

Subject Name : **PROFESSIONAL ETHICS IN ENGINEERING**
Degree & Branch : **B.E – C.S.E.**
Staff in charge : **Dr. M Senthil Kumar & Ms. V. Muthamilselvi**

S.No	QUESTIONS	COMPETENCE	LEVEL
UNIT -1			
2 MARK QUESTIONS			
1.	Define Engineering Ethics and write the need to study Ethics.	REMEMBER	BTL-1
2.	Differentiate Moral and Ethics.	ANALYZE	BTL-4
3.	Identify the method used to solve an Ethical problem.	REMEMBER	BTL-1
4.	Distinguish Micro-ethics and Macro-ethics.	UNDERSTAND	BTL-2
5.	Classify the three types of Inquiry.	ANALYZE	BTL-4
6.	Compose the sorts of complexity and murkiness that may be involved in moral situations.	CREATE	BTL-6
7.	List the steps in confronting Moral Dilemmas.	REMEMBER	BTL-1
8.	Demonstrate the importance of Lawrence Kohlberg's and Carol Gilligan's theory.	APPLY	BTL-3
9.	Summarize the general criteria to become a Professional engineer.	EVALUATE	BTL-5
10.	Deduce the types of Theories about Morality.	EVALUATE	BTL-5
11.	Differentiate Hypothetical imperatives and Moral imperatives.	UNDERSTAND	BTL-2
12.	Quote Rawls's principles.	REMEMBER	BTL-1
13.	Plan the various tests required to evaluate the Ethical Theories.	CREATE	BTL-6

14.	Show the drawbacks of Utilitarianism.	APPLY	BTL-3
15.	Differentiate Ethical Relativism and Ethical Egoism.	UNDERSTAND	BTL-2
16.	Discuss on Ethical Pluralism.	UNDERSTAND	BTL-2
17.	Demonstrate the uses of Ethical Theories.	APPLY	BTL-3
18.	Define personal ethics and business ethics.	REMEMBER	BTL-1
19.	Define normative ethics.	REMEMBER	BTL-1
20.	Analyze descriptive ethics or non-normative ethics.	ANALYZE	BTL-4
16 MARK QUESTIONS:			
1	Describe Gilligan's & Kohlberg's Theory of moral development.	REMEMBER	BTL-1
2	Invent the skills needed to handle problems about moral issues in engineering ethics.	CREATE	BTL-6
3	Assess Gilligan view of moral development initiated by Kohlberg. What is moral autonomy?	EVALUATE	BTL-5
4	Illustrate the ethical theories for right action, self-interest, and duty ethics.	APPLY	BTL-3
5	Examine the uses of ethical theories.	REMEMBER	BTL-1
6	Describe the different models of professional roles.	REMEMBER	BTL-1
7	Discuss briefly on ethical theories of Right Action. Differentiate Act Utilitarian and Rule Utilitarian.	UNDERSTAND	BTL-2
8	Discuss the importance of Duty ethics and virtues in engineering profession.	UNDERSTAND	BTL-2
9	Analyze the role of Kohlberg theory in ethical judgment.	ANALYZE	BTL-4
10	Point out the scope & importance of Engineering ethics.	ANALYZE	BTL-4
UNIT -2			
2 MARK QUESTIONS			
1	Decide the main aspects that are virtual for combining Engineering works to make it suitable as Experiments.	EVALUATE	BTL-5
2	Summarize Engineering Experimentation.	UNDERSTAND	BTL-2
3	List the three conditions that are essential for a valid	REMEMBER	BTL-1

	informed consent.		
4	Identify the roles of codes.	REMEMBER	BTL-1
5	Define codes of Ethics.	REMEMBER	BTL-1
6	Show the limitations of codes.	APPLY	BTL-3
7	Classify Industrial Standards.	ANALYZE	BTL-4
8	Define control group.	REMEMBER	BTL-1
9	Criticize about informed consent.	EVALUATE	BTL-5
10	Point out the responsibilities for engineers to serving the society.	ANALYZE	BTL-4
11	Invent the uncertainties occur in the model design.	CREATE	BTL-6
12	Define accountability.	REMEMBER	BTL-1
13	Define relevant Information.	REMEMBER	BTL-1
14	Discuss that the codes support engineers.	UNDERSTAND	BTL-2
15	Show the Engineering societies that published codes of Ethics.	APPLY	BTL-3
16	Associate balanced outlook on Law.	UNDERSTAND	BTL-2
17	Summarize the suggestions given by the safety Engineers.	UNDERSTAND	BTL-2
18	Invent the reasons led to many repetitions of past mistakes.	CREATE	BTL-6
19	Demonstrate how do, the codes of ethics provide discipline among the engineers.	APPLY	BTL-3
20	Analyze the obligations of researchers.	ANALYZE	BTL-4
16 MARK QUESTIONS			
1	Describe professional responsibility and discuss the theories about virtues.	REMEMBER	BTL-1
2	Generalize Moral disagreement, moral absolutism, moral relativism and moral pluralism.	CREATE	BTL-6
3	Explain the theories pertaining to Moral Autonomy with specific reference to consensus and controversy.	EVALUATE	BTL-5

