MCH34A — SCIENTIFIC RESEARCH METHODOLOGY

Time : Three hours   Maximum : 75 marks

SECTION A — (5 × 6 = 30 marks)

Answer ALL questions.

(a)   Describe the criteria of a good research.

Or

(b)   Explain the different steps involved in the patent process of a research work.

2.   (a)   Explain about the Soxhlet extraction technique.

Or

(b)   Describe the precautions need to take while disposing the explosive and radio active materials.

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3. (a) Write a note on precision and accuracy with an example.

Or

(b) Discuss about the normal distribution curves.

4. (a) Explain the significant figure and computation rules adopted in the statistical treatment.

Or

(b) Why t-test is used in linear regression analysis?

5. (a) How will you present the tables and figures in a research work?

Or

(b) What are the points kept in mind while presenting the references in a research work?

SECTION B — (3 × 15 = 45 marks)

Answer any THREE questions.

6. Explain about the primary and secondary sources of literature survey.

7. Explain the general rules and procedure used for the safety laboratory practice.

8. Discuss in detail about the various types of errors and the ways to minimize them.

9. Explain any five terms involved in the linear regression analysis.

10. Describe the general format of a good research thesis.

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