

CA Foundation
150 TOP MOST
MCQ's
MSLR

Question 1

Which of the following statement is true?

- a) Median is based on all observations
- b) The Mode is the mid value
- c) The Media is the 2nd Quartile
- d) The Mode is the 5th decile

Question 2

The average age of 15 students is 15 years. Out of these the average age of 5 students is 14 years and that of other 9 students is 16 years, then the age of 15th student is

- a) 11 years
- b) 14 years
- c) 15 years
- d) None of these

Question 3

If the mode of data is 18 and mean is 24, then median is _____

- a) 18
- b) 24
- c) 22
- d) 21

Question 4

The mean of 10 observations is 14.4. Out of these mean of 4 observations is 16.5, then find the mean of remaining observations:

- a) 13.6
- b) 13
- c) 13.8
- d) 12

Question 5

The mean of the following data is 6. Find the value of P.

| | | | | | |
|----|---|---|---|----|-----|
| X: | 2 | 4 | 6 | 10 | P+5 |
| F: | 3 | 2 | 3 | 1 | 2 |

- a) 4
- b) 6
- c) 8
- d) 7

Question 6

GM of three observations 40, 50 and x is 10 the value of x is

- a) 2
- b) 4
- c) $1/2$
- d) None

Question 7

Which of the following statement is true?

- a) $Q.D < M.D < S.D$
- b) $Q.D > M.D > S.D$
- c) $Q.D < S.D < M.D$
- d) $Q.D > S.D > M.D$

Question 8

For two numbers A.M.=10 and G.M.=8, then H.M.=?

- a) 9
- b) 8.9
- c) 6.4
- d) None

Question 9

$\sum x^2 = 3390$, $n = 30$, $\sigma = 7$ then $\bar{X} =$ _____

- a) 113
- b) 210
- c) 8
- d) None

Question 10

The mean of 6,4,1,5,6,10 and 3 is 5. If each number is added with 2, then the new mean is_____.

- a) 7
- b) 5
- c) 6
- d) 10

Question 11

If the S.D. of x is σ then S.D. of $\frac{ax+b}{c}$ is:

a) $\left|\frac{a}{c}\right| \sigma$

b) $\left|\frac{b}{c}\right| \sigma$

c) $\left|\frac{c}{a}\right| \sigma$

d) None of these

Question 12

The rate of returns from three different shares are 100%, 200% and 400% respectively, the average rate of return will be_____:

- a) 350%
- b) 200.33%
- c) 200%
- d) 300%

Question 13

Find the mean deviation about mean of 4, 5, 6, 8, 3:

- a) 7.2
- b) 5.2
- c) 1.44
- d) 1.70

Question 14

S.D of 1st 'n' natural numbers is 2 then n =

- a) 12
- b) 7
- c) 9
- d) 5

Question 15

If the sum of squares of difference of ranks, given by two judges A and B, of 9 students is 27, what is the value of rank correlation coefficient?

- a) 0.7
- b) 0.65
- c) 0.775
- d) 0.75

Question 16

The coefficient of correlation r between x and y when: x and y when:

$$\text{Cov}(x, y) = -16.5, \text{Var}(x) = 2.89, \text{Var}(y) = 100 \text{ is:}$$

- a) -0.97
- b) 0.97
- c) 0.89
- d) -0.89

Question 17

For two variables x and y , it is known that $\text{cov}(x, y) = 8$, $r = 0.4$, variance of x is 16 and sum of square of deviation of y from its mean is 250. The number of observations for this bivariate data is:

- a) 7
- b) 8
- c) 9
- d) 10

Question 18

If each value of x is divided by 2 and of y is multiplied by 2. Then the new b_{yx} is

- a) Same as b_{yx}
- b) Twice of b_{yx}
- c) Four time of b_{yx}
- d) Eight times of b_{yx}

Question 19

For 10 pairs of observations, number of concurrent deviations was found to be 4. What is the value of the coefficient of concurrent deviation?

- a) $\sqrt{0.2}$
- b) $1/3$
- c) $-1/3$
- d) $-\sqrt{0.2}$

Question 20

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 (a) and (b)
- d) None of these

Question 21

If $8y - 10x = 30$ is the regression line of y on x and the coefficient of correlation between x and y is 0.85, what is the value of the regression coefficient of x on y ?

