SRM VALLIAMMAI ENGINEERING COLLEGE

(An Autonomous Institution)

SRM Nagar, Kattankulathur – 603 203

QUESTION BANK

IV SEMESTER
1915001 PROFESSIONAL ETHICS

Common to CSE, IT, MECHANICAL, ECE, EEE, EIE, MEDICAL ELECTRONICS, CYBER SECURITY, ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

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UNIT-1
HUMAN VALUES

Moral values and Ethics – Integrity – Work ethic – Service learning – Civic virtue – Respect for others – Living peacefully – Caring – Sharing – Honesty – Courage – Valuing time – Cooperation – Commitment – Empathy – Self-confidence – Character – Introduction to Yoga and Meditation for professional excellence and stress management - Simple Living and High Thinking, Science and Spirituality

S. No	Questions	BTL	Competence
1.	What is morality?	BTL 1	Remember
2.	Define Ethics.	BTL 1	Remember
3.	Distinguish between 'Morality' and 'Ethics'.	BTL 2	Understand
4.	What is meant by Integrity? How it related to work ethics?	BTL 1	Remember
5.	Point out the importance of Integrity.	BTL 3	Apply
6.	Define Work Ethics.	BTL 1	Remember
7.	What is Service Learning?	BTL 1	Remember
8.	How does Self-confidence help an Engineer?	BTL 3	Apply
9.	Write a note on Peace.	BTL 3	Apply
10.	Distinguish between 'Caring' and 'Sharing'	BTL 2	Understand
11.	Bring out the difference between Cooperation and Commitment?	BTL 2	Understand
12.	What is Commitment?	BTL 1	Remember
13.	What are the impediments to proper Co-operation?	BTL 3	Apply
14.	Write the benefits of 'Commitment'.	BTL 3	Apply
15.	Define the term Empathy.	BTL 1	Remember
16.	List the qualities of a Self-confident people.	BTL 2	Understand
17.	Define the term Self-confidence.	BTL 1	Remember
18.	List the importance of doing Yoga.	BTL 2	Understand
19.	What factors help in Peaceful Living?	BTL 1	Remember
20.	Write about your opinion on Stress Management.	BTL 3	Apply
21.	Define Engineering Ethics.	BTL 1	Remember
22.	What is the need to study Ethics?	BTL 2	Understand
23.	List the characteristics of Moral Values.	BTL 2	Understand
24.	Write about Values.	BTL 3	Apply
	PART-B		
1.	Explain the concept of Integrity and different aspects of it. (13)	BTL 1	Remember
2.	How work ethics plays a major role in profession? Explain various elements of work ethics. (13)	BTL 4	Analyze
3.	Define Service Learning. Discuss the characteristics and importance. (13)	BTL 1	Remember
4.	Discuss the role in caring & sharing in society with suitable examples. (13)	BTL 3	Apply
5.	Discuss the importance of civic virtues in detail. (13)	BTL 2	Understand
6.	Write short notes on Honesty and Integrity. (13)	BTL 2	Understand
7.	What do you understand by valuing time? (13)	BTL 2	Understand
8.	Explain in detail about the commitment in profession. (13)	BTL 1	Remember
9.	Explain the ways of building character in job. (13)	BTL 1	Remember

10.	Examine the importance of co-operation with examples. (13)	BTL 3	Apply
11.	Brief out the factors that shape self-confidence in a person? (13)	BTL 4	Analyze
12.	Discuss its role in the spiritual development for excellence in an organization with suitable examples. (13)	BTL 4	Analyze
13.	Examine the role of yoga and meditation for professional excellence and stress management. (13)	BTL 4	Analyze
14.	Explain in detail the different ways to handle stress. (13)	BTL 1	Remember
15.	Explain various actions of an engineer leading to dishonesty. (13)	BTL 3	Apply
16.	What is Courage? What are the salient features of courage? (13)	BTL 1	Remember
17.	What are human values? Brief out the need to study about human values. (13)	BTL 2	Understand
	PART-C		
1.	Analyze the various human values, which are essential to Engineers.(15)	BTL5	Evaluate
2.	Explain with suitable examples about the respect for others religious beliefs to enhance peaceful living. (15)	BTL 4	Analyze
3.	Discuss the role and importance of Ethics in Engineering. (15)	BTL 5	Evaluate
4.	Interpret the necessity of stress management with suitable examples. (15)	BTL 4	Analyze
5.	Elaborate the nature of moral and values with its application in professional life. (15)	BTL5	Evaluate

UNIT-2
ENGINEERING ETHICS

Senses of 'Engineering Ethics' – Variety of moral issues – Types of inquiry – Moral dilemmas – Moral Autonomy – Kohlberg's theory – Gilligan's theory – Consensus and Controversy – Models of Professional roles – Theories about right action – Self-interest – Customs and Religion – Uses of Ethical Theories

