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Question Paper Code:BCSB31



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

MODEL QUESTION PAPER – I

M.TechIII Semester End Examinations (Regular), November – 2019

Regulations: R18

RESEARCH METHODOLOGY AND IPR

(Common to CSE, ECE, ME)

Time:3hours

Max. Marks:70

Answer ONE Question from each Unit

All Questions Carry Equal Marks

All parts of the question must be answered in one place only

UNIT – I

1. a) Discuss the Criteria Characteristics of a good research problem. [7M]
b) What are the approaches of investigation of solutions for research problem? [7M]
2. a) What are the necessary instrumentations to conduct the good research? [7M]
b) What are the various sources of primary and secondary data?. Discuss data collection [7M] and data analysis in the context of research.

UNIT – II

3. a) What are the effective literature studies approaches? [7M]
b) Compare good research with research ethics?[7M]
4. a) List the types. of plagiarism and explain ethical standard of research. [7M]
b) What are the techniques to approach literature studies? [7M]

UNIT – III

5. a) . Explain the significance of a research report and narrate the various steps involved in writing a report. [7M]
b) Write about the statement of findings and recommendations? [7M]
6. a) Explain in detail on Effective technical writing [7M]
b) Write about logical analysis of the subject matter? [7M]

UNIT – IV

7. a) Explain about different types of Intellectual property? [7M]
b) Explain why agencies are responsible for Intellectual Property registration with any two examples. [7M]

8. a) Derive an application for registration of different types of marks in PTO and an Indian IPR organization. [7M]
b) Describe how monopoly nature of owner is controlled by Patent Trademark Organization. [7M]

UNIT – V

9. a) Explain administration of Patent System [7M]
b) Compare patent rights and IPR [7M]
10. a) Explain the inventions that are patentable and not patentable in India. [7M]
b) what are the main provisions of Indian Patent Amendment Act-2005?. [7M]



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COURSE OBJECTIVES:

The course should enable the students to:

The course should enable the students to:	
I	Identify an appropriate research problem in their interesting domain.
II	Understand ethical issues
III	Understand the Preparation of a research project thesis report.
IV	Understand the law of patent and copyrights.
V	Understand the adequate knowledge on IPR

COURSE OUTCOMES (COs):

CO 1	Understand the research problem and research process.
CO 2	Understand research ethics
CO 3	Prepare a well -structured research paper and scientific presentation.
CO 4	Explore on various IPR components and process of filing
CO 5	Understand the adequate knowledge on patents and rights

COURSE LEARNING OUTCOMES (CLOs):

BCSB31.01	Understand the characteristics, objects of a good research problem.
BCSB31.02	Understand the selection, approaches of research problem..
BCSB31.03	Understand concepts of data collection, analysis.
BCSB31.04	Understand the principles of ethics and ethical issues in science and engineering.
BCSB31.05	Understand the analysis Plagiarism.
BCSB31.06	Understand research ethic concepts.
BCSB31.07	Understand significance, effective technical writing and report.
BCSB31.08	Paper developing a research proposal and report.
BCSB31.09	Understand writing a research report as per format.
BCSB31.10	Report presentation and assessment by a review committee..
BCSB31.11	Understand the techniques of interpretation, and making scientific presentation. .
BCSB31.12	Understand the patent laws, patent and searching process.
BCSB31.13	Understand International cooperation on intellectual property
BCSB31.14	Understand the patent laws, patent and searching process, patent data base.

BCSB31.15	Understand the patent rights and transfer of technology.
BCSB31.16	Study of new developments in IPR.

MAPPING OF SEMESTER END EXAMINATION TO COURSE LEARNING OUTCOMES:

SEE Question Number		Course Learning Outcomes	Course Outcomes	Blooms Taxonomy Level	
1	a	BCSB31.01	Discuss the Criteria Characteristics of a good research problem.	CO 1	Understand
	b	BCSB31.02	What are the approaches of investigation of solutions for research problem?.	CO 1	Understand
2	a	BCSB31.03	What are the necessary instrumentations to conduct the good research?	CO 1	Analyze
	b	BCSB31.04	What are the various sources of primary and secondary data?. Discuss data collection and data analysis in the context of research. ?	CO 1	Understand
3	a	BCSB31.05	What are the effective literature studies approaches?	CO 2	Understand
	b	BCSB31.06	Compare good research with research ethics?{	CO 2	Remember
4	a	BCSB31.07	List the types. of plagiarism and explain ethical standard of research.	CO 2	Understand
	b	BCSB31.08	What are the techniques to approach literature studies?	CO2	Understand
5	a	BCSB31.09	Explain in detail on Effective technical writing.	C03	Understand
	b	BCSB31.10	Write about the statement of findings and recommendations?	CO3	Understand
6	a	BCSB31.01	How to write report and how it is helpful to paper development	CO3	Remember
	b	BCSB31.02	Write about logical analysis of the subject matter?	CO3	Analyze
7	a	BCSB31.03	Explain about different types of Intellectual property?	CO4	Understand
	b	BCSB31.04	Explain why agencies are responsible for Intellectual Property registration with any two examples.	CO4	Understand
8	a	BCSB31.05	Derive an application for registration of different types of marks in PTO and an Indian IPR organization?	CO4	Understand
	b	BCSB31.06	How monopoly nature of owner is controlled by Patent Trademark Organization? ?????	CO4	Understand
9	a	BCSB31.07	Explain administration of Patent System	CO5	Understand
	b	BCSB31.08	Compare patent rights and IPR	CO5	Understand

10	a	BCSB31.09	Explain the inventions that are patentable and not patentable in India.	CO5	Understand
	b	BCSB31.10	what are the main provisions of Indian Patent Amendment Act-2005?.	CO5	Understand

Signature of Course Coordinator

HOD, ECE