. 12	c. 15	d. 16
17. Three numbers a G.P. equals	are in G.P. If we dou	ble the middle term, we	get an A.P. Then common ratio of the
a. ^{2± 3}	b. ^{3± 2}	c. 3± ⁵	d. ^{5± 3}
CA VINOD REDDY	CA	FOUNDATION MATHS	WWW.SWAPNILPATNI.COM

18. The first	term of an A.P. is 1, th	ne common difference	is 3 and the last term is 67, find the number of
a. 25	b. 28	c. 23	d. 21
19. The nex	t term of the series $\frac{3}{2}$ +	$5 + 9 + 17 + \dots$ is 4 8 16	
a. 22/32	b. 29/32	c. 37/32	d. 33/32
20. What is a. 2	the common ration of G b. 3	а.Р 3,-6,12,-24,48 c2	d3

DD-87

Qs.	Answer	Qs.	Answer
1	D	11	А
2	С	12	А
3	А	13	А
4	D	14	D
5	А	15	С
6	D	16	В
7	А	17	А
8	В	18	С
9	В	19	D
10	С	20	C

DD-88	By CA VINOD REDDY			WWW.SWAPNILPATNI.COM	
1. In ⁿ P _r , n is always a. An interger	b. A positive integer	c. A fra	ction	d. None of these	
2. If P (m + n,2) = 56 a. m=6 & n=2	and P (m - n, 2) = 12, b. m=5 & n=3	then the value c. m=2 & n=6	of m and n are d. m=3	: & n=5	
3. The number of arra	angements of 10 differ	ent things taker	4 at a time in v	which one particular thing	
always occurs is - a. 2015	b. 2016	c. 2014	d. Non	e	
4. Number of arrange a. 10 b. 24	ements using all letters c. 48 d. 120	of the word LA	UGH, if vowels	are adjacent is :	
5. In how many ways	can 10 books be arra	nged on a shelf	so that a partic	ular pair of books shall be	
always together? a. 9!	b. 2 x 9!	c. 8!	d. None		
6. The sum of all the a. 6660000	numbers formed by ta b. 93325	king all the digi c. 93324	ts from 2, 3, 4, d. 1036	5 is 88000	
7. In how many ways	can the letters of the	word 'MACHINE	' be arranged	so that vowels may occupy	
only odd positions? a. 4 x 7!	b. 576	c. 288		d. None	
8. If all the permutation word will be :	ons of the letters of the	word "CHALK"	are written in a	a dictionary, the rank of this	
a. 30 b. 31	c. 32		d. None		
9. The number of arra a. 907200	angement of the letters b. 226800	s in the word "C. c. 498960	ALCULATOR" d. 4536	is 600	
10. How many words a. 60 b. 120	can be formed using t c. 90	he letter A thrice	e, the letter B tv d. 6	wice and the letter C once?	
11. In how many way	s can the letters of the	word "COLLEG	E" be arranged	d such that the 2 L's come	
a. 400	b. 440	c. 360	d. Non	e	
12. Total no. of ways	in which six "+" and fo	ur "-" signs can	be arranged in	a row so that no two "-" signs	
a. 35 b. 70	c. 6! X	4!	d. 24		
13. If different permut	ations of the word EXA	AMINATION are	listed as in a c	lictionary, how many items are	
a. 906200	b. 907200	c. 908200	d. 9052	200	
14. A letter lock consi unsuccessful attempt a. 124 b. 125	ists of three rings each is to open the lock is : c. 120	marked with 5 d. 75	different letters	. No. of maximum	
15. The number of 5 l end with a vowel, who a. 125 b. 625	letter words that can be en repetitions are allov c. 500	e formed using t ved, is : d. 1350	he letters of th	e word DELHI which begin &	
CA VINOD REDDY	CA FC	OUNDATION MAT	ΉS	WWW.SWAPNILPATNI.COM	

DD-88

By CA VINOD REDDY

16. No. of ways 15 persons be seated round a table if there are 7 seats, is : a. ${}^{15}P_7$ b. ${}^{15}C_7/7$ c. ${}^{15}P_7/7$ d. 14!

 17. If "Pr = 720 "Cr then r=?

 a. 6
 b. 5
 c. 4
 d. 7

18. The number of straight lines can be formed from 10 points out of which 7 are collineara. 26b. 21c. 25d. None of these

19. How many words of 4 consonants and 3 vowels can be made from 12 consonants & 4 vowels, if allletters are different?a. 2,51,820b. 2,58,120c. 2,81,520d. 44,35,200

20. There are 6 candidates for 3 posts, in how many ways the posts can be filled? a. 120 b. 130 c. 240 d. None of these

DD-88

Qs.	Answer	Qs.	Answer
1	В	11	С
2	А	12	А
3	В	13	В
4	С	14	А
5	В	15	С
6	С	16	С
7	В	17	А
8	С	18	С
9	D	19	D
10	А	20	A

DD-89			By CA '	VINOD REDDY		v	VWW.SWAPNILPATNI.COM
1. There are 1 Pune and retu a. 280	5 buses runn rn by a differ b. 310	ing betwe ent bus? c. 240	en Lat	ur and Pune. Ir d. 210	1 How m	any ways car	n a man go from Latur to
2. A code wor and 9. For exa a. 6,15,800	d is to consis Imple 'CA 49 b. 46	t of two di is code w 5,800	stinct E vord' He	English alphabe ow many such c. 7,19,500	ets follow code wo	wed by two dis ords can be th d. 4,10,800	stinct numbers between 1 ere?
3. There are 6 possible, if the a. 6,000	multiple cho first three qu b. 5,0	ice questi uestions h 000	ons in a ave 4 d	an examination choices and ne c. 4,000	. How n xt three	nany sequenc have 5 choice d. 8,000	es of answer are es?
4. How many a. 52	odd numbers b. 32	less than	1000 c. 22	can be formed	using th d. 42	e digits 0,2,5,	7? (repetition is allowed)
5. It is required many such arr a. 2,880	d to seat 5 m angements a b. 2,4	en and 4 are possib 480	women le?	in a row such c. 3,680	that woi	men occupy tł d. 3,280	ne even places. How
6. Four books many ways it o a. 12	, one each in can be done? b. 36	Chemistr	y, Phys c. 24	sics, Biology, N	laths are d. 48	e to be arrang	ed on a shelf. In how
7. In how man balls a. ⁸ C _e x ¹⁰ C	y ways can 5	b. ¹⁰ C	4 white	balls be drawn	from a	bag containin	g 10 red and 8 white d. None of these
8. If 12 ⁿ C ₂ = a. 7	² ⁿ C ₃ : Find n b. 5		, • • c. 9		d. 3		
9. How many line. a. 120	straight lines b. 24	can be ol	btainec	l by joining 16 p c. 119	points o	n a plane, no t d. 480	three points on the same
10. ¹⁰ P _r = 2. ⁹ a. 2	P _r is equal to b. 4			c. 5		d. 6	
11. How many together? a. 900	ways the let b. 1,200	ters of the	e word c. 800	BALLOON' be	arrange d. 600	ed so that two	L's do not come
12. In how ma players are to a. 715	ny ways a cri be included a b. 615	cket team and one p	of 11 articula c. 915	players to be se ar player is to b	elected e rejecte d. 515	out of 16 playe ed	ers if two particular
13. How mar a. 7!	ny numbers g b. 8!	preater that	an a mi c. 9!	llion can be for	med wit d. Non	h the digits 1,2 e of these	2,3,4,5,6,7
14. There are ways this can a. 12	three differer be done? b. 36	nt rings to	be wor c. 24	n in four fingers	s with at d. 48	t most one in e	each finger. In how many
15. (n+2)! = 25 a. 38	550 (n)! Find b. 35	n	c. 49		d. 36		
CA VINOD REDE	Y		CA FC	DUNDATION MA	THS		WWW.SWAPNILPATNI.COM

