



B.E DEGREE EXAMINATIONS: DEC 2022

(Regulation 2018)

Seventh Semester

ELECTRONICS AND COMMUNICATION ENGINEERING

U18ECE0064: Professional Ethics

COURSE OUTCOMES

CO1:	Analyze the various concepts and theories of engineering ethics
CO2:	Apply concepts of ethics and analyze its impact on society
CO3:	Apply and analyze the concept of safety and risk in the light of engineering ethics
CO4:	Analyze and evaluate the rights & responsibilities of engineers
CO5:	Analyze the ethical issues engineers are to consider while operating globally
CO6:	Applying and analyzing the responsibilities of engineers in management and leadership roles

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

(Answer not more than 40 words)

1.	Differentiate Micro-ethics and Macro-ethics.	CO1	[K ₂]
2.	List the criteria for achieving and sustaining professionalism.	CO1	[K ₁]
3.	Outline the conditions required to define a valid consent.	CO2	[K ₁]
4.	Summarize the importance of learning from the past, using the nuclear reactor accident at Three Mile Island, as an example.	CO2	[K ₂]
5.	Outline the factors for safety and risk.	CO3	[K ₁]
6.	Examine the need for Failure Mode and Effect Analysis.	CO3	[K ₂]
7.	Define Collegiality.	CO4	[K ₁]
8.	What do you mean by whistle blowing?	CO4	[K ₁]
9.	How do engineers justify their role and responsibility in weapons development?	CO5	[K ₂]
10.	Identify the qualities of moral leader. Give an example.	CO6	[K ₂]

Answer any FIVE Questions:-

PART B (5 x 16 = 80 Marks)

(Answer not more than 400 words)

11.	Explain three levels of moral development with respect to Kohlberg and Gilligan views. Write at least one statement for all levels of moral development, whether the action of Heinz is right or wrong with respect to Heinz dilemma.	16	CO1	[K ₂]
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12.	a)	Differentiate the engineering experiments from the scientific experiments.	8	CO2	[K ₂]
	b)	Elaborate the normative, conceptual and descriptive issues in the challenger case study.	8	CO2	[K ₂]
13.		Describe in detail about the Bhopal disaster case study. Write a short note on ethical relativism and ethical pluralism with respect to Bhopal Gas Tragedy.	16	CO3	[K ₄]
14.		Describe the needs for protection of intellectual property and explain the types of IPR in detail.	16	CO4	[K ₃]
15.		Explain the role of engineers as consultant.	16	CO6	[K ₃]
16.		Explain the global issues to be holistically solved by environmental ethics.	16	CO5	[K ₂]