S. No	Questions	BTL	Competence
1.	State the senses of 'Engineering Ethics'.	BTL 1	Remember
2.	What are the approaches of ethics?	BTL 1	Remember
3.	Compare Engineering ethics with Professional ethics.	BTL 2	Understand
4.	List the three types of inquiries.	BTL 2	Understand
5.	Recall the situations of Moral dilemmas.	BTL 3	Apply
6.	Define 'Resource Crunch'.	BTL 1	Remember
7.	Write about moral development.	BTL 2	Understand
8.	State the importance of ethical theories.	BTL 1	Remember
9.	Point out the implications of consensus& controversy.	BTL 3	Apply
10.	List the criteria to achieve professionalism.	BTL 3	Apply
11.	List the models of professional roles.	BTL 1	Remember
12.	State the level of Kohlberg's theory.	BTL 1	Remember
13.	What is the significance of Kohlberg's theory?	BTL 3	Apply
14.	Differentiate between self-respect and self-esteem.	BTL 2	Understand
15.	Define Moral Dilemma.	BTL 1	Remember
16.	Identify the four features of moral rights.	BTL 2	Understand

17.	List the theories about right action.	BTL 1	Remember
18.	Show the significance of religion and customs.	BTL 3	Apply
19.	Difference between Kohlberg's theory and Gilligan's theory.	BTL 2	Understand
20.	Identify the reasons for a person to accept 'ethical relativism'?	BTL 3	Apply
21.	What is Normative inquiry?	BTL 1	Remember
22.	Identify the features of Profession.	BTL 3	Apply
23.	What is Gilligan's theory?	BTL 1	Remember
24.	List the characterises of Gilligan's theory.	BTL 1	Remember
	PART-B		
1.	Give an overview of Engineering Ethics with an example. (13)	BTL 2	Understand
2.	Explain the variety of moral issues to engineering ethics. (13)	BTL 1	Remember
3.	What are the causes of moral dilemma? (13)	BTL 3	Apply
4.	Discuss on three types of inquiries, giving an example each. (13)	BTL 1	Remember
5.	Discuss the role of Consensus and controversy while considering moral autonomy in Engineering ethics. (13)	BTL 3	Apply
6.	List and explain the logical steps involved confronting moral dilemma. (13)	BTL 1	Remember
7.	Discuss the Kohlberg moral development theory with an example. (13)	BTL 3	Apply
8.	Explain the Gilligan's moral development theory with an example. (13)	BTL 1	Remember
9.	Explain the uses of ethical theories. (13)	BTL 2	Understand
10.	Elaborate the various models of professionalism. (13)	BTL 2	Understand
11.	List various role models of professional engineers and explain them. (13)	BTL 1	Remember
12.	Discuss the characteristics of the professions. (13)	BTL 4	Analyze
13.	Elaborate the applications of rights theory. (13)	BTL 3	Apply
14.	Analyse the various principles of Duty Ethics. (13)	BTL 4	Analyze
15.	How customs and religion play a major role in shaping moral views and moral value? (13)	BTL 4	Analyze
16.	What is meant by self-interest? Relate the term with "Ethical Egoism" with suitable examples. (13)	BTL 2	Understand
17.	Demonstrate in detail about various theories about right action. (13)	BTL 1	Remember
	PART-C		
1.	Explain moral dilemma with a suitable case study. (15)	BTL5	Evaluate
2.	Analyze the impact of Gilligan's theory on moral development. (15)	BTL5	Evaluate
3.	Illustrate the applications of ethical theories in current scenario. (15)	BTL 4	Analyze
4.	Discuss on the choice of ethical theory to study a problem, with an example. (15)	BTL 4	Analyze
5.	Explain the approaches to ethical theories. (15)	BTL 4	Analyze

UNIT – III – ENGINEERING AS SOCIAL EXPERIMENTATION

Engineering as Experimentation – Engineers as responsible Experimenters - Engineer's Responsibilities to Economically Deprived People and Environment, Corruption – Codes of Ethics- Fundamental Principles – A Balanced Outlook on Law – Challenger Case Study.