DD-89		By CA VINOD REDDY		WWW.SWAPNILPATNI.COM			
16. The number of all possible selections which a student can make for answering one or more questions out of eight given questions in a paper, when each question has an alternative is							
a. ${}^{8}C_{1} + {}^{8}C_{2} + -$	+ ⁸ C ₈	b. 2 x 2 ⁸	c. 3 ⁸	d. 3 ⁸ - 1			
17. How many 3 digit numbers each less than 600 can be formed from the digits 1,2,3,4,5,9, If repetition is allowed							
a. 180	b. 165	c. 160	d. 185				
18. The value o	of ¹⁵ C ₁₁ / ¹⁵ C ₁₀ is equ	al to					
(a) ¹³ 11	(b) $\frac{13}{10}$	(c) ¹³ 11	(d) None	of these			
19. How many even numbers greater then 300 can be formed with the digits 1,2,3,4,5, no repetition being allowed 2							
a. 112 b.	111	c. 113	d. 121				
20. A man has 5 friends. In how many ways can he invite one or more of his Friends to the dinner? a. 2^5 b. 31 c. 5C_2 d. 30							

DD-89

Qs.	Answer	Qs.	Answer
1	D	11	А
2	В	12	А
3	D	13	А
4	В	14	С
5	А	15	С
6	С	16	D
7	В	17	А
8	В	18	D
9	А	19	В
10	С	20	В

1. There are 15 persons in a party and each person shakes hand with another. Then the total number of handshakes is a. ¹⁵P₂ b.¹⁵C₂ c.15! d. 2(15!) 2. $43C_{r-6} = 43C_{3r+1}$ Then the value of r is b. 8 d. 10 a. 12 c. 6 3. In how many ways can 4 boys and 3 girls be arranged in a row so that boys and girls are placed alternatively? a. 3! X 2! b. 6! d. 3! X 4! c. 7! 4. If m! = n! then a. m=1 and n=1 b. m=1 and n=0 c. m=0 and n=1 d. All of these 5. If ${}^{n}C_{x} = {}^{n}C_{y}$ then b. x+y = n c. Both A or B a. x-y =0 d. None of these 6. The number of arrangements of letters of the word 'EQUATION' which begin & end with a consonant are a. 2.340 b. 4.320 c. 4.032 d. 2.034 7. If ${}^{n}P_{4} = 12 \times {}^{n}P_{2}$ then n = ? c. 5 d. None a. -1 b. 6 8. The value of Σ rx^rP_ris a. 719 b. 720 c. 5! d None 9. 5 persons sitting in a round table in such a way that tallest is always on right side of shortest. The no. of such arrangement is a. 6 b. 8 c. 24 d. None 10. No. of ways in which 9 mangoes can be equally divided among 3 students is a. 1680 c. 362880 b. 1860 d. None 11. A committee of 3 ladies and 4 gents to be formed out of 8 ladies and 7 gent. Mrs. X refuses to serve in a committee if Mr. Y is a member. Number of such committees is a. 1530 b. 1500 c. 1520 d. 1540 12. ${}^{500}C_{92} = {}^{499}C_{92} + {}^{n}C_{91}$ then n = ? b. 500 c. 502 d. 499 a. 501 13. ${}^{n}C_{0} + {}^{n}C_{1} + {}^{n}C_{2} + \dots + {}^{n}C_{n} = ?$ b. 2ⁿ-1 c. 2ⁿ-2 d. None a 2ⁿ 14. Number of ways in which 9 things can be divided in 3 groups containing 2, 3, 4 things respectively is b. 1260 a. 1250 c. 1200 d. None 15. Number of ways in which 8 different beads can be strung on a necklace is. a. 2500 b. 2520 c. 2250 d. None 16. ${}^{51}C_{31} = ?$

By CA VINOD REDDY

a. ${}^{51}C_{20}$ b. $2 \times {}^{50}C_{20}$ c. ${}^{51}P_{31}$ d. None 17. $4 \times {}^{n}P_{3} = 5 \times {}^{n-1}P_{3}$ then n = ? a. 12 b. 13 c. 14 d. None

CA VINOD REDDY

DD-90

CA FOUNDATION MATHS

WWW.SWAPNILPATNI.COM

WWW.SWAPNILPATNI.COM

DD-90		By CA VINOD RED	DDY	WWW.SWAPNILPATNI.COM
18. There are printed to ena a. 2500	50 stations on a railwa ble a passenger to tra b. 2450	ay line. How many vel from one stati c. 2400	y different kinds of single on to another? d. None	e first class tickets be
19.	-₃ = 60 then n = ? c. 5	d	l. None	
20. ¹⁸ C _n = ¹⁸ C C. 0	_{n+2} then n = ? b2	c. 8	d. None	

CA FOUNDATION MATHS

WWW.SWAPNILPATNI.COM

DD-90

Qs.	Answer	Qs.	Answer
1	В	11	D
2	А	12	D
3	D	13	А
4	D	14	В
5	С	15	В
6	В	16	А
7	В	17	D
8	А	18	В
9	А	19	С
10	А	20	С

