

**B. B. A. DEGREE END SEMESTER EXAMINATION – MARCH/APRIL 2018****SEMESTER – 2: BACHELOR OF BUSINESS ADMINISTRATION (BBA)****COURSE: 16U2CRBBA7: BUSINESS STATISTICS***(Common for Regular 2017 / Supplementary - Improvement 2016 Admission)*

Time: Three Hours

Max. Marks: 75

**SECTION - A**Answer **all** questions. Each question carries **1** mark

1. Define statistics
2. What do you mean by primary data?
3. What is cumulative frequency distribution?
4. What is arithmetic mean?
5. What is Range
6. Define time series.

(1 x 6 = 6)

**SECTION - B**Answer any **seven** questions. Each question carries **2** marks

7. State the steps in conducting a survey?
8. What do you mean by classification of data?
9. Draw a blank table to show the number of candidates, sex wise, appearing in the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year examinations of a University in the faculties of Art, Science and Commerce in a certain year.
10. Average rain fall of a city from Monday to Saturday is 0.3 inch. Due to heavy rain fall on Sunday, the average rain fall for the week increase to 0.5 inch. What was the rain fall on Sunday?
11. What you mean by 'Central Tendency'?
12. Calculate the mean and median from the data given below.

Daily wages (in Rs.)	5	10	15	20	25	30	35	40	45
No. of persons	20	43	75	67	72	45	39	9	8
13. What are the merits of quartile deviation
14. What is coefficient of mean deviation?
15. What is the standard deviation?
16. Mention two uses of correlation in business.

(2 x 7 = 14)

**SECTION - C**Answer any **five** questions. Each question carries **5** marks.

17. What are the merits and demerits of Karl Pearson's coefficient of correlation?
18. What are the uses of Regression Analysis?
19. What is time series? Discuss the uses of time series.
20. Explain the functions of Statistics.

21. The marks obtained by 20 students in Commerce and Economics are given below. The first figure in brackets indicates the marks in Commerce and the second marks in Economics.  
(14,12), (0,2), (1,5), (7,3), (15,9), (2,8), (12,18) (9,11), (5,3), (17,13) (19,18), (11,7), (10,13), (13,16), (16,14), (6,10), (4,1), (11,14), (8,3), (9,15)

Prepare a two way table taking the magnitude of each class intervals as 4 marks. The first being equal to 0 and less than 4.

22. Calculate the arithmetic average by direct method and short cut method from the following data.

Family	A	B	C	D	E	F	G	H	I	J
Weekly income	850	700	100	750	5000	80	420	2500	400	360

23. From the data given below, calculate quartile deviation and its coefficient.

Class	15-20	20-25	25-30	30-35	35-40	40-45
Frequency	12	40	86	60	52	30

24. Calculate coefficient of correlation from the following data

X :	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Y :	30,000	50,000	60,000	80,000	1,00,000	1,10,000	1,30,000

(5 x 5 = 25)

#### SECTION - D

Answer any **two** questions. Each question carries **15** marks

25. Distinguish between classification and tabulation. Mention the requisites of a good statistical table.
26. Calculate simple and weighted arithmetic averages from the following data and comment on them.

Designation	Weekly salaries (in Rs)	Strength of cadre
Class I Officers	1500	10
Class II Officers	800	20
Subordinate Staff	500	70
Clerical staff	250	100
Lower Staff	100	150

27. Describe the ratio to moving average and the ratio to trend methods of estimating seasonal indices.
28. Obtain the equations of the two lines of regression for the data given below.

X :	1	2	3	4	5	6	7	8	9
Y :	9	8	10	12	11	13	14	16	15

(15 x 2 = 30)

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