

Sr.No.465

Exam Code: 105403

Subject Code: 1404

Bachelor in Business Administration (BBA) - 3rd Sem.

(2119)

Paper : BBA-303

Statistics for Business

Time allowed : 3 hrs.

Max. Marks : 50

SECTION A

ALL SECTION ARE COMPULSORY STUDENT HAVE TO ATTEMPT 5 QUESTIONS IN ALL SELECTING 1 FROM EACH SECTION 5 QUESTION MAY BE ATTEMPT FROM ANY SECTION

Section A

Q1) (a) Find the value of x which makes the following product of matrices equal to I

$$\begin{bmatrix} 2 & 0 & 7 \\ 0 & 1 & 0 \\ 1 & 2 & 1 \end{bmatrix} \begin{bmatrix} -x & -14x & 7x \\ 0 & 1 & 1 \\ x & 4x & -2x \end{bmatrix}$$

(b) if $A = \begin{bmatrix} 2 & -1 & 3 \\ -3 & 2 & 0 \\ 5 & 1 & -1 \end{bmatrix}$ and $B = \begin{bmatrix} -3 & 2 & -1 \\ 0 & 5 & 2 \\ 1 & -2 & 1 \end{bmatrix}$ then find AB and BA What conclusion

you draw

(5+5)

Q2 Solve following system of equation using crammers rule

$$2x - y + z = 4$$

$$x + 3y + 2z = 12$$

$$3x + 2y + 3z = 16 \text{ find } x, y, z$$

(10)

Section B

Q3 What do you mean by sampling Discuss in detail various methods of sampling

(10)

Q4 Find the mean mode median of following data.

Monthly Rent in Rs	No. of families paying rent	Monthly Rent in Rs	No. of families paying rent
90-100	10	130-140	51
100-110	37	140-150	35
110-120	65	150-160	18
120-130	80	160-170	4

(10)

P.T.O

(2)

SECTION C

Q5 (a) What do you mean by correlation discuss various assumptions

(b) Calculate Spearman coefficient of correlation between marks assigned to 10 students by judges X and Y in a certain competitive test as shown below

S.No	1	2	3	4	5	6	7	8	9	10
Marks by judge X	52	53	42	60	45	41	37	38	25	27
Marks by Judge Y	65	68	43	38	77	48	35	30	25	50

(3+7)

Q6 (a) What do you mean by index numbers Discuss its utility

(b) Compute Laspeyres, Paasche, Fishers and Marshall edgeworth index numbers from following data

ITEM	BASE YEAR		CURRENT YEAR	
	PRICE	QUANTITY	PRICE	QUANTITY
A	5	25	6	30
B	3	8	4	10
C	2	10	3	8
D		4	3	5

(3+7)

Section D

Q7 Discuss in detail the properties of binomial and normal distributions

(10) (10)

Q8 (a) A urn contains 9 red, 7 white and 4 black balls A ball is drawn at random What is the probability that ball is (a) red or black (b) White or black (c) not red

(b) A pack of 50 tickets number 1 to 50 is well shuffled and then two tickets are drawn Find the probability that

i both the tickets have prime numbers

ii none of the tickets drawn has a prime number

(10)