DD-91 **By CA VINOD REDDY** WWW.SWAPNILPATNI.COM 1. How many diagonals can be drawn by joining vertices of a pentagon? c. 15 a. 5 b. 10 d. None 2. How many parallelograms can be formed if 10 parallel lines are intersecting with another 15 parallel lines? a. 4725 b. 4275 c. 2475 d. None 3. Out of 6 members belonging to party A and 4 to party B. In how many ways a committee of 5 can be formed so that members of party A will be in a majority? d. 184 a. 180 b. 186 c. 185 4. What is the rank of word 'TALK' if all words by using letters of words are arranged in dictionary sequence? a. 20 b. 18 c. 19 d. None 5. How many 4 digit numbers divisible by 5 can be formed by using 2, 1, 5, 7, 0. a. 42 b. 48 c. 36 d. None 6. There are 25 points in a plane out of which 8 are collinear. How many triangles can be formed? b. 2188 a. 1288 c. 8812 d. None 7. The value of ${}^{12}C_8 + {}^{12}C_3$ is c. 751 d. 571 a. 715 b. 710 8. A dealer provides car and van in 2 body patterns and 5 different colours. How many choices are open to you? a. 2 b. 7 c. 20 d 10 9. How many 4 digit numbers greater than 7000 can be formed out of digits 3, 5, 7, 8, 9. c. 72 a. 24 b. 48 d. 50 10. If ${}^{n}p_{5} = 60$. ${}^{n-1}p_{3}$ then n is b. 15 c. 10 a. 6 d.12 11. The number of arrangements of n different things taken r at a time which include a particular thing is c. r. ⁿ⁻¹p_{r-1} b. n. ⁿ⁻¹p_{r-1} d. r. ⁿ⁻¹p. a. n-1p 12. The number of ways in which a committee of 6 members can be formed from 8 gentlemen and 4 ladies so that the committee contains at least 3 ladies is a. 252 d. None of these b. 672 c. 144 13. If $^{7}Px = 42$ then X is equal to c. 2 a. 6 b. 5 d. None of these 14. The value of n, when $^{n}P_{2} = 20$ is d. 5 a. 3 b. 4 6 C. 15. If ${}^{n}p_{r} = 336$ and ${}^{n}C_{r} = 56$, then n and r will be b. (8, 3) d. None of these a. (3, 2) c. (7,4) 16. If in a railway line there are 38 stations. How many different kinds of tickets of AC-II Tier must be printed so that a passenger may go from any station to another by purchasing a ticket. a. 650 b. 1400 c. 1406 d. 1300 CA VINOD REDDY CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-91	Ву Сл	A VINOD REDDY		WWW.SWAPNILPATNI.COM
17. A dinner is arran The 4 African wish t African on his either a. 28800	ged for 11 guests in v o occupy 2 corner sea side. In how many w b. 43200	which there are 4 A ats at each end and ays can all guests	African, 1 America d the American o be arranged? c. 86400	in and 6 Indian are invited. Id man refuses to have a d. 14400
18. In how many wa a. 9! b. 5!4	ys can 6 gentle men a l! c. 5!	and 4 ladies be sea 3!	ated at a round ta d. None of these	ble.
19. In how many wa a. 272	ys 5 sportsmen can b b. 282	e selected from a c. 252	group of 10 d.	242
20. How many lines a. 310	can be drawn from 2 b. 210	1 points on a circle c. 410	e? d. 570	

DD-91

Qs.	Answer	Qs.	Answer
1	А	11	С
2	А	12	А
3	В	13	С
4	А	14	D
5	А	15	В
6	D	16	С
7	А	17	С
8	С	18	А
9	С	19	C
10	C	20	В

DD-92 **By CA VINOD REDDY** WWW.SWAPNILPATNI.COM 1. We wish to select 6 persons from 8, but if the person A is chosen, then B must be chosen too. In how many ways can selection be made? c. 16 d. 22 a. 24 b. 32 2. (n+1)! = 6(n-1)! Then n=? b. 4 d. 2 a. 6 c. 8 3. The number of different words of letters of the word 'BANANA' are a. 270 b. 60 c. 120 d. 360 4. A group of 13 friends send the greetings to each other. How many greetings card are to be purchased by the friends. a. ${}^{13}C_2$ b. 144 c. 169 d. 156 5. There are 8 true-false questions in the examination. How many sequences of answers are possible? b. 255 d. 512 a. 16 c. 256 6. ${}^{5}C_{r}$: ${}^{5}P_{r}$ = 1:r! a. Correct b. Incorrect d. None of these c. Can't say 7. In an examination a candidate has to pass in each of 4 papers. In how many different ways he can be failed? a. 14 b. 16 c. 15 d. None of these 8. ${}^{18}C_r = {}^{18}C_{r+2}$ then ${}^{r}C_5 = ?$ c. 56 d. None of these a. 55 b. 50 9. If 7 points out of 12 are in the straight line, then the number of triangles formed is a. 19 b. 158 c. 185 d. 201 10. Number of numbers greater than 1000 but less than 4000 that can be formed by using digits 0,1,2,3,4 when repetition is allowed is a. 125 b. 500 c. 375 d. 625 11. Twelve students compete for a race. The number of ways in which first three places can be taken is a. 3! B. 12.11.10 c. 12!/3!9! d. 12!-3 12. Find number of triangles that can be formed with 10 points in a plane, 4 of them are collinear? a. 4b. 116 d. 40 c. 120 13. In how many different ways can 8 examination papers be arranged in a line so that the best and worst papers are never together? b. 30,330 c. 30,540 d. 30,630 a. 30,240 14. In how many ways 52 cards be equally divided among 4 players? a. 52! X (13!)⁴ b. 52! / (13!)⁴ c. 52/4 d. None of these 15. Six boys and 5 girls are to be seated in a row such that no 2 girls and no 2 boys sit together. Find the no. of ways in which this can be done..... d. None of these a. 86400 b. 85000 c. 85400 16. In how many ways can I invite one or more of my six friends? b 64 c. 60 d. None of these a 63

CA VINOD REDDY

CA FOUNDATION MATHS

WWW.SWAPNILPATNI.COM

DD-92	Βγ ϹΑ Ν	/INOD REDDY	WWW.SWAPNILPATNI.COM			
17. In a party of 40 pe	eople ,each shakes hai	nd with others. How ma	any handshakes took place in the			
a. 780	b. 700	c. 880	d. None of these			
18. 5! is equal to a. 120	b. 124	c. 210	d. 180			
19. [8! / 5!] is equa a. 336	al to b. 321	c. 244	d. 422			
20. How many words a. 360	can be formed from th b. 180 c. 90	e word "BHARAT" d. 45				
21. Out of 128 families with 4 children each, How many are expected to have atleast one boy and atleast						
a. 100	b. 105	c. 108	d. 112			

DD-92

Qs.	Answer	Qs.	Answer
1	D	11	В
2	D	12	В
3	В	13	А
4	D	14	В
5	С	15	А
6	А	16	А
7	C	17	А
8	C	18	А
9	С	19	А
10	С	20	А
		21	D

