

Total No. of printed pages = 3

PG/1st Sem/PCE 101

2021

RESEARCH METHODOLOGY

Full Marks – 100

Time – Three hours

The figures in the margin indicate full marks
for the questions.

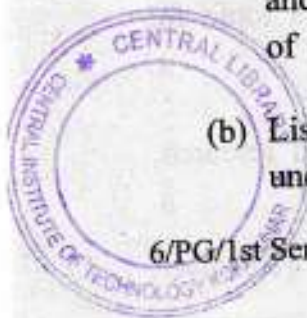
Answer any *five* questions.

1. (a) Define research. Which approaches are usually used to undertake research? 4
- (b) State different possible objectives of research. 6
- (c) What are the criteria on which a topic for research should be chosen? 4
- (d) List the characteristics of a good research. 6

[Turn over



2. (a) Describe various types of research with short examples. 10
- (b) What do you mean by 'research methods' and 'research methodology'? Explain with reference to a research if required to be undertaken to study climate change impact on water resource availability. 10
3. (a) As a researcher, what would you expect in your Institute for availing a good "Research ecosystem" to support and encourage your research activities? 8
- (b) What approach would you adopt to collect data that are essential for carrying out research in your area of interest and what would be the likely sources that you would explore to source data for your research? 12
4. (a) What is the usefulness of literature-review and what are the sources of different types of literature used in research? 12
- (b) List the major steps to be followed for undertaking good research. 8



5. (a) Explain the following adage : *Plan your work and work your plan.* 10
- (b) What do you mean by 'Research Design' ? What queries should your 'research design' address ? 10
6. (a) How would you organize the chapters of your MTech dissertation ? 8
- (b) State the important points to be followed in citing other researcher's work and referencing these in your dissertation. 6
- (c) What general guidelines would you follow in preparing a PowerPoint presentation of your research in a time slot of 10 minutes ? 6
7. (a) Define Intellectual Property (IP). Categorize different types of IP. Name the governing acts for protecting IP Rights in India. 6
- (b) What is a patent ? What are the benefits of patenting ? 6
- (c) What do you mean by ethics in research ? Why is checking plagiarism important for research and publication ? 8

