#### M.TECH/ECE/1STSEM/ECEN 5103/2020

# RESEARCH METHODOLOGY & IPR (ECEN 5103)

Time Allotted: 3 hrs Full Marks: 70

Figures out of the right margin indicate full marks.

Candidates are required to answer Group A and <u>any 5 (five)</u> from Group B to E, taking <u>at least one</u> from each group.

Candidates are required to give answer in their own words as far as practicable.

## Group - A (Multiple Choice Type Questions)

1.	Choos	e the correct alternative for th	e following: $10 \times 1 = 10$	
	(i)	Questionnaire is a : (a) Research method (c) Tool for data collection	<ul><li>(b) Measurement technique</li><li>(d) Data analysis technique.</li></ul>	
	(ii)	Which of the following is not cov Rights? (a) Copyrights (c) Trade Marks	ered under the Intellectual Prope (b) Patents (d) Thesaurus.	rty
	(iii)	Research undertaken for knowle (a) Pure Research (c) Pilot study	edge sake is (b) Action Research (d) Survey.	
	(iv)	Research conducted to find solut (a) Fundamental Research (c) Survey	tion for an immediate problem is (b) Analytical Research (d) Action Research.	
	(v)	is the first step of Re(a) Formulation of a problem (c) Editing and Coding	-	
	(vi)	The first step in formulating a p (a) Statement of the problem (c) Measurement		

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(vii)	Survey is a Stud (a) Descriptive	y. (b) Fact finding
	(c) Analytical	(d) Systematic.
(viii)	works of authorship, inc	tellectual property law that protects original luding literary, dramatic, musical, and artistic ovels, movies, songs, computer software, and  (b) Copyright (d) Trademark.
(ix)	_	conferring a right for a set period, the sole om making, using, or selling an invention is a (b) Trademark (d) Title.
(x)	A comprehensive full Rep (a) Thesis (c) Abstract	oort of the research process is called (b) Summary Report (d) Article
		Group – B
2. (a)	Discuss the characteristic	s of research.
(b)	Briefly describe the steps	involved in the research process. $6 + 6 = 12$
3. (a)	What are the objectives of	f a research problem?
(b)	Identify and elaborate the	various components of a research proposal. $6 + 6 = 12$
	G	roup – C
4. (a)	Define the term 'Review review of literature.	of literature'. Enumerate the objectives of
(b)	Discuss the significance of review should be reported	
5. (a)	Discuss some ethical prine	6 + 6 = 12 ciples of research.
(b)	Mention some means of can be taken to avoid plag	ethical misconduct. List the precautions that
		6 + (2 + 4) = 12

### Group - D

- 6. (a) Mention the essential parts of a research proposal.
  - (b) Enumerate the criteria for evaluating the Research proposal.

6 + 6 = 12

- 7. (a) What is the format of a research paper?
  - (b) State the advantages of a research paper.

6 + 6 = 12

### Group - E

- 8. (a) What is a patent? Discuss the conditions required to be satisfied for an invention to be patentable.
  - (b) Mention few grounds for revocation of a patent.

$$(4+4)+4=12$$

- 9. (a) What is a copyright law? Mention the rights granted by copyright.
  - (b) Discuss three examples of copyright ownership.

6 + 6 = 12

Department & Section	Submission Link
ECE	https://classroom.google.com/c/MjlyMjc4MjMxMzM4/a/MjkxNDMyMzk4NDYz/details

