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)	Why is research important?	4
	b)	What are different objectives of research?	6
	c)	State the points that need to be remembered in choosing a topic for research.	4
	d)	What are characteristics of a good research?	6
2	a)	What do you mean by a "Research ecosystem"?	4
	b)	What approach would you adopt for collecting data for research involving a) Water resources engineering and b) socio-economic aspects of a region?	12
	c)	What do you mean by formulating a "hypothesis" for undertaking research?	4
3	a)	Define research.	4
	b)	Describe with short examples the major categories and subcategories of research types.	10
	c)	Differentiate between 'research methods' and 'research methodology'.	6
4	a)	How would you formulate a 'research problem'?	6
	b)	What are the major steps in undertaking research?	8
	c)	State the importance of literature-review and the sources of different types of literature for undertaking research?	6
5	a)	What do you mean by research design?	6
	b)	What queries should a research design attempt to	8

answer?

c) What steps should be followed in designing a research?   6

6 a) How would you organize the contents of your M.Tech thesis?   8

b) State the important points to be remembered in citing other's work from published literature and referencing these in your thesis?   6

c) What would you consider most in planning and preparing a PowerPoint presentation of your research in a time slot of 10 minutes?   6

7 a) What is an Intellectual Property (IP)? What are different types of IP? Name the governing acts for protecting IP Rights in India.   6

b) What do you mean by a patent? Why is patenting important?   6

c) What is plagiarism? Why is checking plagiarism important for research and publication?   8