K26P 1242

Reg. No. : .....

Name : .....

Second Semester M.Com. Degree (C.B.C.S.S. – O.B.E. – Reg./Supple./ Imp.) Examination, April 2026
(2023 Admissions Onwards)
CMCOM02C06 – RESEARCH METHODOLOGY

Time : 3 Hours Max. Marks : 60

PART – A

Answer **any five** questions in this part. **Each** question carries **3** marks.

1. Distinguish between dependent and independent variables.
2. Explain Z test and its properties.
3. Investigate the significance of research design in research methodology.
4. What is a sample ? Differentiate between sampling and non-sampling errors.
5. Two groups have the following means :
   Group A = 10, Group B = 14
   Standard error (SE) of difference = 2
   Find the t-value.
6. What is meant by validity and reliability ? **(5×3=15)**

PART – B

Answer **any three** questions in this part. **Each** question carries **5** marks.

7. Who is a researcher ? Briefly explain the qualities of a researcher.
8. Discuss the criteria for selecting a research problem.
9. Explain the differences between parametric and non-parametric test.

P.T.O.

10. Two independent samples give the following data :

    Sample A : $n_1 = 12$, $S_1^2 = 25$

    Sample B : $n_2 = 10$, $S_2^2 = 9$

    Test at 5% level whether the population variances are equal.

11. Highlight the purpose of review of literature in social science research. **(3×5=15)**

PART – C

Answer **any three** questions in this part. **Each** question carries **10** marks.

12. Define hypothesis. Examine the procedure followed in testing hypothesis.

13. Define Research process. Explain the various stages involved in research process.

14. Evaluate the criteria for a good measurement in analysis of data.

15. The mean life of 100 bulbs produced by a company is computed to be 1570 hours with standard deviation of 120 hours. The company claims that the average life of bulbs produced by the company is 1600 hours using the level of significance of 0.05, is the claim acceptable ?

16. Apply the Kruskal-Wallis test to test whether there is a significant difference among the three groups :

    * Group A : 5, 7, 9

    * Group B : 6, 8, 10

    * Group C : 1, 2, 3

    Use 5% significance level. **(3×10=30)**