DD	-93		By CA VINOD REDDY		v	VWW.SWAPNILPATNI.COM	
1. A pro a.	An experiment suc bability of having i 1/1024	ceeds thrice as no success at a b. 2/512	after it II?	fails. If the exp c. 3/256	eriment	t is repeated 5 d. None of th	i times, What is the
2. a.	The letters of the 40320 ways	word COMPUT b. 4031	ER car 9 ways	n be arranged i s	n c. 403	18 ways	d. None of these
3. a.	The vowels must 576	be together, the b. 575	e numb	er of arrangem c. 570	ents of	letters of the v d. None of th	vord FAILURE is nese
4. I	f no digit is repeat	ed, then the nur	nber of	f 4 digit number	s greate	er than 5000,f	ormed from the digits
3,4 a.	,5,6,7 are 72	b. 27	c. 70		d. Non	e of these	
5.]	The letters of the w	vord CALCUTTA	A and A	MERICA are a	rrangeo	d in all possibl	e ways. Ratio of number
of a	1:2	b. 2:1		c. 2:2		d. None of th	iese
6. H	How many number	rs greater than 2	23,000	can be formed	from the	e digits 1,2,3,4	4,5 if repetition is not
alic a.	18	b. 72		c. 90		d. None of th	nese
7. ł a.	How many 5 digits 10 x 9 x 8 x 7 x 6	numbers can b b. 9 x 9	e forme x 8 x	ed by using dist 7 x 6	inct dig c. 9⁵	its? ^{d.} 5 ⁸	
8. pla a.	In how many way yers) ¹⁹ C ₁₀	s can a cricket t b. ²⁰ C ₁₀	eam se c. ¹⁹ C ₁	elected so that	a partic d. ²⁰ C ₁	ular player is a	always there? (from 20
9. a.	(n+1)! - n! = n . n! True	b. False		c. Can't Say		d. None of th	nese
10. а.	Number of ways i 40319	n which letters o b. 40320	of the v	vord DOGMATI c. 40321	C can b	be arranged is d. None of th	iese
11.	In a group of boys	s the number of	arrang	ements of 4 bo	ys is 12	times the nu	mber of arrangements of
2 b a.	oys. The number of 10	b. 8 b. 8	are	c. 6		d. None of th	iese
12. eac	Out of 7 gents and th committee inclu	d 4 ladies a con des atleast 1 la	nmittee dy is	e of 5 is to be fo	rmed. T	The number of	committees such that
а.	400	b. 440		c. 441		d. None of th	lese
13. а.	There are 12 poir 200	its in a plane of b. 211	which	5 are collinear. c. 210	The nu	mber of triang d. None of th	lles is nese
14.	Every person sha	kes the hand wi	ith eac	h other in a par	ty and t	otal number o	f handshakes is 66. The
nur a.	11	b. 12		c. 13		d. 14	
15. stu	A question paper dent can answer c	contains 6 ques one or more que	stions, stions	(each having oi is c 729	ne alter	native.) The n	umber of ways in which a
а.		5.720		3. 720			
CA	VINOD REDDY		CA FC	DUNDATION MA	THS		WWW.SWAPNILPATNI.COM

DD	-93	By CA V	/INOD REDDY	WWW.SWAPNILPATNI.COM				
16 the	. 5 letters are writte	en and there are 5 lette	er boxes. The number o	of ways the letters can be dropped into				
a.	119	b. 120	c. 121	d. None of these				
17 are	. 8 points are mark	ed on circumference o	f circle. Number of cho	rds obtained by joining these points				
a.	25	b. 27	c. 28	d. None of these				
18 de	A supreme court	bench consist of 5 judg	ges. In how many ways	can the bench give a majority				
a.	15	b. 16	c. 17	d. None of these				
19 wa	19. There are 4 teachers and 16 students, and a committee of 5 persons is to be formed. The number of ways in which this can be done so as to include exactly 3 teachers is							
а.	479	b. 496	c. 480	d. None of these				
20	There are 1 teach	ore and 16 students	and a committee of 5 m	ersons is to be formed. The number of				

20. There are 4 teachers and 16 students, and a committee of 5 persons is to be formed. The number of
ways in which this can be done so as to include atleast 3 teachers is
a. 496489d. None of these

DD-93

Qs.	Answer	Qs.	Answer
1	А	11	С
2	А	12	С
3	А	13	С
4	А	14	В
5	В	15	D
6	С	16	В
7	В	17	С
8	А	18	В
9	А	19	С
10	В	20	A

DD	-94	Ву СА	VINOD REDDY	v	/WW.SWAPNILPATNI.COM
1. a.	How many 3 digit 3 ³	odd numbers can be b. 3!	formed by using 1,3,5 , c. 3 x 3 x 4	if repetition is d. No	allowed? ne of these
2. a.	How many positiv 18	re numbers are there I b. 20	ess than 100 such that c. 21	exactly one o d. 22	f digits is 7 e. None of these
3. a.	Five digit number 120	can be formed from 3 b. 216	,1,7,0,9,5 divisible by 5 c. 96	5 are d. 384	
4. A team of 11 players chosen from 9 batsmen and 6 bowlers, the number of ways with 8 batsm					ways with 8 batsmen and
3 D a.	18	b. 9	c. 180	d. 20	
5. a.	How many numbe 20	ers are there between b. 18	0 and 100 such that th c. 9	ere is one 6 as d. 19	s one of their digits?
6. ^t a.	⁵⁶ P _{r+6} : ⁵⁴ P _{r+3} = 30,80 42	00:1 then the value of b. 41	r is c. 45	d. None of th	ese
7.	n a group of boys,	two boys are brothers	s and in this group 6 m	ore boys are th	ere. In how many ways
car a.	n they sit if the brot 2 X 6!	thers are not to sit alo b. ⁷ P ₂ X 6!	ng with each other. c. ⁷ C ₂ X 6!	D. None of th	iese
8. In a class there are 5 students who are eligible for inter-school competition but only 3 student be selected, so polling is arranged and a student is entitled to vote for any number to be elected					ut only 3 student are to er to be elected . In how
a.	24	b. 23	c. 26	d. 25	
9. A survey was conducted to study the readership pattern of 100 management students who read at least one of three business magazines. It is found that 80 read Business India, 50 read Business World and 30 read Business Today. Five students read all three magazines. How many read exactly two					students who read at i0 read Business World y read exactly two
ma a.	gazines. 50	b. 10	c. 95	d. 25	
10. 300 students are made to stand in rows in the shape of an isosceles triangle, the numbers in successive rows diminishes by one from the base to the apex. How many students are there in the row,					
a.	30	b. 21	c. 27	d. 24	
11. а.	The number of 2^3	ways in which 3 friend b. 3 ²	s can stay in 2 hotels is c. ³ P ₂	s d. None of th	ese
12. sev	The number of o	diagonals that can be	drawn by joining the ve	ertices of hepta	agon (figure having
a.	14	b. 21	c. 7	d. 24	
13. are atte	13. In a college examination a candidate is required to attempt 6 questions out of 10 questions which are divided into two sections each containing 5 questions. Further the candidate is not permitted to attempt more than 4 questions from either of the section. The number of ways in which he can make up a choice of 6 questions in				
a.	15	b. 200	c. 100	d. 50	
CA	VINOD REDDY	CA F	OUNDATION MATHS		WWW.SWAPNILPATNI.COM