PART – A

S. No	Questions	BTL	Competence
1.	What is engineering experimentation?	BTL 1	Remember
2.	Differentiate scientific experiments and engineering projects.	BTL 1	Remember
3	Why does engineering have to be viewed as an experimental process?	BTL 2	Understand
4.	How industrial standards are important for industries?	BTL 2	Understand
5.	What are the elements of informed consent?	BTL 3	Apply
6.	Mention the elements that should make an engineer a responsible experimenter.	BTL 1	Remember
7.	Name two aspects for comparing engineering work as an experiment.	BTL 2	Understand
8.	Give the principles of experimental control.	BTL 1	Remember
9.	What are the elements of informed consent?	BTL 3	Apply
10.	How does a code support engineer?	BTL 3	Apply
11.	What does the code of ethics exhibit?	BTL 1	Remember
12.	List the roles of the code of ethics.	BTL 1	Remember
13.	What are the ethical issues in corruption?	BTL 3	Apply
14.	Distinguish between the codes of ethics and codes of conduct.	BTL 2	Understand
15.	What is meant by conscientiousness?	BTL 1	Remember
16.	List the importance of industrial standards?	BTL 2	Understand
17.	What does the balanced outlook on law stress in engineering practice?	BTL 1	Remember
18.	Simplify the concept behind Ethical Conventionalism.	BTL 3	Apply
19.	Estimate universally accepted ethical principles.	BTL 2	Understand
20	State the two conceptual issues that happened in the Challenger case.	BTL 3	Apply
21.	How does the law facilitate ethics in engineering?	BTL 1	Remember
22	Interpret the problems with the law in engineering.	BTL 3	Apply
23.	Demonstrate a balanced outlook on Law.	BTL 1	Remember
24.	Summarize the problems with the law in engineering.	BTL 1	Remember

PART – B

1.	"Design, as well as Engineering, is an iterative process", Discuss.	BTL 2	Understand
2.	Compare and contrast engineering experiments with standard experiments with suitable examples.	BTL 1	Remember
3.	(i) How can engineer become a responsible Experimenter? (7) (ii) What are the responsibilities of engineers for environmental development. (6)	BTL 3	Apply
4.	Discuss the problems with the law in engineering practice.	BTL 1	Remember
5.	What engineering aspects make it appropriate to view engineering projects as experiments?	BTL 3	Apply

6.	What are the general features of morally responsible engineers? Explain each with appropriate examples.	BTL 1	Remember
7.	In case of a challenger disaster, examine if the principal actors behaved as responsible experimenters.	BTL 3	Apply
8.	What is research ethics? Discuss the models of research ethics with suitable examples.	BTL 1	Remember
9.	Explain the characteristics of Morally responsible Engineers.	BTL 2	Understand
10.	Summarize the purposes of the code of conduct in fighting corruption.	BTL 2	Understand
11.	Analyze the importance of codes of ethics. Explain in detail.	BTL 1	Remember
12.	What are the limitations of the "Code of Ethics"? Explain.	BTL 4	Analyze
13.	Asses how Engineering societies can promote ethics.	BTL 3	Apply
14.	Demonstrate the various problems and role of law in Engineering.	BTL 4	Analyze
15.	Discuss in detail the balanced outlook on the law.	BTL 4	Analyze
16.	(i) What are the ethical problems involved in Challenger accident? (7) (ii) Which factor was the main cause of the Challenger disaster? (6)	BTL 2	Understand
17.	What are the safety lessons one can learn in the challenger case?	BTL 1	Remember
	PART- C		
1.	"Engineering as experimentation plays a vital role in the design process" - Discuss with a suitable example.	BTL5	Evaluate
2.	Comment on the following: "A code only sets the limits beyond which behaviour will be condemned and moral level is not high when all or most of those who live under it always act within a thin line of those limits.	BTL5	Evaluate
3.	Explain the Bhopal gas tragedy. Discuss the violation of moral, ethical and professional codes of standards in it. Write a conclusion to avoid such tragedy in future.	BTL 4	Analyze
4.	Examine the importance of a balanced outlook on law through a case study.	BTL 4	Analyze
5.	Explain in detail the challenger accident. What are the ethical problems involved in this?	BTL 4	Analyze

UNIT – IV– SAFETY, RESPONSIBILITIES AND RIGHTS

Safety and Risk – Assessment of Safety and Risk – Risk Benefit Analysis and Reducing Risk – Government Regulator's approach to risks - The Three Mile Island, Chernobyl & Bhopal Case Studies, Greenery Effects - Collegiality and Loyalty - Respect for Authority – Collective Bargaining – Confidentiality – Conflicts of Interest – Unethical Behaviour at Work Place – Reporting Unethical Behaviour- Professional Rights – Employee Rights – Intellectual Property Rights (IPR)

