

Roll No.

Total No. of Pages : 2

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BBA (Sem.-3rd)

BUSINESS STATISTICS

Subject Code : BB-304 (2007 to 2011 Batch)

Paper ID : [C0216]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- SECTION-B contains SIX questions carrying TEN marks each and students has to attempt any FOUR questions.

SECTION-A**1. Write briefly :**

- State and Prove Additive law of probability.
- Discuss the properties of coefficient of correlation.
- Distinguish between Geometric and Harmonic mean.
- Why standard deviation is considered to be the best in comparison with other measures?
- State the empirical relation between mean, median and mode.
- What do you understand by Poisson distribution? What are its properties?
- Write a note on mean deviation. How it is different from quartile deviation?
- State subjective approach to probability.
- Write a note on independent and dependent events.
- Differentiate between correlation and regression.

SECTION-B

- The following table gives the distribution of monthly income of 600 families in a certain city.

Monthly Income	No. of families
Below 75	60
75-150	170
150-225	200
225-300	60
300-375	50
375-450	40
450 and more	20

Draw a 'less than' and a 'more than' ogive curve for the above data on the same graph and from these find the median income.

- From the following data calculate mode.

Variable (x) :	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency (f) :	5	6	8	12	15	5	3

- In a certain college, the students engage in various sports in the following proportions.

Football (F)	: 60% of all students
Basketball (B)	: 50% of all students
Both Football and Basketball	: 30% of all students

If a student is selected at random, what is the probability that he will:

- Play football or basketball
- Play neither sports?

- Write regression equations of x on y and y on x for the following data:

x :	45	48	50	55	65	70	75	72	80	85
y :	25	30	35	30	40	50	45	55	60	65

- Fit a Poisson distribution to the following data and calculate the theoretical frequencies.

x :	0	1	2	3	4
y :	123	59	14	3	1

- Calculate mean and standard deviation of the following data:

Value :	90-99	80-89	70-79	60-69	50-59	40-49	30-39
Frequency :	2	12	22	20	14	4	1