

5. Calculate Karl Pearson's coefficient of correlation from the following data and interpret its results :

Marks in English	Marks in History
35	40
30	27
28	35
29	26
13	24
45	40

Section—C

(Long Answer Type Questions)

Note : Attempt any *two* questions. Each question carries 10 marks.

6. From the following regression equations find $\bar{X}$, $\bar{Y}$, σ_x , σ_y and r :

$$3X - 2Y - 10 = 0$$

$$24X - 25Y + 145 = 0$$

7. (i) From a pack of 52 playing cards, all cards whose number are multiples of 3 are removed. A card is now drawn at random.

What is the probability that card drawn is :

- (a) a face card (King, Jack and Queen)

- (b) an even numbered red card.

- (ii) The probability that a boy will get a scholarship is 0.9 and that a girl will get is 0.8. What is the probability that at least one of them will get scholarship ?

8. What is a Hypothesis ? What are different steps in testing of Hypothesis ?

9. What is Sampling ? What are the different methods of doing sampling ? Write briefly about each.

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Roll No. 030243A

BBA-206(N)

B. B. A. (Second Semester)
EXAMINATION, May, 2019

(New Course)

Paper Sixth

BUSINESS STATISTICS

Time : Three Hours]

[Maximum Marks : 70

Note : Attempt questions from all Sections as directed.

Inst. : The candidates are required to answer only in serial order. If there are many parts of a question, answer them in continuation.

Section—A

(Short Answer Type Questions)

Note : All questions are compulsory. Each question carries 3 marks.

1. (A) Define Statistics.

- (B) What is Sampling ? Name the different methods.

- (C) Differentiate between Classification and Tabulation.

- (D) Distinguish between Type I and Type II errors.

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- (E) What is Skewness ?
- (F) Differentiate between Primary and Secondary Data.
- (G) The weight of 25 students of a class are given in the following table :

Weight (in kg)	Number of Students
65	8
66	6
67	4
68	4
69	3

- (H) In a single throw of a dice, find the probability that the number :
- (i) will be an even number.
- (ii) will not be an even number.
- (iii) will be an odd number.
- (I) What are the assumptions of Binomial Distribution ?
- (J) What do you understand by the term 'Dispersion' ?

Section—B

(Long Answer Type Questions)

Note : Attempt any two questions. Each question carries 10 marks.

2. Marks obtained by 40 students in a short assessment are given ahead, where a and b are two missing

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frequencies. If the mean of the data is 7.2 find ' a ' and ' b ' :

Marks	Number of Students
5	6
6	a
7	16
8	13
9	b

3. Calculate standard deviation for the following data :

Marks (more than)	Number of Students
0	100
10	90
20	75
30	50
40	20
50	10
60	5
70	0

4. What is meant by Correlation ? What is its significance ? Discuss briefly the different measures of correlation.

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