

***TOPIC WISE ABC ANALYSIS OF
CA FOUNDATION STATISTICS***

(Detailed ABC Analysis)

EXAM Weightage also given



CA. PRANAV POPAT

- **Chartered Accountant by Qualification**
- **Educator Dil Se** ♥
- **Qualified all CA levels in very first attempt**
- **My Aim is to remove Maths Phobia from commerce background students and make Stats and Maths as their strength to crack CA Exam**
- **Educator at Unacademy for CA Foundation Maths, LR and Stats and CA Intermediate Cost and Management Accounting**

Statistics : Basic Things

Total Marks

40

No. of Chapters

6

Mix of Theory and
Practical Questions

Mix of Theory and Numerical

Chapter	Jan 21			Dec 20			Nov 19		
	Theory	Practical	Total	Theory	Practical	Total	Theory	Practical	Total
14	10	0	10	8	0	8	1	0	1
15	5	4	9	5	4	9	7	10	17
14 and 15	15	4	19	13	4	17	8	10	18
16	1	5	6	0	4	4	0	5	5
17	2	2	4	4	3	7	2	4	6
18	2	3	5	3	0	3	1	3	4
19	4	1	5	6	1	7	5	1	6
	24	15	39	26	12	38	16	23	39

General Points

- Statistics is more about concepts
- Number of Formulas are less but importance is more
- Scope of Theory and Short Numerical are always from Concepts
- Majority Portion is scoring
- In Last 15 days focus on those areas which are weak and important
- Those which are weak but not scoring should not be given priority
- Don't leave any full chapter
- Rather than leaving at least do revision lecture
- Avoid doing full regular class in these last days
- Don't think about out of syllabus questions
- Coverage of ICAI Material is must

Topic Wise – In Depth Discussion

CA. PRANAV POPAT

Chapter 14 - Statistical Description of Data

Topic	Details	Question Type	Difficulty Level	Priority
14.1 Introduction to Statistics	Complete Theory including Definition, History, Application and Limitation of Statistics	Theory	L	B
14.2 Collection of Data	Primary Data - Methods: Interview, Mail, Observation, Enumerator etc.	Theory	L	B
	Sources of Secondary Data: International, Govt, Private, etc	Theory	L	B
	Scrutiny of Data: Consistency	Theory	M	A
14.3 Presentation of Data	Classification or Organisation of Data: Chronological, Geographical, Qualitative, Quantitative etc.	Theory	L	B
	Textual Presentation	Theory	L	C
	Tabular Presentation: usefulness of table and its various terms	Theory	M	A
	Diagrammatic Presentation - Line Diagram, Bar Diagram, Pie Chart: basics of diagram creation, its different types and usage etc.	Theory	M	A
14.4 Frequency Distribution	Frequency Distribution - Basics and How to make	Theory	M	B
	Types / Classification of Frequency Distribution : Inclusive and Exclusive	Theory	H	A
	Various terms - class limit, class boundary, mid-point, class length, cumulative frequency, frequency density, relative frequency	Theory	M	A
14.5 Graphical Presentation of Frequency Distribution	Histogram, Frequency Polygon, Ogives : How to make, properties, usage etc	Theory	M	A

Topic	Details	Question Type	Difficulty Level	Priority
15.1.1 Definition of Central Tendency	Basic Meaning	Theory	L	C
15.1.2 Criteria for an Ideal Measure of Central Tendency	This part is covered at the end of topic - General Review of Central Tendency	Theory	M	A
15.1.3 Arithmetic Mean	Formula of Discrete	Practical	L	C
	Formula of Frequency Distribution - Simple and Grouped	Practical	M	A
	Assumed Mean - Step Deviation Method	Practical	H	B
	Properties of AM	Both	M	A
15.1.4 Median	Formula of Discrete Observations and Simple FD	Practical	L	C
	Formula of Frequency Distribution - Grouped	Practical	H	A
	Properties of Median	Theory	M	B
	Partition Values: Formulas for Discrete	Practical	M	B
	Partition Values: Grouped Frequency Distribution	Practical	H	B
15.1.5 Mode	Formula of Discrete Observations and Simple FD	Practical	L	C
	Formula of Frequency Distribution - Grouped	Practical	H	A
	Empirical Relation between Mean, Median and Mode	Practical	H	A
15.1.6 GM and HM	GM: Formula of Discrete	Practical	M	A
	GM: Formula of Frequency Distribution - Simple and Grouped	Practical	M	B
	Properties of GM	Both	M	B
	HM: Formula of Discrete	Practical	M	A
	HM: Formula of Frequency Distribution - Simple and Grouped	Practical	M	B
	Properties of HM	Both	M	A
	Relation between AM, GM and HM	Theory	M	A
	Weighted Average	Both	M	B
General Review of Central Tendency	Relation between AM, GM and HM for two observations	Practical	M	A
	Best Measure, Pros and Cons of every Measure	Theory	M	A

