

11. (i) In a game, cards are thoroughly shuffled and distributed equally among four players. What is the probability that a specific player gets all the four kings?
- (ii) In how many ways can four differently coloured bulbs be arranged in a row?

12. Fit a straight line trend by the method of least squares to the following data :

Year	Production ('000 Qnt)
2001	80
2002	90
2003	92
2004	83
2005	94
2006	99
2007	92

Show the above series and the trend on the graph paper.

13. What do you mean by correlation? Distinguish between positive and negative correlation. What are different methods of studying correlation?

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(Printed Pages 4)

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Roll No.

BBA- II Sem.

18048

B.B.A. Examination, May 2018

Business Statistics

(BBA-204)

(New)

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt questions from **all** sections as per instructions.

Section-A

(Very Short Answer Questions)

Note : Attempt **all** the **five** questions of this section. Each question carries 3 marks. Very short answer is required not exceeding 75 words. $3 \times 5 = 15$

1. "Statistics are numerical statements of facts, but all facts numerically stated are not statistics". Discuss and point out briefly.

P.T.O.

90

2. If Mode and Arithmetic Mean are 30 and 33, calculate the Median in a moderately symmetrical distribution.
3. In which condition, there is only one regression line?
4. If $b_{xy} = -.4$ and $b_{yx} = -.9$, then find r .
5. What is meant by Standard Error of the Mean.

Section-B

(Short Answer Questions)

Note : Attempt **any two** questions out of the following **three** questions. Each question carries $7\frac{1}{2}$ marks. Short answer is required not exceeding 200 words.

$$7\frac{1}{2} \times 2 = 15$$

6. What is Sampling? What are the objectives of sampling? Distinguish between 'Parameter' and 'Statistics'.
7. When does a binomial distribution tends to become a Normal and Poisson distribution?

1804812

8. If Median, Mean and coefficient of Skewness for a certain distribution are respectively 80, 86 and 0.42. Calculate coefficient of variation and variance.

Section-C

(Detailed Answer Questions)

Note : This section contains **five** questions, attempt any **three** questions. Each question carries 15 marks. Answer is required in detail.

$$15 \times 3 = 45$$

9. The number of runs scored by two batsmen Sahbag and Dhoni in different innings is as follows :

Sahbag	12	115	6	73	7	19	119	36	84	29
Dhoni	47	12	76	42	4	51	37	48	13	0

Who is better run getter? Who is more consistent?

10. What do you mean by dispersion? How is it measured? Distinguish clearly between dispersion and skewness.

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P.T.O.

(89)

13. Calculate Karl Person's coefficient of correlation from the following data and interpret it :

Age of Husband (Year)	Age of Wife (Year)
25	20
26	22
27	24
28	25
30	26
32	27
35	31

NA-583

(4)

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Roll No.

Total Questions : 13] [Printed Pages : 4

18048

B.B.A. IInd Semester Examination, May-2019

BUSINESS STATISTICS

(BBA-204)

Time : 3 Hrs.] [M.M. : 75

Note :- Attempt all the Sections as per instructions.

Section-A

(Very Short Answer Type Questions)

Note :- Attempt all the five questions. Each question carries 3 marks.

1. Define Statistical Investigation.
2. Stratified Random Sampling.
3. Define the term Histogram and Frequency Polygon.

NA-583

(1)

Turn Over

4. In a moderately asymmetrical distribution, the values of mode and median are 32.1 and 35.4 respectively. Find the mean value.
5. Calculate G. M. from the following :
- X : 10, 110, 135, 120, 50, 59, 60, 7

Section-B

(Short Answer Type Questions)

Note :- This section contains three questions. Attempt any two questions. Each question carries 7½ marks.

6. What are the uses of coefficient of variation in Statistical Analysis ? Discuss.
7. Discuss the merits and demerits of Rank Correlation Coefficient.
8. (a) A card is drawn from a pack of cards. Find the probability of getting a queen or a diamond or a red card.
- (b) A bag contains 6 red and 4 green balls. Two balls are drawn blind folded once by one without replacement. What is probability that both will be of red colour ?

Section-C

(Long Answer Type Questions) 3×15=45

Note :- This section contains five questions. Attempt any three questions. Each question carries 15 marks.

9. Define Statistics. Discuss its application in the management of business enterprises. What are its limitations, if any ?
10. Define probability and explain the importance of this concept in statistics.
11. Define classification and explain in brief the various type of classifications.
12. Find out missing frequencies in the following incomplete distribution :

C.I.	0-10	10-20	20-30	30-40	40-50
<i>f</i>	3	?	20	12	?

