FYBCOM (COM) (07)   Seat No:-_____

Duration:- 2½hrs   517041223   **Marks:- 75**

Note:- A)All the questions are compulsory.
 B) Each question carries equal marks.
 C) Graph paper will be provided on demand.

[Q:1] (A) SELECT A PROPER ANSWER FROM GIVEN MULTIPLE CHOICE QUESTION. (ANY 8) 8M

1) Find the mode of 5,6,7,5,6,7,8,6,9. Z = _____ . (5,6,7)   (CO1,R)
2) Quartile divides the data in _____ parts. (3,4,5)   (CO1,R)
3) Rank Correlation is given by _____. (Chanakya, Marshal, Spearsmen)   (CO1 ,R)
4) If bxy = 0.4, byx = 0.5, then r = _____. (0.55, 0.66, 0.44)   (CO2,R)
5)_____ depends on the age of person and sum assured. (Bonus, Premium, Discount)(CO1,R)
6) _____ is given the formula of index number as $\sum P_1Q_o / \sum P_oQ_o$. (Fisher, Lespeyer, Paaches)(CO1,R)
7) The maximum outcomes of an experiment is called _____. (Sample space, Event, Probability)(CO1,R)
8) In _____ criteria we take minimum value of outcomes. (EMV,EOL,Minimin)   (CO2,R)
9) If Q3 is 50, Q1 is 30, then CQD will be _____. (0.25, 0.4, 0.6)   (CO1,R)
10) If the correlation between X and Y is 0.95 it is considered as _____. (Strong, Weak, Normal)(CO2,R)

[Q:1] (B) STATE WHEATER THE FOLLOWING STATEMENTS ARE TRUE OR FALSE. (ANY 7)   7 M

1) Mode means maximum frequency. (CO1,R)
2) Quartile Divides the data in 4 parts. (CO1,R)
3) Diffence between the Highest and Lowest observation is called Range. (CO1,R)
4) Bxy and Byx both are postive only. (CO1,R)
5) Insurance policy is good option to secure financial health for family. (CO1,R)
6) Base year is the latest year given in the data. (CO1,R)
7) In Probability, 3 coins has 8 outcomes. (CO1,R)
8) Course of actions are the project we have to select for business. (CO2,R)
9) Combine mean is not useful in day to day life. (CO1,R)
10) Fisher has given rank correlation formula. (CO2,R)

[Q:2] SOLVE THE FOLLOWING   **(8+7 = 15)**
A) Find the Mode of the following data. (CO1,R)

C. I.	0-20	20-40	40-60	60-80	80-100
F	5	6	8	7	4

B) Find the Median for the following data. (CO 1,R)

C.I.	0-10	10-20	20-30	30-40	40-50
F	3	4	6	5	2

OR

C) Find the Standard Deviation from the following data. (CO2 ,A)

C.I	0-20	20-40	40-60	60-80	80-100
F	2	3	6	5	4

D) Find the range and co-efficient of range of 15, 20, 18, 23, 25, 28. (CO1,R)

[Q:3] SOLVE THE FOLLOWING   **(8+7 = 15)**
A) Find the Karl Pearson's coefficient of correlation. (CO1 ,A)

X	5	6	8	7	4
Y	3	4	6	5	4

B) Find the two regression equations and find the value of x if y =10, and find the value of y when x is 15. (CO1 ,A)

X	4	6	8	10	12
Y	6	5	7	8	9

OR

C) If two dice are thrown at a time, find the probability of getting. (i) the sum of both is 9 (ii) both are equal (CO1,A)

D) Find the Best Course of Action using E.M.V. Criteria. (CO1,A)

State of Nature	Course of Action				Probability
	A1	A2	A3	A4	
S1	30	80	60	80	0.4
S2	50	70	70	20	0.3
S3	70	60	70	50	0.2
S4	80	40	50	30	0.1

[Q:4] SOLVE THE FOLLOWING

(8+7 = 15)

A) D)Find lespeyers , Paaches and fishers index numbers. (CO1 ,A)

Commordity	P_0	P_1	Q_0	Q_1
A	24	27	10	9
B	27	30	8	7
C	28	32	6	5
D	32	40	5	4

B) Find the Cost of living Index numbers. (CO1,R)

Commodity	I	W
A	119	40
B	123	60
C	113	70
D	115	30

OR

C) Mrs. Mishra wants to take a policy of Rs. 500000 as sum assured. The company is charging Rs. 54 per thousand less Rs. 3 Discount on abouve 300000 sum assured plus Rs. 2 on monthly premium charges. Calculate the premium paid by Mrs. Mishra if she took monthly plan. (CO1,R)

D) Find the current age of Mr. Deepak as on today if his date of birth was 02-09-2002.(CO1,R)

[Q:5] SHORT NOTES (ANY 3)

(5+5+5 = 15)

1)Types of Averages (CO1,2 ,R)
2) What is Index Numbers (CO1,2 ,R)
3) Scatter Diagram (CO1,R)
4) What is pay-off table (CO1,R)
5) Insurance and types of Insurance (CO1 ,R)

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