4	Where and how do moral problems arise in engineering?	REMEMBER	BTL-1
5	Discuss on the different roles played by the code of ethics set by professional societies.	UNDERSTAND	BTL-2
6	Summarize the code of ethics promulgated by Institute of Electrical and Electronics Engineers and discuss.	UNDERSTAND	BTL-2
7	Point out the importance of code of ethics. Give a brief account on four canons of code of ethics given by an international standard or associates.	ANALYZE	BTL-4
8	Explain how the Challenger disaster could have been avoided by engineers.	ANALYZE	BTL-4
9	Discover how Engineering projects differ from standard experimentation.	APPLY	BTL-3
10	Examine the roles played by the code of ethics set by professional societies.	REMEMBER	BTL-1
UNIT -3			
2 MARK QUESTIONS			
1	Define safety.	REMEMBER	BTL-1
2	Define Risk.	REMEMBER	BTL-1
3	Give the techniques that are available for reducing risk.	UNDERSTAND	BTL-2
4	Summarize the principles of strict Liability.	UNDERSTAND	BTL-2
5	Select the analytical methods used when testing is inappropriate.	ANALYZE	BTL-4
6	Define Risk Benefit Analysis.	REMEMBER	BTL-1
7	Tell what is meant by Prototype Testing.	REMEMBER	BTL-1
8	Predict the uncertainties in design.	UNDERSTAND	BTL-2
9	Discover any three conditions for safe exit.	APPLY	BTL-3
10	Show the problems faced by the Engineers regarding the public conceptions of safety.	APPLY	BTL-3
11	Demonstrate overestimation of Risk.	APPLY	BTL-3
12	Discuss about safe exit.	UNDERSTAND	BTL-2
13	Define strict Liability.	REMEMBER	BTL-1

14	Point out the quantitative measures in overcoming difficulty in accessing personal risk?	ANALYZE	BTL-4
15	Illustrate how scenario analysis is done?	ANALYZE	BTL-4
16	Recommend the factors influenced in acceptability of risk.	EVALUATE	BTL-5
17	Define Disaster.	REMEMBER	BTL-1
18	Deduce the drawbacks that are involved in the definition of Lawrence on safety.	EVALUATE	BTL-5
19	Generalize acceptability of risks.	CREATE	BTL-6
20	Invent the reasons for the inadequacies in knowledge of risks.	CREATE	BTL-6
16 MARK QUESTIONS			
1	Examine the aspects of engineering that make it appropriate to view engineering projects as experiments.	REMEMBER	BTL-1
2	Describe in detail the concept of „Risk-Benefit Analysis“.	REMEMBER	BTL-1
3	Compare and contrast engineering experiments with standard experiments.	UNDERSTAND	BTL-2
4	Discuss with the help of examples that engineers would learn not only from their earlier design and operating results, but also from those of other engineers.	UNDERSTAND	BTL-2
5	Describe in detail about safety and risk.	REMEMBER	BTL-1
6	Demonstrate safety. Explain what safety measures are to be taken to establish a nuclear power plant in a country.	APPLY	BTL-3
7	Analyze the effect of information on risk assessments and give four examples of improved safety and explain.	ANALYZE	BTL-4
8	“Learning from the past” Integrate the phrase with the Chernobyl case disaster, explaining on how ethical	CREATE	BTL-6

	errors of engineers caused the damage.		
9	Explain the various measures for assessing and reducing risks.	ANALYZE	BTL-4
10	Assess the concept of safety exist in the Chernobyl case studies.	EVALUATE	BTL-5
UNIT-4			
2 MARK QUESTIONS:			
1	Define collegiality.	REMEMBER	BTL-1
2	Tell what is meant by connectedness.	REMEMBER	BTL-1
3	Define expert authority.	REMEMBER	BTL-1
4	Plan when an institutional authority morally justified.	CREATE	BTL-6
5	Give three arguments in favors of unions in collective bargaining.	UNDERSTAND	BTL-2
6	Give reasons for why should engineering information kept confidential.	UNDERSTAND	BTL-2
7	Analyze the respect for promises between the employer and employee refer.	ANALYZE	BTL-4
8	Apply different ethical theories which help to justify the rights.	APPLY	BTL-3
9	Recommend the possible way of avoiding the conflicts of interest.	EVALUATE	BTL-5
10	Demonstrate occupational crime.	APPLY	BTL-3
11	Examine the conflict and crime in 'price-fixing' with example.	APPLY	BTL-3
12	Compare contractual employee rights and non contractual employee right. Give example.	ANALYZE	BTL-4