- a) 0.578
- b) 0.45
- c) 0.6
- d) None of these

Question 22

The coefficient of regression of Y on X is $b_{yx} = 1.2$. If $u = \frac{x-100}{2}$ and $v = \frac{y-200}{3}$ find b_{vu} .

- a) 0.9
- b) 0.8
- c) 0.7
- d) None of these

Question 23

Bowley's Index number = 150, Laspeyer's Index = 180 then Paasche's index no. is_____.

- a)120
- b)30
- c)105
- d)None

Question 24

Which of the following statement is true?

- a) Paasche's index number is based on base year quantity.
- b) Fisher's index satisfies the circular test
- c) Arithmetic mean is the most appropriate average for constructing the index number.
- d) Splicing means constructing are continuous series from two different indices on the basis of common base.

Question 25

If Fisher index number is 150, and Passche's index number is 144 then Laspeyer's index number is;

- a) 147.77
- b) 156.25
- c) 140.17
- d) 138.08

Question 26

Price relative is equal to:

a) $\frac{\text{Price in the given year}}{\text{Price in the base year}} \times 100$

b) $\frac{\text{Price in the base year}}{\text{Price in the given year}} \times 100$

c) Price in the given year $\times 100$

d) Price in the base year $\times 100$

Question 27

Calculate the Fisher index number from the following data.

$$\sum P_0 q_0 = 116, \sum P_0 q_1 = 140, \sum P_1 q_0 = 97, \sum P_1 q_1 = 117$$

- a)83.59
- b)184.09
- c)120.02
- d)None

Question 28

Circular test is satisfied by which index number?

- a) Laspayer's
- b) Paasche's
- c) Fisher's
- d) None

Question 29

Time Reversal Test is satisfied by _____.

- a) Fisher's ideal index
- b) Drobish Bowley's index
- c) Laspeyer's index
- d) None

Question 30

Monthly salary of an employee was ₹10,000 in the year 2000 and it was increase to ₹20,000 in the year 2013, while the consumer price index is 240 in 2013 with base year 2000. What should be his salary in comparison of consumer price index in the year 2013?

- a)2000
- b)16,000
- c)24,000
- d)None

Question 31

For a data on frequency distribution of weights 70,73,49,57,56,44,56,71, 65,62,60,50,55,49,63 and 45. If we assume class length as 5, the number of class Intervals will be:

- a) 5
- b) 6
- c) 7
- d) 8

Question 32

Data given below refers to marks gained by a group of students

| Class | Below 10 | Below 20 | Below 30 | Below 40 | Below 50 |
|-------|----------|----------|----------|----------|----------|
| C.P | 15 | 38 | 65 | 84 | 100 |

Find the no of students getting more than 30 marks.

- a) 50
- b) 53
- c) 35
- d) 52

Question 33

Which of the following graph is used to calculate the partition values

- a) Lorenz Curve
- b) Ogive Curve
- c) Histogram
- d) None

Question 34

There were 200 employees in an office in which 150 were married. Total male employees were 160 out of which 120 were married. What was the number of female unmarried employees?

- a) 30
- b) 10
- c) 40
- d) 50

Question 35

A pie diagram used to represent the following data_____.

| Source | Custom | Excise | Income Tax | Wealth Tax |
|--------------------|--------|--------|------------|------------|
| Revenue in Million | 120 | 180 | 240 | 180 |

The central angles corresponding to income tax and wealth tax

- a) $(90^\circ, 120^\circ)$
- b) $(120^\circ, 90^\circ)$
- c) $(60^\circ, 120^\circ)$
- d) $(90^\circ, 60^\circ)$

Question 36

Cost of sugar in a month under the heads Raw Materials, labour, direct production and others were 12, 20, 35 and 23 units respectively. What is the difference between the central angles for the largest and the smallest components of the cost of sugar?

- a) 72°
- b) 48°
- c) 56°
- d) 92°

Question 37

There are 6 positive and 8 negative numbers. Four numbers are selected at random without replacement and multiplied. Find the probability that the product is positive:

- a) $\frac{420}{1001}$
- b) $\frac{409}{1001}$
- c) $\frac{70}{1001}$
- d) $\frac{505}{1001}$

Question 38

A random variable X takes three values $-1, 2, 3$ with the respective probabilities $P(-1) = 1/3$, $P(2) = 1/3$, $P(3) = 1/3$, then $E(|X|)$ is

- a) $3/2$
- b) $-5/2$
- c) 2
- d) $9/2$

Question 39

A bag contains 15 one rupee coins, 25 two rupee coins and 10 five rupee coins. If a coin is selected at random from the bag, then the probability of not selecting a one-rupee coin is:

- a) 0.30
- b) 0.70
- c) 0.25
- d) 0.20

Question 40

If $P(A) = \frac{1}{2}$, $P(B) = \frac{1}{3}$, $P(A \cup B) = \frac{2}{3}$, then the $P(A \cap B)$?

