

WEST BENGAL COUNCIL OF HIGHER SECONDARY EDUCATION

SYLLABUS FOR CLASSES XI AND XII

SUBJECT : STATISTICS (STAT)

COURSE OVERVIEW :

Nowadays , Statistics has become an indispensable subject in every sphere of life, specially in the fields of Engineering, Commerce, Industry, Agriculture, Bio-Technology , Education , Economics, Physical Science and Social Science.

Sincere attempt has been taken in including the topics in Class XI and Class XII, so that students are familiarized with the content and ideas of those topics.

This Higher Secondary Statistics Syllabus included all the topics covered by the leading boards of India in HS level. Utmost care has been taken in selecting and preparing the topics for both the classes. Most of the topics will help HS students in their All India Entrance Examinations and Entrance tests of the reputed Institutions. Not only that, the students who are willing to pursue their studies in basic sciences will also get immense help.

For some advance topics, only a few salient features have been discussed to give the students a brief idea.

CLASS - XI

SEMESTER – I

SUBJECT : STATISTICS (STAT)

FULL MARKS: 35

CONTACT HOURS: 60 Hours

COURSE CODE : THEORY

UNIT No.	TOPICS	CONTACT HOURS	MARKS
UNIT 1	Introduction: Meaning of statistics, Nature of statistics, Importance of statistics, Relation with some allied subjects, Uses of statistics, Misuses of statistics	03	02
	Types of data: Primary and Secondary data, Quantitative data and Qualitative data, Discrete data and continuous data, Time series , Spatial series data and cross-sectional data, ordinal data and nominal data, Illustration with examples	06	04
UNIT 2	Collection of data: Questionnaire and its basic characteristics, Definition of Schedule and pilot survey, Designing a questionnaire and schedule, concept of outliers.	05	01
	Scrutiny of data: Checking internal consistency and detection of error in collection and in recording.	04	02
UNIT 3	Presentation of data: Textual representation, Tabular representation, Diagrammatic representation (line diagram, Multiple axes diagram and multiple line diagram), Bar diagram (Horizontal and vertical bar diagrams, multiple and divided bar diagrams), Pie diagram	09	04
UNIT 4	Frequency distribution, Cumulative frequency distribution and their graphical representation (Column diagram, Step diagram, ogive, Histogram, frequency curve of different types, Stem and leaf diagram)	09	05
UNIT 5	Official Statistics: Structure and activities of some organizations (NSSO, CSO, DGCSIR, Labour Borough, Agricultural Statistics, MOSPI)	04	03
UNIT 6	Concept of Central Tendency and its measures with properties including $AM \geq GM \geq HM$.	13	09
UNIT 7	Index No.: Definition of Index Number, Types of Index No.(Price Index, Quantity Index, Value Index), Construction of Price Index No. and its uses, Various Price Index formulae(Laspeyres', Paasche's, Edgeworth-Marshall and Fisher), Tests of consistency (Time reversal test and Factor reversal test)	07	05
TOTAL		60 Hours	35