Mid term exam paper

STATISTICS

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BBA

Question 1:

Fill the following statements with appropriate words and options:

(1- Each)

1. Statistics is the word which use to measure <u>DATA</u>.
2. Figures belongs with <u>GRAPHICAL</u> data.

3. Attributive study of the data belongs with <u>QUALITATIVE.</u>
4. <u>CLASSIFICATION</u> is the process which separate data in homogeneous groups.
5. The graph which construct on behalf of continuous group of data is called as <u>HISTOGRAM</u>.
6. The Grading score of the students belongs with <u>ORDINAL SCALE</u> measurement scale.
7. Today's temperature was recorded at 32⁰ F, lies in the category of <u>INTERVAL SCALE</u> measurement scale.

8. Statistics has very limited number of usage in advance research studies.(F)
9. Number of dots in a single line is very good example of countable data.(F)
10. Qualitative data do not belong with the field of Statistics.(F)

Question 2:

a) Describe the relevant fields and branches of Statistics.

Answer: Statistics plays a huge role in every field of activity. Statistics helps in determining population growth rates, housing, schooling and medical facilities etc in country.

The two main branches of statistics are descriptive and inferential statistics. Both of these are employed in scientific analysis of data.both are important equally for students.

b) How could you elaborate the "Importance and Applications of Statistics".

Answer: The importance The field of statistics is the science of learning data, this knowledge helps you use the proper method to collect the data, implement the correct analysis, and effectively shows all the results. Statistics is the crucial process behind low process that how we make discoveries in science and how decision is based on data and make predictions. This allow you to understand subject more deeply.The application of statistics helps in providing data as well as tolls for data analysis.some of the most powerful techniques are time series analysis , index numbers and forecasting. These are useful in the analysis of data in economic planning.

Question 3:

a) "The initial techniques which are usually prefer during transformation of data towards information are mostly recommendable during presentation of data." Elaborate the above mentioned statement precisely.

Answer: Date are usually derived in a raw format and the inherent information is difficult to understand, for that reason the raw data need to be summarized , processed and analyzed. However no matter how well manipulated the information derived from the raw data should be presented in effective format otherwise it will be greatest loss for both authors and readers the technique of data and information presentation in tabular ,graphical, and textual forms are introduced.The text ,tables and graphs for data information presentation are the most powerful communication tool.They can make article easy to understand and efficiently presents large amounts of complex information.

b) Construct an appropriate frequency distribution for the following data related to an experimental yield.

93, 89,75, 97,75,47, 73, 40, 100, 42, 39, 75, 13, 39, 89, 78, 32, 72, 51, 21, 92, 45,

29, 58, 16, 31, 6, 82, 76, 10, 10, 32, 2, 25, 98, 94, 93, 91, 68, 20, 19, 61, 37, 98,

72, 61, 72, 19, 81, 78.

c) Construct the followings about the Question 3 (b).
- Simple Bar Graph & Histogram

ANS:

93, 89,75, 97,75,47, 73, 40, 100, 42, 39, 75, 13, 39, 89, 78, 32, 72, 51, 21, 92, 45, 29, 58, 16, 31, 6, 82, 76, 10, 10, 32, 2, 25, 98, 94, 93, 91, 68, 20, 19, 61, 37, 98, 72, 61, 72, 19, 81, 78.

Lower class limit=2

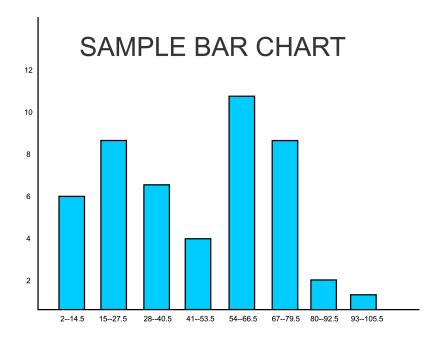Higher class limit = 98

Range= highest class - lowest class

N=50

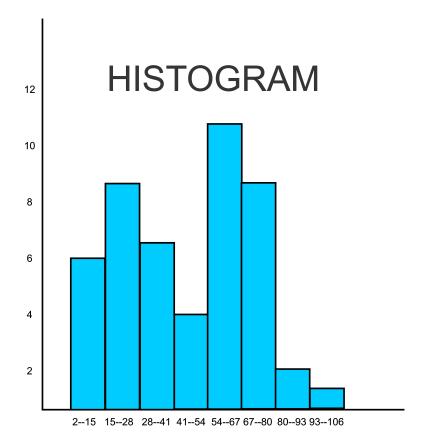$$Class = \sqrt{n} \quad = \sqrt{50} \quad = 7.07 = 7$$

Range = 98-2= 96 $Class \quad width = \dfrac{range}{class}$

$$Class \quad width = \dfrac{96}{7} = 13.7 = 13$$

Class Boundaries	Frequency
2--14.5	6
15--27.5	9
28--40.5	7
41--53.5	4
54--66.5	12
67--79.5	9
80--92.5	3
93--105.5	1

SAMPLE BAR CHART

Class Boundaries	Frequency
2--15	6
15--28	9
28--41	7
41--54	4
54--67	12
67--80	9
80--93	3
93--106	1

HISTOGRAM

End of the Paper