

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BCom DEGREE EXAMINATION MAY 2023
(Second Semester)

Branch – COMMERCE (BUSINESS PROCESS SERVICE)

STATISTICS FOR BUSINESS PROCESS

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

- 1 Which of the following is one dimensional diagram?
(i) bar diagram (ii) pie diagram
(iii) cylinder (iv) histogram
- 2 Which one of the following is not a measure of central tendency?
(i) mean (ii) median
(iii) mode (iv) range
- 3 The arithmetic mean of two regression coefficient is always
(i) equal to correlation coefficient
(ii) not equal to correlation coefficient
(iii) less than correlation coefficient
(iv) greater than correlation coefficient
- 4 Two events are said to be independent if
(i) each outcome has equal chance of occurrence
(ii) there is no common point in between them
(iii) one does not affect the occurrence of the other
(iv) both the events have only one point
- 5 Range function in MS Excel is
(i) range (Min,Max) (ii) range (MIN,MAX)
(iii) RANGE (MIN,MAX) (iv) Range (MIN,MAX)

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 (a) Write the need of statistics in business field.
OR
(b) State the sources of secondary data collection.
OR
- 7 (a) Find geometric mean to the data given below:
45, 60, 48, 100, 65
OR
(b) Define Karl Pearson's co efficient of skewness.
- 8 (a) Write a short note on scatter diagram.
OR
(b) State the properties of regression co-efficients.
- 9 (a) Find the probability of a leap - year contains 53 Mondays.
OR
(b) One card is selected at random from a standard pack of cards. Find the chance that it was either a king or a queen.

Cont...

- 10 (a) Explain the computational procedure to find arithmetic mean by using MS Excel
OR
(b) Explain the computational procedure to find Quartile Deviation by using MS Excel

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 6 = 30)

- 11 (a) Explain the various diagrammatical representations of statistical data.
OR
(b) Write the qualities of a good table.
- 12 (a) Find mean, median and mode to the data below:

Daily Income (in Rs):	100-120	120-140	140-160	160-180	180-200
Number of workers:	12	14	8	6	10

OR

- (b) Find standard deviation to the data below and also find the coefficient of variation.

sales	1-5	6-10	11-15	16-20
No. of days	1	2	3	4

- 13 (a) Find Karl Pearson's coefficient of correlation for the following data

Father's Height(in cm)	65	66	67	68	69	70	71
Son's Height (in cm)	67	68	66	69	72	72	69

OR

- (b) Find the two regression lines for the following data

x	7	4	8	6	5
y	6	5	9	8	2

- 14 (a) In a bolt factory, machines X,Y and Z manufacture respectively 25, 35 and 40 % of the total output. Of their output, 5, 4 and 2% respectively are defectives. One bolt is taken at random and it is found to be defective. Find the probability that it was manufactured by (i) Machine A or C (ii) Machine B.

OR

- (b) A lot contains 10 items of which 3 are defective. Three items are chosen at random from the lot one after the another. Find the chance that all the three are defective.

- 15 (a) What do you mean by Relative cell referencing and Absolute cell referencing in MS Excel?

OR

- (b) How is a Formula different from a Function in Excel?

Z-Z-Z

END