13	Point out the limitation imposed by the employers on the employees right of choice engagement of outside activities.	ANALYZE	BTL-4
14	Give the main element of intellectual property right.	UNDERSTAND	BTL-2
15	Tell what is meant by copy right.	REMEMBER	BTL-1
16	Define preferential treatment.	REMEMBER	BTL-1
17	Summarize “trade secret” .	UNDERSTAND	BTL-2
18	Decide the basic type of moral rights engineers should have in addition to their responsibility.	EVALUATE	BTL-5
19	Design ‘duty ethics ‘in placing order to the employee.	CREATE	BTL-6
20	Define bootlegging.	REMEMBER	BTL-1
16 MARK QUESTIONS			
1	Examine the importance of loyalty and collegiality in teamwork.	REMEMBER	BTL-1
2	Discover the ways and means of reducing occupational crime in industries.	APPLY	BTL-3
3	Describe the concept of confidentiality with professional ethics.	REMEMBER	BTL-1
4	Summarize the features of whistle-blowing that characterize the cases.	UNDERSTAND	BTL-2
5	Describe professional conscience and right of conscientious refusal.	REMEMBER	BTL-1
6	Explain the expected confidentiality to be maintained by the engineer while he shifts to another organization similar in services as the previous one.	ANALYZE	BTL-4
7	Explain “Professional rights and Employee rights for privacy and choice of outside activities.	EVALUATE	BTL-5

8	Formulate the expected confidentiality to be maintained by a computer engineer while he shifts his job on career advancement.	CREATE	BTL-6
9	Define Collective Bargaining. Discuss the role of collective bargaining in workplace rights and responsibilities.	UNDERSTAND	BTL-2
10	Apply confidentiality for avoiding harmful conflicts of interest in workplace.	APPLY	BTL-3
UNIT-5			
2 MARK QUESTIONS:			
1	Discuss on Multinational Corporation.	UNDERSTAND	BTL-2
2	Discuss on Relative Values in multinational Corporation issues.	UNDERSTAND	BTL-2
3	Show different forms of relativism in existence of the formation of a multinational corporation.	APPLY	BTL-3
4	Define technology transfer.	REMEMBER	BTL-1
5	Discover the general effects of Acid rain.	APPLY	BTL-3
6	List the ethical issues that arise in environmental degradation.	REMEMBER	BTL-1
7	Analyze what does the Right Ethics stress for a livable environment.	ANALYZE	BTL-4
8	Classify the problems that exist in computer ethics.	ANALYZE	BTL-4
9	Compare Bio centric ethics with Eco centric ethics.	ANALYZE	BTL-4
10	Recommend the professional issues in computer Ethics.	EVALUATE	BTL-5
11	Show the principles for conflict resolution.	APPLY	BTL-3

12	Give the abuses of Engineers as expert witnesses.	UNDERSTAND	BTL-2
13	Evaluate the normative models for advisors.	EVALUATE	BTL-5
14	Tell what is meant by moral Leadership.	REMEMBER	BTL-1
15	Compose the rules of practice framed in the codes of Ethics.	CREATE	BTL-6
16	Generalize the Professional Obligations in codes of Ethics.	CREATE	BTL-6
17	Define Ego Biases.	REMEMBER	BTL-1
18	Give some of the environmental issues of concern to engineers.	UNDERSTAND	BTL-2
19	Tell about international Rights.	REMEMBER	BTL-1
20	Define Bio centric Ethics.	REMEMBER	BTL-1
16 MARK QUESTIONS			
1	Describe in detail about computer ethics.	REMEMBER	BTL-1
2	Discuss an engineer's involvement in weapons.	UNDERSTAND	BTL-2
3	Summarize the employee rights.	UNDERSTAND	BTL-2
4	Examine environmental degradation.	REMEMBER	BTL-1
5	Summarize on three senses "relative" values & Describe the moral posed by the revolutionized communication using computers to privacy.	EVALUATE	BTL-5
6	Analyze the functioning of anonymity and privacy as a) helpful b) undesirable in computer-aided activities with suitable examples.	ANALYZE	BTL-4
7	Explain about the moral threats posed by the revolutionized communication using computer to the	ANALYZE	BTL-4

	right to privacy.		
8	Describe in detail on: Engineer as expert witness & Engineer as good managers.	REMEMBER	BTL-1
9	Relate Engineering, Ecology and Economics? Explain in detail.	APPLY	BTL-3
10	Compose the issues related to computer ethics an interest with your personal Experience.	CREATE	BTL-6