- a) $\frac{1}{4}$
- b) $\frac{1}{6}$
- c) $\frac{2}{3}$
- d) $\frac{1}{2}$

Question 41

A die is thrown twice then the probability that the sum of the numbers is divisible by 4 is

- a) $\frac{1}{9}$
- b) $\frac{1}{3}$
- c) $\frac{11}{36}$
- d) $\frac{1}{4}$

Question 42

$P(A_1) = 2/3$; $P(A_2) = 3/8$; $P(A_1 \cap A_2) = 1/4$ then A_1 and A_2 will be:

- a) Mutually exclusive & independent
- b) Exclusive but not independent
- c) Independent but not exclusive
- d) None of these

Question 43

Two dice are tossed what is the probability that the total is divisible by 3 or 4.

- a) $20/36$
- b) $21/36$
- c) $14/36$
- d) None of these

Question 44

When an unbiased dice is rolled, find the odds in favour of getting of multiple of 3.

- a) $1/6$
- b) $1/4$
- c) $1/2$
- d) $1/3$

Question 45

A sum of 44,000 is divided into 3 parts such that the corresponding interest earned after 2 years, 3 years and 6 years may be equal at the rate of simple interest are 6% p.a., 8% p.a., & 6% p.a. respectively. Then the smallest part of the sum will be:

- a) ₹4,000
- b) ₹8,000
- c) ₹10,000
- d) ₹12,000

Question 46

In what time will a sum of money double itself at 6.25% p.a. simple interest.

- a) 5 Yrs.
- b) 8 Yrs.
- c) 12 Yrs.
- d) 16 Yrs.

Question 47

A sum of money will be doubled itself in 8 years at S.I. In how many years the sum will be tripled itself?

- a) 20 years
- b) 12 years
- c) 16 years
- d) None of these

Question 48

The difference between CI and SI on a certain sum of money for 2 years at 4% per annum is ₹1. The sum is;

- a)625
- b)630
- c)640
- d)635

Question 49

A man invests an amount of ₹15860 in the names of his three sons A, B and C in such a way that they get the same amount of interest after 2, 3 and 4 years respectively. If the rate of interest is 5% then ratio of amount invested in the name of A, B and C is

- a) 6:4:3
- b) 30:12:5
- c) 3:4:6
- d) None of the above

Question 50

The Partners A & B together lent ₹3903 at 4% p.a. interest compounded annually. After a span of 7 years, A gets the same amount as B gets after 9 years. The share of A in the sum of ₹3903/- would have been;

- a) ₹1875
- b) ₹2280
- c) ₹2028
- d) ₹2820

Question 51

Ram deposited ₹12,000 in a bank at 10% per annum and remaining amount deposit in other bank at 20% per annum. If he received interest according to 14% per annum find the Ram's amount.

- a) ₹20,000
- b) ₹22,000
- c) ₹30,000
- d) ₹25,000

Question 52

Mr. X bought an electronic item for ₹1000. What would be the future value of the item after two years, if the value is compounded semi-annually at the rate of 22% per annum?

- a) ₹1,488.40
- b) ₹1518.07
- c) ₹2008.07
- d) ₹2200.00

Question 53

A sum of money amounts to ₹6,200 in 2 years and ₹7,400 in 3 years as per S.I. then the principal is;

- a) ₹3,000
- b) ₹3,500
- c) ₹3,800
- d) None of these

Question 54

Determine the present value of perpetuity of ₹50,000 per month @
Rate of interest 12% p.a. is_____

- a)45,00,000
- b)50,00,000
- c)55,00,000
- d)60,00,000

Question 55

If the desired future value after 5 years with 18% interest rate is ₹1,50,000, then the present value (in ₹) is (Given that $(1.18)^5 = 2.2877$)

- a) 63,712
- b) 65,568
- c) 53,712
- d) 4117

Question 56

If the sum of money when compounded annually become 1140 in 2 years and 1710 in 3 years at rate of interest.

