BACHELOR OF BUSINESS ADMINISTRATION (CBCS - 2018 COURSE)
B.B.A. Sem-II : WINTER : 2021
SUBJECT: BUSINESS STATISTICS

Day : Friday
Date : 21-01-2022 **W-18819-2021** Time : 02:00 PM-05:00 PM
Max. Marks: 60

N.B.:

1) Attempt **ANY THREE** questions from Section – I and **ANY TWO** questions from Section – II.
2) Answers to both the sections should be written in **SAME** answer book.
3) Figures to the right indicate **FULL** marks.
4) Use of non-programmable **CALCULATOR** is allowed.

SECTION – I

Q.1 **a)** Define 'Attribute' and discuss the importance of study of attributes. **[06]**

b) Pune Municipal Corporation collected the following amount of tax from roaming traders in a busy market: **[06]**

Amount of Tax (₹)	25	50	75	100	200	300
No. of traders	135	120	90	60	55	40

From the above data of tax collection calculate Quartile Deviation (Q. D).

Q.2 **a)** Find D_7 and P_{42} for the data series given below: **[06]**

Weekly wages (in 'oo ₹)	75 – 80	80 – 85	85 – 90	90 – 95	95 – 100
No. of workers (f)	9	12	15	11	20

b) Describe various methods for studying of Correlation. **[06]**

Q.3 **a)** Four cards are drawn at random from a pack of 52 cards, find the probability that: **[06]**

i) Two are red and two are black.
ii) They are a King, a Queen, a Jack and an Ace.

b) Discuss Absolute and Relative Measures of Dispersion. **[06]**

Q.4 **a)** If N = 1482, (A) = 368, (B) = 343, (AB) = 35 then Find Yule's coefficient of Association. **[06]**

b) Differentiate: Regression and Correlation. **[06]**

Q.5 Write short notes on **ANY TWO** of the following: **[12]**

a) Measures of Central Tendency

b) Baye's Theorem

c) Mean Deviation

P.T.O.

SECTION – II

Q.6 Three urns contains colored balls. The first Urn consist 3 red, 2 white and 2 blue balls. Second urn contains 3 red, 4 white and 2 blue balls and 3rd Urn contains 5 red, 2 white and 3 blue balls. An Urn selected randomly and a ball is selected from it. Find the probability that the white ball is taken from first Urn. **[12]**

Q.7 Calculate Karl Pearson's coefficient of correlation between expenditure on advertising and sales from the data given below; **[12]**

Advertisement expenses('000 ₹)	39	65	62	90	82	75	25	98	36	78
Sales (lakh in ₹)	47	53	58	86	62	68	60	91	51	84

Q.8 Compute the Variance and Standard Deviation for the following data: **[12]**

Height in inches	58	59	60	61	62	63	64	65	66
No. of students	15	20	32	35	33	22	22	10	8

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