Chapter 15 - Measures of Central Tendency and Dispersion - Unit II

Topic	Details	Question Type	Difficulty Level	Priority
15.2.1 Definition of Dispersion	Basics, Types of Measures of Dispersions	Theory	L	B
15.2.2 Range	Formula: Discrete and Grouped	Practical	L	B
	Coefficient of Range	Practical	L	B
	Properties, Pros and Cons of Range	Theory	M	B
15.2.3 Mean Deviation	Formula: Discrete and Grouped	Practical	H	A
	Properties	Theory	M	A
	Coefficient of Mean Deviation	Practical	M	A
15.2.4 Standard Deviation	Formula of SD and Variance - Discrete	Practical	H	A
	Formula of SD and Variance - Frequency Distribution	Practical	H	A
	Coefficient of Variation	Practical	M	A
	SD of two numbers	Practical	L	A
	SD of first n natural number	Practical	M	A
	Properties of SD	Both	H	A
15.2.5 Quartile Deviation	Formula: Discrete and Grouped	Practical	L	B
	Coefficient of QD	Practical	L	B
General Review of Measures of Dispersion	Best Measure, Pros and Cons of every Measure	Theory	M	A

Chapter 16 - Probability

Topic	Details	Question Type	Difficulty Level	Priority
16.1 Introduction	Meaning, Types - Objective Subjective	Theory	L	C
16.2 Random Experiment	Meaning	Theory	L	C
	Mutually Exclusive Events	Both	M	A
	Exhaustive Events	Both	M	A
	Equi Probable Events	Theory	L	C
16.3 Classical Definition of Probability	Basic Formula	Practical	L	A
	Demerits and Limitation	Theory	L	C
	Complimentary Probability	Practical	M	B
	Odds in Favor/ Odds against	Practical	H	A
16.4 Relative Frequency Definition of Probability	Basic Formula and Logic	Theory	M	B
16.5 Operations on Events - Set Approach	Connection of Set with Probability: Sample Space, Event Set, Sample Points, Formula	Both	M	A
	Union and Intersection	Practical	M	A
16.6 Axiomatic / Modern Definition of Probability	Conditions. (Real use is in Chapter 17)	Practical	H	C
16.7 Addition Theorems or Theorems of Total Probability	All four theorems and their logic	Both	M	A
16.8 Conditional Probability and Compound Theorem	Dependent and Independent Events	Theory	M	B
	Formula of Conditional Probability	Practical	H	A
	Compound Theorem	Practical	H	A
16.9 Random Variable Probability Distribution	Basics about Random Variable	Theory	H	B
	Making - Probability Distribution	Practical	H	B
	Expected Value of RV	Practical	M	A
	Properties of EV	Theory	M	C

