M. Tech.-I (Electrical -Power System) (CBCS -2015 Course):

SUMMER - 2019 SUBJECT: RESEARCH METHODOLOGY

Time: 11.00 AM TO 02.00 PM Day: Thursday S-2019-3389 Date: 16/05/2019 Max. Marks: 60 N.B: 1) All questions are **COMPUSLORY**. Figures to the right indicate FULL marks. 2) Answers to both the sections should be written in SAME answer books. 3) **SECTION-I** Classify research according to various levels, kinds etc. Compare research (10) **Q.1** methods V/s research methodology. Distinguish between following types of research. (10)**Q.1** Applied Vs Fundamental Descriptive Vs Analytical ii) Conceptual Vs Empirical Quantitative Vs Qualitative iv) iii) Explain the criteria for selection of the problem. State the need of defining a (10) **Q.2** problem. What are the precautions to be taken in identifying the problem? OR List the steps in defining a problem. What are the various ways of defining (10) **Q.2** problem? Explain the characteristics a problem statement should have. State the meaning and definition of sampling. Describe the functions of (10) Q.3 population and sampling. Summarize types of sampling design. OR State the characteristics of a good sample. List the advantages of sampling (10) **Q.3** technique. Discuss the types of errors in sampling. **SECTION-II** What are the important factors for selection and choice of statistical tool for (10) **Q.4** statistical analysis of data? Describe the following methods of statistical data analysis. Multivariate analysis Inferential analysis ii) i) OR Describe Interpretation of data with reference to following: (10)**Q.4** Importance of interpretation i) Technique of interpretation ii) Precaution for correct interpretation iii) Describe in detail the important steps involved in report writing. Brief the (10) Q.5 different sections that should be included in main text of the study. Explain the importance of the following in research paper and thesis writing. (10)Q.5 Illustration and tables i) Bibliography ii) Referencing and foot notes iii) (10)Write detailed notes on the following. Q.6 Technology transfer i) Copy right ii) iii) Royalty OR (10)Write detailed notes on the following: 0.6 Trade aspects of intellectual property rights i) Plagiarism tools ii) Reproducibility and accountability iii)