B.COM DEGREE END SEMESTER EXAMINATION MARCH 2017
SEMESTER – 2: COMMERCE (CORE COURSE)
COURSE: **15U2CRCOM4 –: QUANTITATIVE TECHNIQUES FOR BUSINESS RESEARCH**

(*Common for Regular 2016 admission and Supplementary 2015 admission*)

Time: Three Hours   Max. Marks: 75

SECTION A

I.   Answer **all** the questions. Each question carries 2 Marks.

1. What is meant by Descriptive research?
2. What is spurious correlation?
3. What is a Research Report?
4. Define Research.
5. What do you understand by Mutually Exclusive Events?
6. Point out the purpose of Graphs.
7. What is Inferential Analysis?
8. What is sampling error?
9. What is Tabulation?
10. What is Universe?

(2 x 10 = 20)

SECTION B

II.   Answer **any five** Questions. Each Question carries 5 Marks.

11. Two unbiased dice are thrown. Find the probability that (1)both the dice show the same number (2)one dice shows five (3) first dice shows five (4) the total of the numbers on the dice is eight (5) total of the numbers on the dice is greater than eight (6) a sum of 10.

12. From the following data, obtain the two regression equations.

Sales	:	91	97	108	121	67	124	51	73	111	57
Purchases	:	71	75	69	97	70	91	39	61	80	47

13. Differentiate between a Questionnaire and an Interview schedule.

14. Calculate Karl Pearson's Coefficient of Correlation from the following data using 44 and 26 respectively as the origin of x and Y.

X : 43 44 46 40 44 42 45 42 38 40 42 57
Y : 29 31 19 18 19 27 27 29 41 30 26 10

15. How many words can be formed with the letters of word 'ASSASSINATION'?

16. What is the probability of getting 3 white balls in a draw of 3 balls from a box containing 5 white and 4 black balls?

17. What are the characteristics of a good sample?

$(5 \times 5 = 25)$

SECTION C

III. Answer **any three** Questions. Each Question carries 10 Marks.

18. In the study of regression equations, following values were obtained.
    regression coefficient of y on x = .25, r = .42, S.D of y = 4. Find S.D of x.

19. Draw a pie diagram for the following data on the basis of Govt. Expenditure.

Agriculture	:	25.5%
Education	:	22.7%
industry	:	15.3%
transport	:	9.8%
communication	:	16.2%
social service	:	10.5%

20. Find the rank correlation coefficient between poverty and overcrowding from the table below:

Town	:	A	B	C	D	E	F	G	H	I	J
Poverty	:	17	13	15	16	6	11	14	9	7	12
Overcrowding	:	36	46	35	24	12	18	27	22	2	8

21. What are the differences between probability and non-probability sampling probability?

22. Explain the contents of a Research Report.

$(10 \times 3 = 30)$

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