- a)30%
- b)40%
- c)50%
- d)60%

Question 57

A certain sum of money double itself in 4 years at C.I. In how many years it will become 32 times to itself;

- a) 16 Years
- b) 24 Years
- c) 20 Years
- d) 12 Years

Question 58

Assuming that the discount rate is 7% p.a. how much would you pay to receive ₹200, growing at 5% annually, for ever?

- a) ₹2,500
- b) ₹5,000
- c) ₹7,500
- d) ₹10,000

Question 59

What sum should be invested at the end of every year so as to accumulate an amount of ₹7,96,870 at the end of 10 years at the rate of interest 10% compound annually.

- a)40,000
- b)4,50,000
- c)4,80,000
- d)50,000

Question 60

A person has assets worth ₹1,48,200. He wish to divide it amongst his wife, son and daughter in the ratio 3:2:1 respectively. From this assets the share of his son will be

- a) ₹74,100
- b) ₹37,050
- c) ₹49,400
- d) ₹24,700

Question 61

The first, second and third month salaries of a person are in the ratio 2:4:5. The difference between the product of the salaries of first 2 months & last 2 months is 4,80,00,000. Find the salary of the second month.

- a) ₹4,000
- b) ₹6,000
- c) ₹12,000
- d) ₹8,000

Question 62

x,y,z together starts a business. If x invests 3 times as much as y invests and y invests two third of what z invests, then the ratio of capitals of x, y, z is.....

- a) 3:9:2
- b) 6:3:2
- c) 3:6:2
- d) 6:2:3

Question 63

In a certain business, A and B received Profit in a certain ratio; B and C received profits in the same ratio. If A gets ₹1,600 and C gets ₹2,500, then how much does B get?

- a) ₹2,000
- b) ₹2,500
- c) ₹1,000
- d) ₹1,500

Question 64

The ratio of numbers is 1:2:3 and sum of their squares is 504 then the numbers are

a) 6,12,18

b) 3,6,9

c) 4,8,12

d) 5,10,15

Question 65

If P is 25% less than Q and R is 20% higher than Q the Ratio of R and P

- a) 5:8
- b) 8:5
- c) 5:3
- d) 3:5

Question 66

If $a : b = 2 : 3$, $b : c = 4 : 5$, $c : d = 6 : 7$ then $a : d$ is _____:

a) 24:35

b) 8:15

c) 16:35

d) 7:15

Question 67

If one type of rice of cost ₹13.84 is mixed with another type of rice of cost ₹15.54. the mixture is sold at ₹17.6 with a profit of 14.6% on selling price then in which proportion the two type of rice mixed?

- a)3:7
- b)5:7
- c)7:9
- d)9:1

Question 68

The mean proportion between 24 and 54 is_____.

- a)33
- b)34
- c)35
- d)36

Question 69

A bag contain 23 number of coins in the form of 1 rupee, 2 rupee and 5 rupee coin. The total sum of the coins is ₹43. The ratio between 1 rupee and 2 rupee coins is 3:2, then the number of 1 rupee coins:

- a) 12
- b) 8
- c) 10
- d) 16

Question 70

The salaries of A, B and C are in the ratio 2:3:5. If increments of 15%, 10% and 20% are allowed respectively to their salaries, then what will be the new ratio of their salaries?

- a) 3 : 3 : 10
- b) 10 : 11 : 20
- c) 23 : 33 : 60
- d) Cannot be determined

Question 71

$\frac{3x-2}{5x+6}$ is the duplicate ratio of $\frac{2}{3}$ then find the value of x:

- a) 2
- b) 6
- c) 5
- d) 9

Question 72

$15(2p^2 - q^2) = 7pq$ where p, q are positive then $p:q$

- a) 5:6
- b) 5:7
- c) 3:5
- d) 3:7

Question 73

If $\frac{1}{2}, \frac{1}{3}, \frac{1}{5}, \frac{1}{x}$ are in proportion then $x =$

a) $\frac{15}{2}$

b) $\frac{3}{15}$

c) $\frac{2}{15}$

d) $\frac{1}{15}$

Question 74

The ratio of no. of boys and the no. of girls in a school is found to be 15:32. How many boys and equal no. of girls should be added to bring the ratio to $\frac{2}{3}$?

