

Roll No. ....

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**CCMTE/D-23**

**24065**

RESEARCH METHODOLOGY AND IPR  
MT-CSE-20-15  
(CBCS)

Time : Three Hours]

[Maximum Marks : 75

**Note :** Attempt *Five* questions in all. Question No **1** is compulsory. In addition to compulsory question, attempt four more questions selecting *one* question from each Unit. All questions carry equal marks.

**(Compulsory Question)**

1. Answer any *five* of the following questions in brief :
  - (i) What should be the characteristics of a good research ?
  - (ii) Enumerate any *two* research techniques for data collection.
  - (iii) What is a research instrument and what makes a good research instrument ?
  - (iv) Describe any *two* ways for avoiding plagiarism.

- (v) List any *two* guidelines for the procedure for presentation and assessment by a review committee.
- (vi) Is there any difference between geographical indication and patent ? Justify.

### Unit I

2. (a) What is the meaning of research and research problem ? Enumerate and describe the scope and objectives of research problem.
- (b) What are the common errors/mistakes in selecting, formulating and clarifying a research problem ? What steps can be used to minimize errors ?
3. Distinguish between the following :
  - (a) Qualitative and Quantitative approaches for research
  - (b) Deductive and Inductive research approaches
  - (c) Data analysis and interpretation.

### Unit II

4. What are the key points to conducting a literature review ? Describe the approaches for effective literature studies.
5. (a) What should be the components/structure of a research proposal ?
- (b) What is the importance of research ethics ? What are the common ethical issues in research and publication ?

### Unit III

6. What is the basic concept of IPR and what are its objectives ? What are the types of intellectual property ? Give a brief description of each.
7. Give brief description of the following :
  - (a) Procedure for grant of a property right/patent to an inventor.
  - (b) Process of patenting and development.

### Unit IV

8. (a) What are the basic guidelines for patent licensing ?
- (b) What does the phrase 'Patent information' mean ? What are its advantages ?
9. (a) Describe and Illustrate Geographical Indications using any *three* examples. What rights does geographical indication provide ?
- (b) What are the Intellectual Property Rights in Software and how can they be protected ?