Chapter 17 - Theoretical Distribution

Topic	Details	Question Type	Difficulty Level	Priority
17.1 Introduction	Discrete and Continuous Random Variable, Axiomatic Definition of Probability and Other Theory	Theory	M	C
17.2 Binomial Distribution	Bernoulli's Trial and when to use Binomial	Theory	M	A
	Formulas of Probability, Mean, Variance, Mode	Practical	M	A
	Properties	Theory	M	A
	Fitting of Binomial	Practical	H	C
17.3 Poisson Distribution	Poisson Mode	Theory	H	B
	Formulas of Probability, Mean, Variance, Mode	Practical	M	A
	Properties	Theory	M	A
	Fitting of Poisson	Practical	H	C
17.4 Normal or Gaussian Distribution	Formula (only for comparison questions)	Practical	H	B
	All formulas of MD, QD, Points of Inflexion	Practical	M	A
	Area under Normal Curve	Both	H	A
	Cumulative Distribution Function	Practical	M	A
	Standard Normal Distribution	Practical	H	B
	Z Score	Practical	H	B

Topic	Details	Question Type	Difficulty Level	Priority
18.1 Introduction	Background of Correlation and Regression	Theory	M	C
18.2 Bivariate Data	Meaning, Conditional Distribution, Marginal Distribution	Theory	M	A
18.3 Correlation Analysis	Basics and Nature	Theory	M	B
18.4 Measures of Correlation	Scatter Diagram	Theory	M	A
	Karl Pearson's Product Moment Correlation Coefficient	Practical	H	A
	Properties and Interpretation	Theory	H	A
	Spearman's Rank Correlation Coefficient	Practical	M	A
	Spearman's Rank Correlation Coefficient - In case of Tie	Practical	H	A
	Coefficient of Concurrent Deviations	Practical	M	B
18.5 Regression Analysis	Meaning and Interpretation of Regression Analysis	Theory	H	B
	Format of Equations	Practical	M	A
	Formula of Regression Coefficient	Practical	H	A
18.6 Properties of Regression	Properties of Regression lines and coefficient	Practical	H	A
	Linkage between correlation and regression	Practical	M	A
18.7 Probable Error	Formula	Practical	M	B
	Theory of Testing Reliability	Theory	H	B
18.8 Review of Correlation and Regression	Theory	Theory	M	B
	Coefficient of Determination and Non-Determination	Practical	L	A

Chapter 19 - Index Number and Time Series - Unit I

Topic	Details	Question Type	Difficulty Level	Priority
19.1.1 Introduction	Introduction, Definition and Examples	Theory	L	B
19.1.2 Issues Involved	Base Period, Average usage etc	Theory	M	A
19.1.3 Construction of Index Numbers	Price Index, Quantity Index, Value Index and Price Relative etc	Theory	M	B
19.1.3.1 Simple Aggregative	Formula and Pros, Cons	Both	M	B
19.1.3.2 Simple Aggregative of Relatives	Formula and Pros, Cons	Both	M	B
19.1.3.3 Weighted Method	Weighted Aggregative Index - General	Theory	M	B
	Laspeyre's Index	Both	M	A
	Paasche's Index	Both	M	A
	Marshal Edgeworth	Both	M	B
	Fisher's Ideal	Both	M	A
	Weighted Aggregative of Relative Method	Practical	M	C
19.1.3.4 Chain Index Numbers	Formula	Practical	M	B
19.1.3.5 Quantity Index Numbers	Same as Price	Practical	L	C
19.1.3.6 Value Indices	Same as Price	Practical	L	C
19.1.4 Usefulness of Index Numbers	Theory	Theory	M	B
19.1.5 Deflating Index Numbers	Formula of Deflated Value and its use	Practical	M	A
19.1.6 Shifting and Splicing	Formula	Practical	M	A
19.1.7 Test of Adequacy	All Test and their details	Theory	M	A

Chapter 19 - Index Number and Time Series - Unit II

Topic	Details	Question Type	Difficulty Level	Priority
19.2.1 Introduction	What is Time Series	Theory	M	C
	Components of Time Series in Detail - Secular Trend, Seasonal Variations, Cyclical Variations, Random / Irregular Variations	Theory	M	A
19.2.2 Models of Time Series	Additive Model	Theory	M	A
	Multiplicative Model	Theory	M	A
19.2.3 Measurement of Secular Trend	Freehand Curve Method	Theory	M	B
	Method of Semi Average	Both	M	A
	Moving Average Method	Both	M	A
	Method of Least Squares	Practical	H	C
	Seasonal Indices	Practical	H	C