

M.Sc. (Electronics) (NEP Pattern) Semester-I
NEP-35 / PSCELT105 - Paper-V : Research Methodology

P. Pages : 2

Time : Three Hours



GUG/W/24/15093

Max. Marks : 80

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- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw well labeled diagrams if necessary.
 3. Use of calculator is allowed.

Either:

1. a) State and explain the need of scientific research. 8
- b) Explain the steps involved in research. 8

OR

- c) Explain the importance of literature survey while defining the research problem. 8
- d) With suitable example discuss the research method and research methodology. 8

Either:

2. a) What are the different methods of research? 8
- b) Discuss : 8
 - i) Brain storming and
 - ii) Case study with respect to research

OR

- c) Explain the importance of group discussion. 8
- d) Explain the need of sampling and questionnaire in research. 8

Either:

3. a) Explain the need of research design. 8
- b) Describe research design related to 8
 - i) Deduction
 - ii) Induction

OR

- c) Classify and discuss research design. 8
- d) How you will predict the problem? Explain. 8

Either:

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| 4. | a) | Describe the reporting research. | 8 |
| | b) | Discuss types of research reporting and their significance. | 8 |

OR

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|----|---|----------|
| c) | Explain an importance of publication ethics. | 8 |
| d) | What are the role of figures, tables and graphs in research publications. | 8 |

5. Solve the followings:

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|----|---|----------|
| a) | Differentiate research method and methodology. | 4 |
| b) | Discuss survey and case study method. | 4 |
| c) | Explain concepts related to research design. | 4 |
| d) | What is plagiarism related to publication ethics. | 4 |
