

M.Com. DEGREE EXAMINATION NOVEMBER 2017
COMMERCE
THIRD SEMESTER

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

SECTION – A

ANSWER ANY SIX QUESTIONS: (6x10=60)

- 1) Briefly describe the different steps involved in a research process.
- 2) What is research problem? Define the main issues which should receive the attention of the researcher in formulating the research problem. Give suitable example to elucidate your points.
- 3) A) What do you mean by Sample Design?
B) Under what circumstances would you recommend:
 - a) A Probability Sample?
 - b) A Non Probability Sample?
 - c) A Cluster Sample?
- 4) What are the classification of measurement Scales? Explain with examples.
- 5) Two salesmen A and B are working in a certain district. From a sample survey conducted by the Head Office, the following results were obtained. State whether there is any significant difference in the average sales between the two salesmen:

Particulars	District A	District B
No. of Sales	20	18
Average Sales (Rs in Thousands)	170	205
Standard Deviation (Rs. in Thousands)	20	25

- 6) a) A sample of 900 items has mean of 3.4 and standard deviation of 2.61. Can the sample be regarded as drawn from a population with mean of 3.25 at 5 % level of significance?
b) Distinguish between : 1) Type I Error and Type II Error 2) One tailed test and Two tailed Test.

- 7) Time taken by workers in performing a job are given below:

Method I	20	16	26	27	23	22	
Method II	27	33	42	35	32	34	38

Test whether there is any significant difference between the variances of time distribution. (Table value F at 5% level for $ndf=6,5 =4.28$)

- 8) Genetic theory states that children having one parent of blood type A and the other of blood type B will always be of one of three types, A , AB, B and that the proportion of three types will on be an average be as 1:2:2. A report states that out of 300 children having one A parent and B parent, 30 percent were found to be type A, 45 percent type AB and remainder type B. Test the hypothesis by Chi - Square test.

SECTION – B

ANSWER ANY TWO QUESTIONS:

(2x20=40)

9) Give your understanding of a good research design. Is single research design suitable in all research studies? If not, why?

10) Describe in brief, the layout of a research report, covering all relevant points.

11) The vice president of a garment company wants to determine whether sales of the company's brand of jeans is independent of age group. He has appointed a marketing researcher for this purpose. This marketing researcher has taken a random sample of 703 consumers who have purchased jeans. The researcher conducted survey for three brands of the jeans, namely Brand 1, Brand 2, Brand 3. The researcher has also divided the age groups into four categories: 15 to 25, 26 to 35, 36 to 45, and 46 to 55. The observations of the researcher are given below:

Age/ Brand	Brand 1	Brand 2	Brand 3	Row Total
15 - 25	65	75	72	212
26 - 35	60	40	64	164
36 - 45	45	52	50	147
46 - 55	55	65	60	180
Column total	225	232	246	703

Determine whether brand preference is independent of age group. Use chi -square to test at 5% level of significance.

12) A company which produces stationary items wants to diversify into the photocopy paper manufacturing business. The company has decided to first test market the product in three areas termed as the north area, central area, and the south area. The company takes a random sample of five salesmen S1, S2, S3, S4 and S5 for this purpose. the sales volume generated by these five sales men (in thousand rupees) and total sales in different regions is given below:

Region / Salesmen	S1	S2	S3	S4	S5	Region's Total
North	24	30	26	23	32	135
Central	22	32	27	25	31	137
South	23	28	25	22	32	130
Sales men's Total	69	90	78	70	95	402

Use a randomized block design analysis to examine:

- 1) Whether there salesmen significantly differ in performance?
- 2) Whether there is a significant difference in terms of sales capacity between the regions?

Take 95% as confidence level for testing the hypotheses.
