## MCOM DEGREE EXAMNATIONS - APRIL 2023 <br> COMMERCE <br> SECOND SEMESTER

| COURSE | : MAJOR CORE |
| :--- | :--- |
| PAPER | : BUSINESS RESEARCH |
| TIME | : 3 HOURS |

MAX. MARKS: 100
SECTION A

## Answer any SIX questions

1. What do you mean by research? Explain its significance in modern times.
2. What are the characteristic features of a hypothesis?
3. Describe the steps involved in sampling design.
4. Distinguish between probability and non-probability sampling.
5. What are the steps involved in research process?

6 . How can you avoid plagiarism in research study?
7. What should be the size of the sample if a simple random sample from a population of 4000 items is to be drawn to estimate the per cent defective within 2 per cent of the true value with 95.5 per cent probability? What would be the size of the sample if the population is assumed to be infinite in the given case?
8. In a population of 20 industrial units of the same size, all of which are experiencing excessive labor turnover problems. The past records show that the mean of the distribution of annual turnover is 320 employees, with a standard deviation of 75 employees. A sample of 5 of these industrial units is taken at random which gives a mean of annual turnover as 300 employees. Is the sample mean consistent with the population mean? Test at $5 \%$ level.

## SECTION B

## Answer any TWO questions

9. Discuss the different types of research.
10. "Scaling describes the procedures by which numbers are assigned to various degrees of opinion, attitude and other concepts." Discuss. Also point out the bases for scale classification.
11. The sales data of an item in six shops before and after a special promotional campaign are:

| Shops | A | B | C | D | E | F |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Before the promotional campaign | 53 | 28 | 31 | 48 | 50 | 42 |
| After the campaign | 58 | 29 | 30 | 55 | 56 | 45 |

Can the campaign be judged to be a success? Test at 5 per cent level of significance.
Use paired t -test as well as A-test.
12. A die is thrown 132 times with following results

| Number turned up | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 16 | 20 | 25 | 14 | 29 | 28 |

[^0]
[^0]:    Is the die unbiased?