DD-94	By CA \	/INOD REDDY	WWW.SWAPNILPATNI.COM				
 14. In a school 21 students play basket ball, 26 students hockey and 29 play football. 14 students play hockey and basket-ball, 15 play hockey and football and 12 play football and basketball. If 8 students play all the three games, what is the total number of players? a. 45 b. 44 c. 34 d. 43 							
15. Seven women an side of every woman.a. (7!)²	d seven men are to sit The number of seatin b. (6!) ²	around a circular table g arrangements is - c. 6! 7!	e such that there is a man on either d. 7!				
16. If ⁿ P ₃ = 120, then a. 4	n is equal to b. 5	c. 6	d. None of these				
17. The number of different four digits numbers that can be formed with the digits 2, 3, 4, 5, 7 using each digit only once is							
a. 4!	b. 4 (4!)	c. 5!	d. 5(7!)				
18. If ${}^{n}P_{5} = 60$. ${}^{n-1}p_{5}$ a. 6	₃ then n is b. 15	c. 10	d. 12				
19. The number of ways the letter of the word "Triangle" to be arranged so that the word 'angle' will be							
a. 20	b. 60	c. 24	d. 32				
20. The number of dia	20. The number of diagonals in a decagon is						
a. 30	b. 35	c. 45	d. None of these				

DD-94

Qs.	Answer	Qs.	Answer
1	А	11	А
2	А	12	А
3	В	13	В
4	С	14	D
5	D	15	С
6	В	16	С
7	В	17	С
8	D	18	С
9	А	19	С
10	D	20	В

DD	-95	Ву СА	VINOD R	REDDY		www.sv	APNILPATNI.COM
1. a.	The term 'chance' True	and probability are syn b. False	onymou c. Both	S. I	d. None	of these	
2. a.	For any two events P(A) + P(B) < P(A∩	s A and B IB) b. P(A) + P(B) > P	P(A∩B)	c. P(A) + P(B) <u>-</u>	<u><</u> P(A∩B)	d. P(A) + P(E	B) <u>></u> P(A∩B)
3. a.	All possible outcor Sample space	nes of random experim b. Events	ent form	is the c. Both	Ċ	I. None of the	se
4. a.	P(B/A) is defined on B is a sure event	only when b. A is a sure event	c. A is	not an impossit	ole event	d. B is an im	possible event
5. a. b.	The probability spa {(H,T),(T,H),(T,T)} {(H,T),(T,H),(T,T),(ace in tossing two coins (H,H)}	s is	c. {(H,H),(T,H) d. {(H,T),(T,H)),(T,T),(H,F ,(T,T),(H,1	H)} `)}	
6. a.	Probability mass fu 0	unction is always: b. Greater than 0		c. Greater than	n or equal	to 0	d. None of these
7. a.	If P(A) = P(B) then Dependent	A, B are b. Independer	nt	c. Equally likel	ly d	I. Both A and	С
8. a.	If P(A-B) = P(B-A) P(A) = P(B)	then, b. P(A) + P(B) = 1		c. If P(A) ≠ P(I	3)	d. Nor	ne of these
9. a.	For a certain/sure P(A) = 0	event A, b. P(A) ≠ 0	c. 1-P(A) ≠ 0	d. 1-P(A)) = 0	
10. а.	If event A and B and P(A) X $P(B)$	e independent then pro b. P(A U B)	obability c. P(A=	of occurrence o =B)	of A as wel d. Both c	II as B is give option A and I	n by: 3
11. are a. (The probability of a aimed at the buildi 0.665	a bomb hitting a target ng, find the probability b. 0.345	is 1/5. Tu that a bu c. 0.64	wo bombs are e uilding is destroy 5	enough to o yed. d. 0.525	destroy a buil	ding. If six bombs
12. a.	If p:q are the odds p/(p+q)	against an event then b. p/q	the prot	bability of not oc c. q/p+q	currence (of that event I. None of the	is ese
13. are a) 2	The odds against a 6:5. Find the chance 25/77	a certain event are 5:2 a ce that atleast one of th b. 35/77	and odd ne events c. 52/7	s in favour of ar s will 7	nother eve d. 65/87	nt, independe	ent of the former,
14. a.	If P(A) = 8/13 then 8:13	odds in favour of even b. 13:8	t A are c. 8:5		d. None	of these	
15. a. b.	For any two events P(A-B) = P(A) - P(A-B) = P(A) - P(A-B) = P(A) - P(A)	s B) A - B)	c. P(A· d. P(A·	-B) = P(B) - P(A -B) = P(A) - P(A	λ ∩ B) λ ∩ B)		
16. а.	If A is an event and $P(A) - P(A^{C}) = 1$	d A ^c is its complementa b. P(A) + P(A ^c	ary event ^C) = 0	t then c. P(A)) + P(A ^C)	= 1	d. None of these
17. pro a.	The probability tha blem, What is the p 9/12	t A will solve the proble robability that problem b. 7/12	em is 2/3 gets sol c. 5/12	and B can solv	/e is ¾. If I d. 11/12	ooth of them	attempt the
CA	VINOD REDDY	CA F	OUNDAT	ION MATHS		WWW.S	WAPNILPATNI.COM

DD-95

By CA VINOD REDDY

- 18. If P(A) =0.40, P(A U B) = 0.70 If A and B are independent events then P(B) = d. 0.5Ò
- b. Ó.33 c. 0.30 a. 0.22

19. If P(A) = 0 then the event A

a. Will never happen b. May happen c. Will always happen d. May not happen

20. Two dice are thrown at a time and the sum of numbers on them noted is 6. The probability of getting number 2 on any of the dice is

a. 2/36 b. 5/36 c. 6/36 d. None of these

CA VINOD REDDY

CA FOUNDATION MATHS

WWW.SWAPNILPATNI.COM
DD-95

Qs.	Answer	Qs.	Answer
1	А	11	В
2	D	12	А
3	А	13	С
4	С	14	С
5	В	15	D
6	С	16	С
7	С	17	D
8	А	18	D
9	D	19	А
10	A	20	D

1. Two dice are rolled simultaneously, what is the probability that the sum of two numbers on the dice is a prime number a. 5/12 b. 4/12 d. 1/6 c. 1/22 2. The probability that the number selected from first 100 natural numbers is a perfect cube is b. 4/25 c. 1/25 а. 4/24 d. 1/10 The probability that a candidate passes CPT exam is 0.10.7 candidates are selected at random from the 3. class what is the probability that exactly 2 of them will pass $(0.10)^2 (0.90)^2$ b. 21 (0.10)⁵ (0.90)² c. 20 (0.10)² (0.90)⁵ d. 21 (0.10)² (0.90)⁵ a. 4. The probability of choosing the number at random that is divisible by 6 or 8 from first 90 natural numbers is 26/90 b. 24/90 c. 23/90 d. None of these a. 5. A and B are mutually exclusive events with P(A) = [0.50.P(B)] and AUB = S, the sample space. Then P(A) =a. 2/3 b. 1/3 c. 1/4 d. 3/4 6. In a class 40% students read Mathematics, 25% Biology and 15% both Mathematics and Biology. One student is select at random. The probability that the reads Biology if he reads Mathematics is: a. 1/8 b. 7/8 c. 3/8 d. None of these. 7. A single letter is selected at random from the word 'PROBABILITY' . The probability that it is a vowel is, a. 3/11 d. None of these b. 4/11 c. 2/11 8. The number of 4 different digits is formed by using 1,2,3,4,5,6,7. Find the probability that it is divisible by 5. 1/4 b. 1/5 c. 1/6 d. None of these а. 9. The probability of two events A and B are 0.25 and 0.35 respectively. The probability of occurring both events is 0.15. probability that neither A nor B occurs is a. 0.35 b. 0.65 c. 0.50 d. 0.55 10. One dice and one coin is tossed simultaneously. The probability of getting 5 points on the dice and tail on the coin is b. 1/12 a. 1/2 c. 1/6 d. Can't say 11. A bag contains tickets numbered from 1 to 20. two tickets are drawn. The probability that both numbers are prime numbers is a. 14/95 b. 17/95 c. 20/95 d. None of these $P(A \cup B) = 0.80$ then P(A) =12. If A and B are mutually exclusive events and P(B) = 0.20, c. Incorrect data a. 0.60 b. 0.40 d. 1.00 13. In continuous probability distribution f(x) is called a. Frequency distribution function b. Cumulative distribution function c. Probability density function d. None 14. The probability that a man can hit the target is ³/₄. He tries 5 times. The probability that he will hit the target at least 3 times is a. 291/364 b. 371/464 c. 471/502 d. 459/512 15. From a well shuffled pack of 52 cards, 3 cards are drawn at random. Find the probability that three cards drawn contain 2 kings and one ace. a. 4/5525 b. 5/5525 c.6/5525 d. None of these

