

M.Com. DEGREE EXAMINATION NOVEMBER 2016  
COMMERCE  
THIRD SEMESTER

COURSE : CORE  
PAPER : BUSINESS RESEARCH  
TIME : 3 HOURS

MAX. MARKS: 100

SECTION – A

ANSWER ANY SIX QUESTIONS:

(6x10=60)

1. Describe the Research process by pointing out the major steps involved in it.
2. Discuss the Non-random sampling methods.
3. Explain the classifications of measurement scales.
4. Describe the different types of correlation.
5. A random sample of 200 tins of coconut oil gave an average weight of 4.95 kgs with a standard deviation of 0.21 kg. Do we accept the hypothesis of net weight 5 kgs per tin at 1% level?
6. In an anti malarial campaign in a certain area, quinine was administered to 812 persons out of a total population of 3,248. The number of fever cases is shown below:

Treatment	Fever	No Fever	Total
Quinine	20	792	812
No Quinine	220	2,216	2,436
Total	240	3,008	3,248

Discuss the usefulness of quinine in checking malaria.

7. Calculate Karl Pearson's co-efficient of correlation between expenditure on advertising and sales from the data given below:

Advertising Expenses('000s)	39	65	62	90	82	75	25	98	36	78
Sales(lakhs) (Rs.)	47	53	58	86	62	68	60	91	51	84

8. The life time of electric bulbs for a random sample of 10 from a large consignment gave the following data:

Item	1	2	3	4	5	6	7	8	9	10
Life in '000 hours	4.2	4.6	3.9	4.1	5.2	3.8	3.9	4.3	4.4	5.6

Can we accept hypothesis that the average life time of bulbs is 4,000 hours?

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

9. Describe the procedure for testing hypothesis.
10. Discuss the factors to be considered for making an effective research report.
11. 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 variance of time distribution.

12. The following table gives the aptitude test scores and productivity indices of 10 workers selected at random.

Aptitude scores(X)	60	62	65	70	72	48	53	73	65	82
Productivity index(Y)	68	60	62	80	85	40	52	62	60	81

Calculate the two regression equations and estimate (i) the productivity index of a worker whose test score is 92, and (ii) the test score of a worker whose productivity index is 75.

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