



Biyani Girls College
I Internal Examination 2019-20
B.Com. (I Year) Hons.
Subject-Advanced Business Statistics & Mathematics

Time: 1.30 Hrs.

Set:A

MM: 40

[I] Multiple Choice Questions

(10*1=10)

- 1) The formula to find out a & b in the method of least square is
(a) $a = \frac{\sum Y}{N}$ $b = \frac{\sum XY}{\sum X^2}$ (b) $a = \frac{\sum X}{N}$ $b = \frac{\sum XY}{\sum Y^2}$
(c) $a = \frac{\sum XY}{N}$ $b = \frac{\sum XY}{\sum X^2 Y^2}$ (d) None of these
- 2) What is the equation trend value in least square method?
(a) $Y_a = a + bX$ (b) $Y_c = b + aX$ (c) $Y_c = a + bX$ (d) None of these
- 3) How do we show original data & trend line in semi average method?
(a) Original _ trend _ (b) Original _ trend _ (c) Original _ trend (d) None of these
- 4) In semi average method, data is divided into
(a) 4 Parts (b) 1 Part (c) 2 Parts (d) None of these
- 5) Which is the time series model
(a) $O = T + S + C + I$ (b) $O = T - S - C - I$ (c) $O = T + S - C - I$ (d) None of these
- 6) What does law of inertia of large number states
(a) The smaller the data the more accurate the result
(b) The larger the data the more states the result
(c) No relation between data & result
(d) None of these
- 7) Example of random sampling
(a) Lottery (b) Ticket Method (c) Both (1)&(2) (d) None of these
- 8) What is the indication of Null hypothesis
(a) H_1 (b) H_N (c) H_0 (d) None of these
- 9) What is the indication of alternative hypothesis
(a) H_0 (b) H_X (c) H_a (d) None of these
- 10) Sample chosen should be
(a) Representative of the universe (b) Should adequate in size
(c) Both (1)&(2) (d) None of these

[II] Long Questions

(3*10=30)

- 1) What do you mean by Sampling? Explain the essentials of a good sample.

- 2) The following table shows the distribution of the temper between nature of brothers and sisters:

Brothers	Sisters		
	Good Natured	Sullen	Total
Good Natured	1040	180	1220
Sullen	160	120	280
Total	1200	300	1500

Calculate association between nature of brothers and sisters.

- 3) Fit a trend line to the following data using least square method

Year	1999	2000	2001	2002	2003	2004
Production	20	25	27	35	38	41