By CA VINOD REDDY

CA VINOD REDDY

DD-96

CA FOUNDATION MATHS

WWW.SWAPNILPATNI.COM

WWW.SWAPNILPATNI.COM

DD-96

By CA VINOD REDDY

16. If three unbiased coins are tossed. Find the probability of getting atleast two tails and atmost two tails.a.1/2,3/8b.1/2,5/8c.1/2,1/4d.None of these

17. An occurrence of set of events which implies, non occurrence of another set of events is known as:a. Mutually inclusiveb. Mutually exhaustivec. Independentd. None of these

18. The probability of having atleast one tail in four throws with a coin isa. 1/16b. 13/16c. 1.00d. None of these

19. If the mean is 'a' and variance is 'b' in a Poisson distribution, thena.a + b = 0b.a - b = 0c.a x b = 0d. None of these

20. In a Poisson distribution of P (X = 0) = P(X=1) = k, the value of k is:

a. 1 b. 1/e c. e d. ^e

Qs.	Answer	Qs.	Answer
1	А	11	А
2	С	12	А
3	D	13	А
4	С	14	D
5	В	15	С
6	С	16	D
7	В	17	D
8	D	18	D
9	D	19	В
10	В	20	В

DD	9-97		By CA V	VINOD RE	DDY		WWW.SWAPNILPATNI.COM
1	The probability of	netting score 5 a	tlogst c	nce whe	n a dice is th	rown thrice is	
а.	5/6 b. 125/	/216	c. 1/21	6	d. 91	/216	
2.T 3∙5	he odds in favour o	of one student pa	assing a	a test are	3:7. The odd	s against ano	ther student passing it are
a.	5/16	b. 21/80		c. 9/80		d. 3/16	
3. a.	If 7 points out of 12 19	2 are in the strai b. 158	ght line	, then the c.185	number of tr	iangles forme d. 201	d is
4. I a.	f A,B,C are mutuall 1/3	y exclusive and b. 1	exhaus	tive even c. 0	ts then P(A)+ d. An	+ P(B)+ P(C)= y value betwe	en o and 1
5. a. b.	Rectangular Distri Discrete probabilit Both of these	bution is a y distribution		c. Conti d. None	nuous probal of these	oility distributio	on
6. a. b.	P(A/B') is defined B is a sure event B is an impossible	only when - event			c. B is not a s d. B is not an	sure event i impossible ev	vent
7. ran a.	Following are wag dom, what is the pr 0.625	es of 8 workers obability that his b. 0.50	in rupe wages	es – 50, 6 are less c. 0.375	62, 40, 70, 45 than average	, 56, 32, 45. If e wages? d. 0.45	one worker is selected at
8. a.	For 2 independent 4/15	events A, B. If F b. 4/9	P(A) = 2	2/5, P(AU c. 5/9	B) = 2/3, ther	n P(B) = ? d. 7/15	
9. a.	If P(A) = a, P(B) = 1-a-b-c	b, P(A∩B) =c, th b. a+b-c	nen P(A	('∩B') is c. 1+a-b)-C	d. 1-a-b+c	
10. а.	It is given that a fa 0.50	mily of 2 children b. 0.75	n has a	girl. Wha c. 0.333	at is probabilit 3	ty that other ch d. 0.66666	nild is also a girl?
11. D()	If P(A) = 0.60, P(B) = 0.30, P(A∩B) = 0.10). Find –			
г (7	a. 0.20	b. 0.80	c. 0.50)	d. 0.90		
12. ran a.	A player has 7 ca dom. The probabili 2/5 b. 3/5	rds in hands of v ty that it is a king c. 4/5	vhich 5 g, it beir	are red a ng known	ind of these f that it is red d. None	ive 2 are kings is	s. A card is drawn at
13. а.	If 4 coins are tosse 1/2 b.3/8	ed. The chance t	hat the c. 1/8	re should	be two tails d. No	is one	
14. а.	Two events A and Not disjoint	B are mutually b. Disjoint	exclusi	ve means c. Equa	s they are Ily likely	d. None	
15. his a.	If it rains a dealer expectation if the p 136.6	r in umbrella can probability of a ra b. 138.6	earn` iiny day 6	300 per is 0.57(i	day, if it does n rupees) is : c. 146.6	s not rain he ca	an lose ` 80 per day. What is d. 146
16. sho a.	A player tossed tw ow he pays ` 3 as p 1.25	vo coins. If two h enalty. The expe b. 2.25	eads sleeted va	how he w alue of th c. 3.25	vins `4. If one e game to hir	e head shows n (in rupees) i d. 1.35	he wins `2, but if two tails s:
CA	VINOD REDDY		CA FC	DUNDATIO	ON MATHS		WWW.SWAPNILPATNI.COM

DD-97	By CA VINOD REDDY			W	/ww.sv	VAPNILPA	TNI.COM		
17. A random	has the following prob	ability distributio	on:	X P	4 0.1	5 0.3	6 0.4	8 0.2	
The expected a. 4.9	d value of X is: b. 5.9	c. 3.9			d. 6.9				
18. A number chosen being a	is chosen at random ar multiple of 5 or 15 is:	nong the first 12	0 natura	l numl	bers. The	e proba	bility of	the numb	er
a. 1/8	b. 1/7	c. 1/6			d. 1/5				
19. 10,000 tick 8000. Ram has a0.20	ets each of `1 are sold one ticket of the lotter b. 0.20	d in a lottery. The y. The expectati c0.10	ere is on on of Ra d. 0.04	ly one m is: -	ticket in -	the lot	tery bea	ring a priz	ze of Rs.