The values of Median and Mode are 27 and 26 respectively.

(4)

12. What is meant by correlation? What is its significance in statistical analysis? Discuss briefly the different measures of correlation.

13. What do you understand by graphical representation? Discuss its advantages, disadvantages and various forms.

Price(Rs.)	17	18	19	20	21	22	23	24	25	26
Supply(kg.)	38	27	38	33	32	33	34	29	26	23

No. of Students	8	22	44	68	84	96	4
Marks(less than)	10	20	30	40	50	60	60 and over

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V

(20516)

BBA-II Sem.

Roll No.

18048

B.B.A. Examination, May 2016

BUSINESS STATISTICS

(BBA-204)

(New)

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt questions from all Sections as per instructions.

Section-A

(Very Short Answer Questions)

Attempt all the five questions of this Section.

Each question carries 3 marks. Very short answer is required not exceeding 75 words. $3 \times 5 = 15$

1. What is random sample? What are its various kinds?
2. Statistics is a science of counting. Explain.

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(2)

3. The median of the following observation arranged in the ascending order is 26. Find the value of x :
10, 12, 15, 17, $x+2$, $x+4$, 31, 33, 36, 42.

4. What is mean deviation? How is it calculated.

5. Find out the range and its coefficient of the following items :

-2, -3, -8, -7, -1, -20, -17.

Section-B

(Short Answer Questions)

This Section contains three questions, attempt any *two* questions. Each question carries $7\frac{1}{2}$ marks. Short answer is required not exceeding 200 words. $7\frac{1}{2} \times 2 = 15$

6. Find out coefficient of skewness by quartile measures :

Mid point	15	20	25	30	35	40
Frequencies	30	28	25	24	20	21

7. Explain clearly the limitations of Statistics.

8. Explain the concept of regression.

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Section-C

(Detailed Answer Questions)

This Section contains five questions, attempt any *three* questions. Each question carries 15 marks. Answer is required in detail. $15 \times 3 = 45$

9. Calculate Karl Pearson's coefficient of correlation between price and supply of a commodity from the following data :

Price(Rs.)	17	18	19	20	21	22	23	24	25	26
Supply(kg.)	38	27	38	33	32	33	34	29	26	33

10. Compute, Mean, Median and Mode from the following distribution :

Marks(less than)	10	20	30	40	50	60	60 and over
No. of Students	8	22	44	68	84	96	4

11. What are the various methods of collecting statistical data? Which of these is most reliable and why?

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13. Calculate Karl Pearson's coefficient of correlation between the age of husbands and wives from the following data :

Husband's age	32	35	27	38	25	40
Wife's age	28	32	26	35	24	38

F	C.I.
12	0-10
8	10-20
12	20-30
11	30-40
4	40-50

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BBA-II Sem.

Roll No.

18048

B. B. A. Examination, May 2017

BUSINESS STATISTICS

(BBA-204)

(New)

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt questions from all Sections as per instructions.

Section-A

(Very Short Answer Questions)

Attempt all the *five* questions of this Section.

Each question carries 3 marks. Very short answer is required not exceeding 75 words. $3 \times 5 = 15$

1. "Statistics is the science of averages." Explain.
2. Give the meaning and definition of classification.
3. From the following information, find out the range and its coefficient :
391, 384, 591, 407, 672, 522, 777, 733, 2828, 1490.

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(2)

4. Define probability.
5. Calculate mode, if arithmetic mean is 15.6 and median is 15.73.

Section-B

(Short Answer Questions)

This Section contains three questions, attempt any *two* questions. Each question carries $7\frac{1}{2}$ marks. Short answer is required not exceeding 200 words. $7\frac{1}{2} \times 2 = 15$

6. What do you understand by sampling? Discuss its role in economic analysis.
7. Explain the concepts of correlation and regression. How do they differ from each other?
8. Calculate the quartile deviation and its coefficient from the following table :

C.I.	F
10-20	3
20-30	5
30-40	15
40-50	10
50-60	4
60-70	2

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Section-C

(Detailed Answer Questions)

This Section contains five questions, attempt any *three* questions. Each question carries 15 marks. Answer is required in detail. $15 \times 3 = 45$

9. What do you understand by graphical presentation? Describe its advantages, disadvantages and various forms.
10. Define Statistics and discuss its nature and scope.
11. Distinguish between positive and negative correlation. Explain the interpretation of correlation with the help of Scatter diagrams.
12. Calculate Mean and Mode from the following data :

C.I.	F
0-10	12
10-20	8
20-30	15
30-40	11
40-50	4

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