- a) 20
- b) 19
- c) 23
- d) 27

Question 75

If the ratio of two numbers is 7 : 11. If 7 is added to each numbers then the new ratio will be 2:3 ten the numbers are.

- a)49,77
- b)42,45
- c)43,42
- d)39,40

Question 76

If $(x + 5)$ is the mean proportional between $(x + 2)$ and $(x + 9)$ then the value of 'x' is

- a) 4
- b) 5
- c) 7
- d) 8

Question 77

Find the two numbers such that the mean proportional between them is 18 and third proportional between them is 144:

- a) 9,36
- b) 8,32
- c) 7,28
- d) 6/24

Question 78

What must be added to each of the numbers 10, 18, 22, 38 to make them proportional:

- a)5
- b)2
- c)3
- d)9

Question 79

If $p^x = q$, $q^y = r$, $r^z = p^6$ then the value of xyz is:

- a) 0
- b) 1
- c) 3
- d) 6

Question 80

If $\sqrt[3]{a} + \sqrt[3]{b} + \sqrt[3]{c} = 0$ then find the value of $\left[\frac{a+b+c}{3}\right]^3$

- a) $9abc$
- b) $\frac{1}{9abc}$
- c) Abc
- d) $\frac{1}{abc}$

Question 81

A vessel contained a solution of acid and water in which water was 64%. Four litres of the solution were taken out of the vessel and the same quantity of water was added. If the resulting solution contains 30% acid, the quantity (in litres) of the solution, in the beginning in the vessel, was

- a) 12
- b) 36
- c) 24
- d) 27

Question 82

The value of $\frac{3^{n+1} + 3^n}{3^{n+3} + 3^{n+1}}$

- a) $1/3$
- b) $1/6$
- c) $1/4$
- d) 19

Question 83

The value of $\left(\frac{y^a}{y^b}\right)^{a^2+ab+b^2} \left(\frac{y^b}{y^{bc}}\right)^{b^2+bc+c^2} \left(\frac{y^c}{y^a}\right)^{c^2+ac+a^2}$

- a) y
- b) -1
- c) 1
- d) None of these

Question 84

If $3^x = 5^y = (75)^z$ then:

a) $\frac{1}{x} + \frac{2}{y} = \frac{1}{z}$

b) $\frac{2}{x} + \frac{1}{y} = \frac{1}{z}$

c) $\frac{1}{x} + \frac{1}{y} = \frac{1}{z}$

d) None of these

Question 85

If $2^{x+y} = 2^{2x-y} = \sqrt{8}$ then the respective values of x and y are

_____:

- a) 1, $\frac{1}{2}$
- b) $\frac{1}{2}$, 1
- c) $\frac{1}{2}$, $\frac{1}{2}$
- d) None of these

Question 86

If $xy + yz + zx = -1$ then the value of $\left(\frac{x+y}{1+xy} + \frac{z+y}{1+zy} + \frac{x+z}{1+zx}\right)$ is

a) xyz

b) $\frac{-1}{yz}$

c) $\frac{1}{xyz}$

d) $\frac{1}{x+y+z}$

Question 87

If $abc = 2$ then the value of $\frac{1}{1+a+2b^{-1}} + \frac{1}{1+\frac{b}{2}+c^{-1}} + \frac{1}{1+a^{-1}+c} =$

- a) 1
- b) 2
- c) $\frac{1}{2}$
- d) $\frac{3}{4}$

Question 88

If $P = x^{1/3} + x^{-1/3}$ then $p^3 - 3p =$

a) 3

b) $\frac{1}{2} \left(x + \frac{1}{x} \right)$

c) $\left(x + \frac{1}{x} \right)$

d) $2 \left(x + \frac{1}{x} \right)$

Question 89

$X = 1 + \log_p qr$, $y = 1 + \log_q rp$, $z = 1 + \log_r pq$ then find $\frac{1}{x} + \frac{1}{y} + \frac{1}{z}$

- a) 0
- b) 1
- c) 2
- d) -1

Question 90

If $\log_x y = 100$ and $\log_2 x = 10$ then the value of y

- a) 2^{10}
- b) 2^{100}
- c) 2^{1000}
- d) $2^{10,000}$

Question 91

$$\log_{10}^5 + \log_{10}^{(5x+1)} = \log_{10}^{(x+5)} + 1 \text{ then } x =$$

- a) 5
- b) 3
- c) 1
- d) None of these

Question 92

$(\log_{\sqrt{x}} 2)^2 = \log_x 2$ then $x =$

- a) 16
- b) 32
- c) 8
- d) 4

Question 93

Given $\log 2 = 0.3010$ and $\log 3 = 0.4771$ then the value of $\log 24$:

- a) 1.3081
- b) 1.1038
- c) 1.3801
- d) 1.8301

Question 94

If $\log_4 (X^2 + X) - \log_4 (X + 1) = 2$ then the value of is:

- a) 2
- b) 3
- c) 16
- d) 8

Question 95

$\log xy^2 - \log y = \log(x + y)$ Find the value of y in term of x

a) $X - 1$

b) $\frac{x}{x+1}$

c) $\frac{x}{x-1}$

d) $X + 1$

Question 96

The value of the expression:

$$a^{\log_a^b} \cdot \log_b^c \cdot \log_c^d \cdot \log_d^t$$

- a)t
- b)Abcdt
- c)(a + b + c + d + t)
- d)None

Question 97

α, β are the roots of the equation $2x^2 + 3x + 7 = 0$. Then the value of $\alpha\beta^{-1} + \beta\alpha^{-1}$ is:

- a) 2
- b) $3/7$
- c) $7/12$
- d) $-19/14$**

Question 98

If $2 + \sqrt{3}$ is one root of $x^2 + px + q = 0$ Then p and q are

- a) -4, -1
- b) 4, -1
- c) -4, 1
- d) 4, 1

Question 99

Value of k for which roots are equal of given equation $4x^2 - 12x + k = 0$:

- a) 144
- b) 9
- c) 5
- d) None of these

Question 100

The difference between the roots of the equation $x^2 - 7x - 9 = 0$ is _____:

- a) 7
- b) $\sqrt{85}$
- c) 9
- d) $2\sqrt{85}$

Question 101

A fraction is such that if 3 is added to the numerator and 2 is added to the denominator it will become 6 and if 4 is subtracted from the numerator and 2 is subtracted from the denominator it will become $\frac{3}{9}$, Then the fraction is

- a) $\frac{1}{3}$
- b) $-\frac{1}{3}$
- c) $\frac{3}{-1}$
- d) $\frac{5}{3}$

Question 102

If the A.M between the roots of Quadratic equation is '8' and G.M is '5' then the equation is _____.

a) $x^2 + 16x - 25 = 0$

b) $x^2 - 16x + 25 = 0$

c) $x^2 - 16x - 5$

d) None of these

Question 103

Divide 27 into two parts such the sum of their Reciprocal is $\frac{1}{6}$.

- a) 18, 9
- b) 17, 10
- c) 0, 27
- d) 14, 13

Question 104

The age of a person is 8 years more than thrice the age of the sum of his two grandsons who were twins. After 8 years his age will be 10 years more than twice the sum of the ages of his grandsons. Then the age of the person when twins born is _____:

- a) 86 years
- b) 73 years
- c) 68 years
- d) 63 years

Question 105

Solving equation $m + \sqrt{m} = 6/25$ the value of 'm' works out to

- a) $2/25$
- b) $1/25$
- c) $3/25$
- d) 1

Question 106

A person on a tour has ₹9,600 for his expense. But the tour was extended for another 16 days, so he has to cut down his daily expenses by ₹20. The original duration of the tour had been?

- a) 48 days
- b) 64 days
- c) 80 days
- d) 96 days

Question 107

If $|x - 2| + |x - 3| = 7$ then x:

- a) 6
- b) -1
- c) 6 & -1
- d) None of these

Question 108

In an A.P. If $S_n = n^2p$ and $s_m = m^2p$ ($m \neq n$) then $S_p =$

- a) p^2
- b) p^3
- c) $2p^3$
- d) p^4

Question 109

If the 8th term of an AP is 15 then the sum of first 15 term is.

- a)15
- b)0
- c)225
- d)225/2

Question 110

In an AP, If $S_n = 3n^2 - n$ and its common difference is '6' then first term is _____.

- a)2
- b)3
- c)4
- d)6

Question 111

In an AP. If the sum of 4th & 12th terms is 8 then sum of first 15 terms is _____.

