



## THE JAMMU & KASHMIR STATE BOARD OF SCHOOL EDUCATION

Academic Division, Rehari Colony, Jammu / Bemina, Bye-Pass Srinagar-190010.

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### NOTIFICATION

It is notified for information of all the stakeholders in general and the students of Higher Secondary Part-1<sup>st</sup> (Class 11<sup>th</sup>) in particular that the syllabus of Practicals for Statistics mentioned at page no 42 in the syllabi and courses of studies (*Class XI*) should be read as under:

- 1- Preparing different types of statistical tables (frequency table, cumulative frequency table, exclusive and inclusive continuous table).
- 2- Construction of different diagrams/charts ( Bar Charts, Pie Charts). Graphs (Histogram, Frequency polygon, Frequency Curve Ogive)
- 3- Calculation of different measures of central tendency.
- 4- Calculation of different partition values and check them graphically.
- 5- Calculation of different measures of dispersion.
- 6- Calculation of skewness and kurtosis, using moments.
- 7- Calculation of co-efficient of correlation.

No: F(Acad-C)STS-Pract/19

Dated: 08-04-2019

(Dr. Farooq Ahmad Peer)

Director Academics

Copy to the:-

- 1- Commissioner/Secretary to Govt. School Education Department, Civil Secretariat, Srinagar for information.
- 2- Director School Education Kashmir/Jammu for information.
- 3- OSD to Hon'ble Advisor to Governor School Education Department for information of the Hon'ble Advisor.
- 4- Joint Secretary, Examination/General/Secrecy, Publication J.D/K.D for information & n/action.
- 5- All Chief Education Officers of J&K State for information.
- 6- All Assistant Directors/Academic Officers for information & n/action to please include the updated syllabi in the next issue 2018-19 & 2019-20.
- 7- All Assistant/Deputy Secretaries of the Board for information.
- 8- Assistant Secretary, Central Secrecy/General/Examination/Secrecy/ Registration, J.D/K.D for information.
- 9- All Heads of Govt. /Pvt. Higher Secondary School of J&K State for information.
- 10- P/s to Chairperson/Secretary for information of the Chairperson/Secretary.
- 11- Information officer J.D/K.D for information.
- 12- Incharge website/ITSS for information.
- 13- All Sub/Branch Offices of the Board.
- 14- Concerned file

Code : 222

# STATISTICS



Maximum Marks: 100

Maximum Marks (Theory): 70

Maximum Marks (Practical): 30

## Unit I: Introduction to Statistics

- Origin, Definition and Meaning of Statistics. Importance and Scope of Statistics.
- Limitations of Statistics. Data and its types (Primary, Secondary, Qualitative and Quantitative data), Sources of secondary data. **6 marks**

## Unit II: Data Collection.

Concept of Population and Sample. Methods of data collection (Questionnaire and Interview Method). Merits and Demerits of these Methods. Presentation, Classification and Tabulation of data. Discrete and continuous data. Frequency and frequency distribution. **6 marks**

## Unit III: Graphical representation of data

Representation of data by Graph, its advantages. Construction of diagrams/Charts (Bar chart, Multiple Bar diagram, Pie chart). Frequency graphs (Histogram, Frequency Polygon, Frequency Curve, Ogive Curves) **7 marks**

## Unit IV: Measures of Location

Centre Tendency and its Measures (Mean, Median, Mode, Geometric Mean and Harmonic Mean). Essentials of good average. Merits and Demerits of Measures of Central Tendency. Combined and Weighted Mean. **8 marks**

## Unit V: Partitation Values

Graphical Location of Median, Concept of Quartiles, Deciles and Percentiles.

Percentile Rank. Empirical relation between Mean, Median and Mode. Symmetrical and Asymmetrical data. **8 marks**

### Unit VI: Dispersion

Dispersion and its absolute measures (Range, Quartile Deviation, Mean Deviation and Standard Deviation). Merits and Demerits of these measures. Relative measures of Dispersion (Co-efficient of Range, Co-efficient of Quartile deviation, Co-efficient of Standard deviation). Co-efficient of variation (C.V.). **8 marks**

### Unit VII: Moments

Define Moments, Types of Moments (Raw Moments and Centre Moments for discrete and continuous data). Relationship between Raw and Central Moments. Numerical illustration based on Moments. **6 marks**

### Unit VIII: Skewness and Kurtosis

Define Skewness and its types, Measures of Skewness (Karl Pearson, Bowleys and Moment based measure), Kurtosis and its types. Measures of Kurtosis.

**7 marks**

### Unit IX: Correlation

Bivariate data, Scattered diagram, Concept of Correlation and its types. Methods of measuring Correlation ( Product moment method, Graphical method). Properties of Correlation co-efficient. Rank correlation for simple and repeated Ranks.

**8 marks**

### Unit X: Introduction to Computers

Basic idea about computers, Functional components (Input/Output Units, Hardware



## SYLLABUS CLASS XI

and Software). Generation of Computers, Concept of flow charts, Classification of computers.

6 marks

### Practical Work (weightage 30 marks )

1. Preparing different types of statistical tables (frequency table, cumulative frequency table, exclusive and inclusive continuous tables).
2. Construction of different diagrams/charts (Bar Charts, Pie Charts).graphs (Histogram, Frequency polygon, Frequency Curve Ogive)
3. Calculation of different measures of central tendency.
4. Calculation of different partition values and check them graphically.
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7. Calculation of Co-efficient of correlation.