20. The data reveals that 10 per cent patients die in a particular type of operation. A doctor performed 9operations and all of them survive(d) Whether the 10th patient on being operated:a. Will surviveb. Will diec. May survive or died. None of the above

DD-97

Qs.	Answer	Qs.	Answer
1	D	11	В
2	D	12	А
3	С	13	В
4	В	14	В
5	А	15	А
6	С	16	А
7	В	17	В
8	В	18	D
9	D	19	А
10	А	20	C

DD-98

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

1.1 a. 1	P(A) = 0.8 ⁄2	50 then b. 1/3	P(A)' = ?	c. 1/7		d. 1/4					
2. L a.	et A and B 1/3	the ever b. ½	nts with P(A) = 1	1/3, P(B) = 1/4 c. ¾	and P(A	and B) = d. 2/3	= 1/12 th	nen P(A	/B) is eq	jual to	
3. lf a.	P(A) = 1/5, 7 / 10	P(B) =	1/2 and A and E b. 3 / 10	3 are mutually c. 1	exclusive 5	e then P(A U B) i d. None	is e of thes	se		
4.A	random va	iriable h	as the following	probability di	stribution:	Х	40 P	50 0.10	60 0.30	80 0.20k	0.10k
T a.	he expecte 49	d value	of X is: b. 59	c. 39)		d. 69				
5. the a	Ticket num ticket draw 1/5	bered 1 n bears	to 20 are mixed a number whicl b 2/5	d up and then h is multiple o	a ticket is f 2 or 4?	drawn a	at rando	m. Wha	it is the	probabil d ½	ity that
6.	A card is d	rawn fro	om a pack of pla	lying cards at	random. V	What is t	he prob	ability tł	nat the c	ard drav	wn is
nei a.	ther a king i 4/13	nor a he b. 9/13	eart?	c. 2/13		d. None	e of thes	se			
7. dra a.	A bag cont wn contain 12/55	ains 3 r exactly	ed, 5 yellow and two green balls. b. 10/55	d 4 green balls c. 13	s. 3 balls a 9/55	are draw	n at ran d. None	dom. Fi e of thes	nd the c se	hance tl	hat balls
8. dra a.	 8. A bag contains 4 white balls and 2 black balls. Another contains 3 white and 5 black balls. If one ball is drawn from each bag. Then the probability that one is white and one is black is - a. 11/24 b. 13/24 c. 15/25 d. None of these 							ball is			
9. tha tha	A bag cont t contains 3 t it is red?	ains 5 r red and	ed and 4 black I d 7 black balls. A	balls. A ball is A ball is drawr	drawn at n randomly	random / from th	from the	e bag ar nd bag. '	nd put ir What is	ito anoth the prot	ner bag bability
a.	32/99		b. 1/3		c. 74/9	9			d. Non	e of thes	se
10. pur the	A committe chase depa re must be	ee of 4 p artment, one fror	persons is to be two officers of t n each category	appointed fro he sales depa /.	m 3 office artment an	rs of the d 1 Cha	product rtered A	tion dep ccounta	artment ant. Finc	, 4 office I the cha	ers of the ance
a.	4/35		b. 3/35	c. 1/7	d. Non	e of thes	se				
11. pur it sl a.	11. A committee of 4 persons is to be appointed from 3 officers of the production department, 4 officers of the purchase department, two officers of the sales department and 1 Chartered Accountant. Find the chance that it should have at least one from the purchase department. a. $\frac{4}{35}$ b. $\frac{39}{42}$ c. $\frac{42}{105}$ d. None of these										
12. pur	A committe chase depa	ee of 4 p artment,	persons is to be two officers of t	appointed fro	m 3 office artment ar	rs of the nd 1 Cha	produc Intered A	tion dep Account	oartment ant. Find	t, 4 offic d the ch	ers of the ance that
a.	4/35	ACCOUN	b. 39/4	2	e. c. 42/1	05		d. Non	e of the	se	
13. P(A a.	A, B, C are A), given tha 3/13	e three n at P(B) =	nutually exclusiv = 3/2 P(A) and P b. 4/13	ve and exhaus P(C) = ½ P(B) c. 5/13	stive even d. Non	ts assoc e of thes	iated wi se.	th a ran	dom ex	perimen	t. Find

CA VINOD REDDY

CA FOUNDATION MATHS

WWW.SWAPNILPATNI.COM

DD-98	Ву СА	VINOD REDDY	WWW.SWAPNILPATNI.COM
14. A committee of fou	ur has to formed from a that the committee cor b. 0.6048	mong 3 economists. 4 e	ngineers, 2 statisticians and 1 doctor.
What is the probability		nsists of the doctor and a	at least one economist?
a. 0.3048		c. 0.9048	d. None of these
15. The probability that an electric contract is the will get both the contract is 14/45	at a contractor will get a 5/9. If the probability of ntracts? b. 13/45	plumbing contract is 2/3 getting at least one cont c. 11/45	3, and the probability that he will not get tract is 4/5. What is the probability that d. None of these.
16. A problem of Math	ematics is given to thre	e students X, Y and Z w	vhose chance of solving it are 1/3, 1/4
and 1/5 respectively. F	Find the chance that the	problem will be solved	?
a. 4/5	b. 2/5	c. 3/5	d. None of these
17. If P(A) = ½; P(B) =	= 1/3 and P(A∩B) = ¼ tl	nen the value of P(A/B)	is –
a. 3/4 b. 1/4	c. 2/5	d. None of these	
18. If P(A) = ½; P(B) =	: 1/3 and P(A∩B) = ¼ tl	nen the value of P(A'∩B	3') is –
a. 5/12 b. 7/12	c. 1/2	d. None of these	
 Probability distribution False 	tion is known as theore b. True c. Eith	etical distribution. This is er (a) or (b)	d. None of these
20. A Chartered Account	untant applies for a job	in two firms X & Y. He e	estimates that the probability of his being
selected in firm X is 0.	7, and being rejected a	t Y is 0.5 and the probat	pility of at least one of his applications
being rejected is 0.6. W	Vhat is the probability t	hat he will be selected ir	n exactly one of the firms?
a. 0.8	b. 0.7	c. 0.9	d. None of these

DD-98

Qs.	Answer	Qs.	Answer
1	A	11	В
2	A	12	С
3	A	13	В
4	В	14	A
5	D	15	А
6	В	16	С
7	А	17	А
8	В	18	А
9	А	19	В
10	А	20	D

A card is drawn from a well shuffled pack of playing cards. Find the probability that it is either a diamond or a king.
 a. 5/13 b. 3/13 c. 4/13 d. None of these
 A problem in statistics is given to two students A and B. The odd in favour of A solving the problem are 6 to 9 and against B solving the problem are 12 to 10. If both A and B attempt, find the probability of the problem being solved.

a. 0.673 b. 0.237 c. 0.255 d. None of these

3. If one card is drawn at random from a pack of playing cards; find the probability it is neither a heart nor a club: a. $\frac{1}{2}$ b. $\frac{3}{4}$ c. $\frac{1}{8}$ d. None of these

4. Three balls are drawn at random from a bag containing 6 blue and 4 red balls. What is the chance that 2 balls are blue and 1 is red?