- a)60
- b)120
- c)110
- d)150

Question 112

There are 'n' AMs between 7 & 71 and 5th AM is 27 then 'n' =

- a)15
- b)16
- c)17
- d)18

Question 113

Find the sum of all natural numbers between 100 and 1,000 which are divisible by 11 is:

- a) 44,550
- b) 66,770
- c) 55,440
- d) 33,440

Question 114

The value of $1^3 + 2^3 + 3^3 + \underline{\hspace{2cm}} + m^3$ is equal to:

- a) $\left[\frac{m+(m+1)}{2}\right]^3$
- b) $\frac{m(m+1)(2m+1)}{6}$
- c) $\left[\frac{m(m+1)}{2}\right]^2$
- d) None of these

Question 115

Three No's a, b, c are in A.P. find $a - b + c$

- a) A
- b) $-b$
- c) b
- d) c

Question 116

The number of integers from 1 to 100 which are neither divisible by 3, nor by 5 nor by 7, is

- a)67
- b)55
- c)45
- d)33

Question 117

Divide 69 into 3 parts which are in A.P. and are such that the product of first two parts is 460

- a) 20, 23, 26
- b) 21, 23, 25
- c) 19, 23, 27
- d) 22, 23, 24

Question 118

The sum n terms of the series $1 + (1 + 3) + (1 + 3 + 5) + \dots$.

- a) $\frac{n(n+1)(2n+1)}{6}$
- b) $\frac{n(n+1)(2n+1)}{3}$
- c) $\frac{n(n+1)(n+2)}{3}$
- d) None of these

Question 119

If the p^{th} term of an A.P. is 'q' and the q^{th} term 'p', then its r^{th} term is

- a) $p + q + r$
- b) $p + q - r$
- c) $p - q - r$
- d) $p + q$

Question 120

A person received the salary for the 1st year is ₹5,00,000 per year and he received an increment of ₹15,000 per year then the sum of the salary he taken in 10 years:

- a) ₹56,75,000
- b) ₹72,75,000
- c) ₹63,75,000
- d) None of these

Question 121

A polygon has 44 diagonals then the number of its sides are:

- a) 8
- b) 9
- c) 10
- d) 11

Question 122

How many permutations can be formed from the letters of the word "DRAUGHT", if both vowels may not be separated?

- a) 720
- b) 1,440
- c) 140
- d) 1,000

Question 123

If ${}^{15}C_{3r} = {}^{15}C_{r+3}$, then 'r' is equal is

- a) 2
- b) 3
- c) 4
- d) 5

Question 124

If ${}^{13}C_6 + 2 {}^{13}C_5 + {}^{13}C_4 = {}^{15}C_x$ then, $x =$ _____.

- a) 6
- b) 7
- c) 8
- d) 9

Question 125

If ${}^n P_r = 720$ and ${}^n C_r = 120$, then value of r is:

- a) 4
- b) 5
- c) 6
- d) 3

Question 126

An examination paper with 10 questions consists of 6 questions in mathematics and 4 questions in statistic part. At least one question from each part is to be attempted in how many ways can this be done?

- a) 1024
- b) 945
- c) 1005
- d) 1022

Question 127

There are 5 books on English, 4 Books on Tamil and 3 books on Hindi. In how many ways can these books be placed on a shelf if the books on the same subjects are to be together?

- a) 1,36,800
- b) 1,83,600
- c) 1,03,680
- d) 1,63,800

Question 128

Find odd man out

15, 21, 63, 81, 69

- a)15
- b)21
- c)81
- d)63

Question 129

Find odd man out'

7, 9, 13, 17, 19

- a)9
- b)7
- c)13
- d)19

Question 130

If HONEY is coded as JQPGA, which word is code as VCTIGVU?

- a) CARPETS
- b) TRAPETS
- c) UMBRELU
- d) TARGETS

Question 131

$$\frac{3}{8}, \frac{8}{19}, \frac{18}{41}, ?, \frac{78}{173}$$

a) $\frac{38}{85}$

b) $\frac{83}{38}$

c) $\frac{81}{38}$

d) None of these

Question 132

If in a certain code "THANKS" is written as "SKNTHA", then how is "STUPID" written?

- a)DISPUTS
- b)DISPUT
- c)DISPUST
- d)DIPSTU

Question 133

If FRAME is coded as 0618011305 then ARISE is coded as _____.

- a)0118091905
- b)01190991805
- c)0118190905
- d)0118091805

Question 134

If Shyam sees the rising sun behind the tower and setting sun behind the railway station from his house. What is the direction of tower from the railway station?

