**SUBJECT CODE: 15CM/PC/BR34**

**M.Com. DEGREE EXAMINATION NOVEMBER 2018**
**COMMERCE**
**THIRD SEMESTER**

COURSE    :    CORE
PAPER     :    BUSINESS RESEARCH
TIME      :    3 HOURS                                        MAX. MARKS: 100

**SECTION – A**

**ANSWER ANY SIX QUESTIONS:**                                        **(6x10=60)**

1. What is a research design? What are the various steps involved in its preparation?
2. Distinguish between probability sampling and non-probability sampling.
3. What is meant by measurement? Describe its components.
4. Describe the different types of scaling techniques.

5. The following data relate to the results obtained by 4 investigators investigating some common problem. Each investigator has taken a sample of 6 items. Do these results significantly vary from each other?

| Investigation Results | | | | | | |
|---|---|---|---|---|---|---|
| A | 66 | 82 | 60 | 50 | 60 | 90 |
| B | 42 | 66 | 30 | 60 | 36 | 48 |
| C | 54 | 90 | 60 | 81 | 60 | 51 |
| D | 78 | 54 | 60 | 42 | 71 | 49 |

6. Find correlation co-efficient between the sales and expenses from the data given below:

| Firm | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Sales (in lakh) | 50 | 50 | 55 | 60 | 65 | 65 | 65 | 60 | 60 | 50 |
| Expenses (in lakh) | 11 | 13 | 14 | 16 | 16 | 15 | 15 | 14 | 13 | 13 |

7. A study of railway reservations is made for 10 days in the winter season to know if the number of daily reservations is uniform or not. From the following results, find out whether the distribution is uniform.

| Days | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| No. of Reservations | 65 | 80 | 100 | 98 | 75 | 80 | 82 | 70 | 60 | 90 |

8. A survey indicates that over 50% of the persons who enter a store are non-buyers. A departmental store, however, finds that in its sample of 100 persons entering the store 41 made no purchases. Test at 5% level of significance the hypothesis that the percentage of non-buyers is 50.

## SECTION – B

**ANSWER ANY TWO QUESTIONS:** (2x20=40)

9. What do you mean by research? Explain its significance in modern times.
10. Describe the different types of Research Report?

11. The following data give the test scores and sales made by nine salesmen during the last one year:

| Test scores | 14 | 19 | 24 | 21 | 26 | 22 | 15 | 20 | 19 |
|-------------|----|----|----|----|----|----|----|----|----|
| Sales( Rs.000) | 31 | 36 | 48 | 37 | 50 | 45 | 33 | 41 | 39 |

Obtain
   a) the regression equation of test scores on sales
   b) the regression equation of sales on the test scores

12. A newspaper publisher, trying to pinpoint his market's characteristics, wondered whether newspaper readership in the community is related to reader's educational achievement. A survey questioned adults in the area on their level of education and their frequencies of readership. The results are shown in the following table:

| Level of Educational Achievement | | | | | |
|---|---|---|---|---|---|
| Frequency of readership | Post-graduate | Graduate | High school | Middle | Total |
| Never | 10 | 17 | 11 | 21 | 59 |
| Sometimes | 12 | 23 | 08 | 05 | 48 |
| Morning or evening | 35 | 38 | 16 | 07 | 96 |
| Both editions | 28 | 19 | 06 | 13 | 66 |
| **Total** | **85** | **97** | **41** | **46** | **269** |

At the 0.01 significance level, does the frequency of newspaper readership in the community differ according to the reader's level of education?

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