USN USN

20RMI17

# First Semester M.Tech. Degree Examination, Jan./Feb. 2021 Research Methodology and IPR

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

# Module-1

- 1 a. Discuss in brief on:
  - (i) Objectives of research
  - (ii) Types of research with a reference to:
    - (1) Descriptive versus analytical

(2) Quantitative versus qualitative

(10 Marks)

b. Explain with short note on the criteria of good research.

(10 Marks)

#### OR

- a. Explain with a brief note on any four conditions to be met while defining Research Problem.
  (10 Marks)
  - b. Discuss the necessary observations which help in development of hypothesis.

(10 Marks)

# Module-2

- a. What is research problem? Define the main issues, which should receive the attention of the researcher in formulating the research problem. (10 Marks)
  - b. Describe fully the techniques of defining research problem with example.

(10 Marks)

### OR

- 4 a. Summarize the literature review functions in research work and state the way in which it can help research. (08 Marks)
  - b. What are the steps involved to conduct literature review for research and explain each one briefly.

    (12 Marks)

#### Module-3

5 a. List and explain various involved in sample design.

(10 Marks)

b. With neat diagrams, explain different types of sample designs.

(10 Marks)

#### OR

6 a. Define measurement. List different types of errors in measurement.

(06 Marks)

- b. Write short notes on:
  - (i) Test of validity
  - (ii) Test of Reliability

(10 Marks)

c. Define data collection. Explain the interview method in detail.

(04 Marks)

#### Module-4

7 a. What is hypothesis? Explain characteristics of hypothesis in brief.

(10 Marks)

b. Explain hypothesis testing for difference between proportions.

(10 Marks)

OR

# 20RMI17

8 a. What are the limitations of the tests of hypothesis?

(08 Marks)

b. What is Chi-square testing? Briefly explain Chi-Square as a test for comparing variance.

(12 Marks)

# Module-5

9 a. Explain layout of the research report.

(10 Marks)

b. Mention emphasis topics of technical report. Write a general outline of a technical report.

(10 Marks)

#### OR

10 a. Write short notes on intellectual property system in India.

(06 Marks)

b. Summarize the salient provisional points in patents.

(10 Marks)

c. What is TRIPS agreement? Outline the issues and features of the TRIPS agreement.

(04 Marks)

\* \* \* \* \*