

Seat No. : _____

ML-105

July-2021

B.Sc., Sem.-I

101 : Statistics

(Descriptive Statistics – I)

Time : 2 Hours]

[Max. Marks : 50

- Instructions :** (1) All Questions in **Section I** carry equal marks.
(2) Attempt any **Three** questions in **Section I**.
(3) Question – **9** in **Section II** is **Compulsory**.

Section – I

1. (A) Explain the guiding rules of tabulation. 7
(B) Write difference between primary data and secondary data. 7
2. (A) Define the terms : 7
(i) Variable and attribute
(ii) Discrete variable and continuous variable
(B) Define the terms : 7
(i) Numerical data
(ii) Qualitative data
(iii) Chronological data
3. (A) Explain in detail different methods of collecting primary data. 7
(B) Write a detail notes on measurement of scales. 7

4. (A) Describe the different measures of central tendency of a frequency distribution with their merits and demerits. 7
 (B) Write a note on partition values. 7
5. (A) State all the three properties of arithmetic mean. 7
 (B) Prove any two properties of arithmetic mean. 7
6. (A) Explain the importance of graphs in statistics. State the limitations of graphs. 7
 (B) Write a note on two dimensional diagrams. 7
7. (A) Describe the methods of drawing a frequency polygon and a frequency curve of frequency distribution with equal class length. 7
 (B) Describe the method of drawing a histogram where class lengths of class of the frequency distributions are : (i) equal and (ii) unequal 7
8. (A) State types of measures of dispersion and write a short note on quartile deviation. 7
 (B) Explain in detail skewness and kurtosis. 7

Section – II

9. MCQs. (Attempt any **Eight**) 8
- (1) Measure of central tendency is also known as
 (a) measures of location (b) measures of life
 (c) measures of linear relation (d) measures of climate
- (2) Statistics was formally introduced in Encyclopedia Britannica in _____.
 (a) 1797 (b) 1897
 (c) 1697 (d) 1997

- (3) A quantity whose value varies from unit to unit of a population or sample is called a _____.
(a) variable (b) attribute
(c) quality (d) None of the above
- (4) The name chronological data is derived from the _____ words 'chromo' means 'time'.
(a) Greek (b) Latin
(c) Arabic (d) English
- (5) If a characteristics associated with units of a population or sample is not measurable but can be described then it is called as
(a) variable (b) attribute
(c) quality (d) None of the above
- (6) Nominal scales could simply be called _____.
(a) labels (b) levels
(c) identity (d) None of the above
- (7) _____ is the example of the ratio scale.
(a) Gender (b) Likert scale
(c) Weight of an object (d) None of the above
- (8) Multiple bar diagram is used when data is related with _____.
(a) mutually related matters
(b) exclusive matters
(c) more than one mutually related matters
(d) None of the above
- (9) A pie diagram is also known as _____.
(a) simple divided diagram (b) percentage divided diagram
(c) bar diagram (d) sector diagram

- (10) In pie diagram we take the total volume of data equal to _____.
(a) 630 (b) 360
(c) 36 (d) 60
- (11) There are _____ types of absolute measures.
(a) 3 (b) 4
(c) 5 (d) 6
- (12) First central moment is always _____.
(a) 3 (b) 2
(c) 1 (d) 0
- (13) If $\beta_2 > 3$ and $\gamma_2 > 0$ then curve is _____.
(a) Leptokurtic (b) Mesokurtic
(c) Platykurtic (d) None of the above
- (14) The sum of deviations of a set of values from their arithmetic mean is
(a) 0 (b) 1
(c) 2 (d) None of the above
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