- a) South
- b) North
- c) West
- d) East

Question 135

When a person fevers north and walks 25 m and she turn Left and walk 20 m and again turns right and walk-25 m, and turns right 25 m and turns right and walks 40 m. In which direction is he now from his starting point?

- a) North-West
- b) North-East
- c) South-East
- d) South-West

Question 136

The hour hand of a clock is in west direction when time is 3'0 clock.
What is the direction of minutes hand when time is 6:45?

- a) East
- b) West
- c) North
- d) South

Question 137

A man is facing west. He turns 45 degrees in the clockwise direction and then another 180 degrees in the same direction and then 270 degrees in the anti-clockwise direction which direction is he facing now?

- a) South-West
- b) North-West
- c) West
- d) South

Question 138

A and B start moving towards each other from the places 200 apart. After walking 60 m, B turns Left and goes 20 m, then he turns right and goes 40 m. He then turns right again and comes back to the road on which he had started walking. If A and B walk with the same speed, what is the distance between them now?

- a) 80 m
- b) 70 m
- c) 40 m
- d) 60 m

Question 139

Eight persons A, B, C, D, E, F, G and H are sitting in a line. E sits second right to D. H sits fourth left to D. C and F are immediate neighbours but C is not immediate neighbor of A. G is not neighbor of E. Only two persons sit between A and E. The person on left and right end respectively are.

- a) G and B
- b) G and E
- c) H and E
- d) B and E

Question 140

Six children A, B, C, D, E of F are standing in a row. B is b/w F and D. E is b/w A and C. A does not stand next to either of F or D. C does not stand next to D. F is between which of the following pairs of children.

- a) B & E
- b) B & C
- c) B & D
- d) B & A

Question 141

Four ladies A, B, C and D and four gentleman E, F, G and H are sitting in a circle around a table facing each other.

I. No two ladies or gentlemen are sitting side by side.

II. C who is sitting b/w G & E, facing D.

III. F is b/w D & A and facing G.

IV. H is to the right of B?

Who is immediate neighbor of B?

- a) G and H
- b) E and F
- c) E and G
- d) A and B

Question 142

Four girls are seated for a photographer. Shikha is left of Reena. Manju is to the right of Reena. Rita is b/w Reena and Manju. Who is second left in photograph?

- a) Reena
- b) Manju
- c) Rita
- d) Shikha

Question 143

Six friends P, Q, R, S, T and U are sitting around the hexagonal table each at one corner and facing the centre of the hexagonal. P is second to the left of U. Q is neighbor of R and S. T is second to the left of S. Which one sitting opposite to S?

- a)R
- b)P
- c)Q
- d)T

Question 144

Pointing to a photograph, a Man said "His Mother husband's sister is my aunt". Then what is relation between a man and he?

- a) Son
- b) Uncle
- c) Nephew
- d) Brother

Question 145

In a line P is sitting 13th from Left. Q is sitting 24th from the right and 3rd Left from P. How many people are sitting in the line?

- a)34
- b)31
- c)32
- d)33

Question 146

Point out to a lady Sohil said she is the daughter of woman. Who is the mother of the husband of my mother. Who is the lady to Sohil?

- a) Sister
- b) Aunt
- c) Daughter
- d) Sister-in-law

Question 147

Pointing to old man, Kailash said "his son is my son's uncle" How is Kailash is related to old man?

- a) Brother
- b) son
- c) Father
- d) Grand Father

Question 148

Pointing to man in a photograph, a woman said “the father of his brother is the only son of my grandfather”, how is the woman related to the man in the photograph?

- a) Mother
- b) Daughter
- c) Aunty
- d) Sister

Question 149

P, Q, R, S, T, U are 6 members of a family in which there are two married couples. T, a teacher is married to a doctor who is mother of R and U, Q the lawyer is married to P. P has one son and one grandson. Of the two married ladies one is a housewife. There is also one student and one male engineer in the family. Which of the following is true about the granddaughter of the family?

- a) She is lawyer
- b) She is an engineer
- c) She is a student
- d) She is a doctor

Question 150

If $P + Q$ means P is the mother of Q, $P \div Q$ means P is the father of Q, $P - Q$ means P is the sister of Q. Then which of the following relationship shows that M is the daughter of R?

- a) $R \div M + N$
- b) $R + N \div M$
- c) $R - M \div N$
- d) None of these