a. ¼ b. ¾ c. ½ d. None of these

5. Find the probability of 53 Mondays in a leap year?

a. 2/7 b. 3/7 c. 4/7 d. None of these.
6. Two letters are drawn at random from the word "HOME" Find the probability that both the letters are vowels?

a. 1/6 b. 5/6 c. 2/3 d. None of these

7. Two letters are drawn at random from the word "HOME. Find the probability that at least one is a vowel?
a. 5/6 b. 1/6 c. 1/3 d. None of these

8. Two letters are drawn at random from the word "HOME. Find the probability that one of the letter selected should be M.

a. ¼ b. ½ c. ¾ d. None of these

9. A and B are two mutually exclusive events of an experiment. If P('not A') = 0.65, P(AUB) = 0.65 and P(B)
= p. Then the value of p is a. 0.35 b. 0.60 c. 0.30 d. None of these

10. Three groups of children contain respectively 3 girls and 1 boy; 2 girls and 2 boys and 1 girl and 3 boys. One child is selected at random from each group. Then the chance that the three selected consist of 1 girl and 2 boys is a. 17/32 b. 15/32 c. 13/32 d. None of these

11. Eight coins are thrown simultaneously, Find the probability of getting at least 6 heads?a 37/512b. 74/4024c. 37 / 256d. None of these

12. If 15 dates are selected at random what is the probability of getting 2 Sundays?a. 3/7b. 0.29c. 0.71d. None of these

13. The incidence of occupational disease in an industry is such that a workman is having 10% chance of
suffering from it. What is the probability that out of 5 workmen, 3 or more will contract the disease?a.0.86%b.86%c.14%d.1.23%

14. Find the probability of success for the binomial's distribution satisfying the following relation 4 P(x=4) = P(x=2) and having other parameter i.e. n=6? a. 1/3 b. 2/3 c. 0.75 d. 4/5

15. The overall % of success in an exam is 60, What is the probability that out of group of 4 students at least 1 has passed?

a. 0.6525 b. 0.9744 c. 0.8704 d. 0.0256

CA VINOD REDDY

CA FOUNDATION MATHS

WWW.SWAPNILPATNI.COM

WWW.SWAPNILPATNI.COM

By CA VINOD REDDY

DD-99		Ву	CA VINOD REDDY	WWW.SWAPNILPATNI.COM
16. For a binon a. 4	nial distributi b. 4	on with mean = 25	= 4 and variance = c. 4.5	= 3, the mode is - d. 4.1
17. What is the a. 193/512	e probability b. 4	of guessing co ·6/512	rrectly atleast 6 o c. 193/1024	f 10 answers in a TRUE-FALSE objective test? d. None of these
18. Out of 128 girl? a. 100	families with b. 105	4 children eac c. 108	h, How many are d. 112	expected to have atleast one boy and atleast one e. None of these
19. The total ar a. 1.00	rea of the no b. 0	rmal curve is 50	c. 0.25	d. Any value between 0 and 1
20. An experim probability of ha	ent succeed aving no suc b. 2	s thrice as afte cess at all? /512	r it fails. If the exp c. 3/256	periment is repeated 5 times, What is the d. None of these

DD-99

Qs.	Answer	Qs.	Answer
1	С	11	С
2	А	12	В
3	А	13	А
4	С	14	А
5	А	15	В
6	А	16	А
7	А	17	А
8	В	18	D
9	С	19	A
10	С	20	A

DD-100

By CA VINOD REDDY

WWW.SWAPNILPATNI.COM

1. Find mean and SD of x where x is poisson variate satisfying P(x=2) = P(x=3)a. m=3 b. m=2 c. m=1 d. None of these 2. Probability distribution may be a. Discrete b. Continuous c. Infinite d. Option (a) or (b) 3. Binomial Probability distribution is a. Discrete b. Continuous c. Infinite d. Option (a) and (b) 4. Binomial Probability distribution is d. None of these a. uniparametric b. biparametric c. Both of these 5. Two parameters of binomials distribution are d. None of these b. n.p a. p,q c. n,o 6. Mean in case of binomial distribution a. Always more than variance c. Always equal to variance b. Always less than variance d. Always equal to S.D. 7. The variance of binomial distribution attains its maximum value at a. n/4 b. p=0.4 c. q=0.5 d. All of these 8. The distribution of wages of a group are normal with mean of `500 and SD `100. If the wages of 100 workers in the group are less than 430. What is the total number of workers in the Group? c.600 a. 413 b. 500 d. 513 9. Find P(x>60) if mean of normal distribution is 50 and variance of 100. a. 15.87% b. 12.45% c. 18.89% d. 20.78% 10. If a random variable x follows normal distribution with a mean as 120 and standard deviation as 40, what is probability that x lies between 120 and 150? a. 25.98% b. 50.05% c. 75.14% d. 27.34% 11. If X is binomial variable with n=20. What is mean if distribution is symmetrical? a. 5 b. 10 c. 2 d. 8 e. None of these 12. If X is Binomial variate with parameter 15 and 1/3, What is the mode of the distribution? a. 5 and 6 b. 5 c. 5.50 d 6 13. If QD of a normal curve is 4.05 then mean deviation is d.4.86 a. 5.26 b.6.24 c. 4.24 14. Standard deviation of poisson variate X is 2, What is P (1.5 < X < 2.90)a. 0.231 b. 0.158 c. 0.15 d. 0.1465 15. If the mean of poisson variable X is 1, What is P(X = atleast 1)c. 0.632 d. 0.254 a. 0.456 b. 0.821 e. None of these 16. If 1.5% of items produced by a manufacturing units are known to be defective, What is the probability that a sample of 200 items would contain no defective item? a. 0.0500 b. 0.1497 c. 0.20 d. 0.0497 17. If the two quartiles of Normal Distribution are 14.6 and 25.4 respectively, what is the standard deviation of the distribution? a. 9 d. 8 b. 6 c. 10 CA VINOD REDDY CA FOUNDATION MATHS WWW.SWAPNILPATNI.COM

DD-100	Ву	CA VINOD REDDY	v	/WW.SWAPNILPATNI.COM			
18. If 1% of Airline there will be exactled	's flights suffer from a y two such failures in r	minor equipment failu next 100 such flights?	ure in an Aircraft, what	is the probability that			
a. 0.50	b. 0.184	c. 0.265	d. 0.256	e. None of these			
19. When coin is to a. Normal distribut	ossed 10 times, then it ion. b. Poissor	is a case of distribution. c. I	Binomial distribution.	d. None of these			
20. If 50% of certain	in product have weight	t 60 kg or more where	eas 10% have weight	55 kg or less. On the			
assumption of normality, what is the variance of the weight?							
a. 15.0231	b. 9.00	c. 16.0	0	d. 22.68			

Qs.	Answer	Qs.	Answer
1	А	11	В
2	D	12	В
3	А	13	D
4	В	14	D
5	В	15	С
6	А	16	D
7	С	17	D
8	А	18	В
9	A	19	С
10	D	20	A