PART - A

S. No	Questions	BTL	Competence
1.	Define safety.	BTL1	Remember
2.	Compare "safety" and "risk".	BTL2	Understand
3	Identify the ways to determine the risk.	BTL3	Apply
4.	Name the factors that influence the perception of risk.	BTL1	Remember
5.	Classify any two analytical methods of testing for safety of a product/project.	BTL2	Understand
6.	Identify the ethical implications of risk benefit analysis.	BTL3	Apply
7.	What is meant by voluntary risk?	BTL1	Remember
8.	Explain unethical work behaviour.	BTL2	Understand
9.	Choose any two aspects of collegiality.	BTL3	Apply
10.	List out senses of loyalty.	BTL1	Remember
11.	Interpret about institutional authority with an example.	BTL2	Understand
12.	Identify the important conflict of interest.	BTL3	Apply
13.	What is meant by proprietary information?	BTL1	Remember
14.	Explain ethical theories justify confidentiality.	BTL2	Understand
15.	Brief about occupational crime.	BTL3	Apply
16.	What is the difference between bribe and gift?	BTL1	Remember
17.	Classify various provisions under human rights.	BTL2	Understand
18.	Construct brief about Bootlegging.	BTL3	Apply
19.	What is Institutional Authority?	BTL1	Remember
20	Classify the different types of intellectual property?	BTL2	Understand
21.	Identify the difference patent and trade secret	BTL3	Apply
22	What are the safety measures an engineer must know before assessing a risk of any product?	BTL1	Remember

23.	Interpret about voluntary risk.	BTL2	Understand
24.	Experiment the methods that can be applied when testing is inappropriate.	BTL3	Apply
	PART – B		
1.	Define the Risk and Safety. How we, engineers assess the safety?	BTL1	Remember
2.	Demonstrate the procedure in risk benefit analysis and discuss its role in reducing risks with suitable examples.	BTL2	Understand
3.	Construct the risk benefit analysis and conceptual problems associated with it.	BTL3	Apply
4.	Show your understanding of testing strategies for safety with suitable examples. Mention the difficulties in assessing the personal risks.	BTL4	Analyze
5.	Summarize the concept of safe exit in the Chernobyl case study.	BTL1	Remember
6.	Discuss the various moral principles justifying the concept of 'Confidentiality' and also explain types of confidential information.	BTL2	Understand
7.	Discuss the 'faithful agent argument' and 'Public service argument' of collective with suitable examples.	BTL3	Apply
8.	Explain the importance of Collective bargaining.	BTL4	Analyze
9.	Describe the concept of confidentiality in professional ethics.	BTL1	Remember
10.	Explain in detail the types of conflicts of interests and ways to avoid conflicts of Interests.	BTL2	Understand
11.	Illustrate the concept of confidentiality and its types.	BTL3	Apply
12.	Explain "Employee Rights" and its role in a Business organisation.	BTL4	Analyze
13.	What are the elements of Intellectual property rights? Explain.	BTL1	Remember
14.	Summarize the safety lessons from "The Challenger".	BTL2	Understand
15.	Discuss the notion of safe exit using evacuation plans for communities near power plants or Chemical processing plants?	BTL3	Apply
16.	Explain the concept of (i) Whistle blowing (3) (ii) Occupational crime (3) (iii) Intellectual property rights (3) (iv) Discrimination (3) (V) Institution Authority (3)	BTL4	Analyze
17.	Discuss human rights, professional rights and employee rights in an engineer field.	BTL 1	Remember
	PART- C		
1.	Discuss about the worst industrial disaster with respect to Bhopal Gas tragedy.	BTL 4	Analyze
2.	Compare "Fault tree analysis" and "Event tree analysis". Illustrate with suitable example how safety analysis of a system can be done with a fault tree.	BTL 5	Evaluate

3.	Illustrate with example how IPR provides security to manufacturing and selling of a product.	BTL 4	Analyze
4.	"Safety in a commodity comes with a price"-Substantiate with explanation. Discuss how the knowledge of risk is always better for safety with suitable examples.	BTL 5	Evaluate
5.	Discuss the significance of loyalty and collegiality in teamwork?	BTL 4	Analyze

UNIT V – INTERNATIONAL ISSUES

Multinational corporations - Business ethics - Environmental ethics - Internet ethics - Role in Technological Development - Weapons development-engineers as managers - Consulting Engineers - Engineers as expert witnesses and advisors - Honesty - leadership - Sample code of conduct ethics - ASME, ASCE, IEEE, Institution of Engineers (India),Indian Institute of Materials Management Institution of electronics and telecommunication engineers (IETE), India – Corporate Social Responsibility, Indian and Western Culture – Cyber Crime

PART - A

S. No	Questions	BTL	Competence
1.	State the influence of Multinational Corporations.	BTL 1	Remember
2.	List out the factors influencing Business Ethics	BTL 2	Understand
3	Express the meaning of the term Business Ethics.	BTL 4	Analyze
4.	Quote some examples of pollution that spoiled the environment?	BTL 2	Understand
5.	Infer the ethical issues that arise in environmental degradation	BTL 2	Understand
6.	State the meaning of 'computer crime'.	BTL 1	Remember
7.	Who are hackers?	BTL 1	Remember
8.	Demonstrate the meaning of Hired Guns.	BTL 1	Remember
9.	Identify the problems of Defence industry?	BTL 3	Apply
10.	What is the basic ethical and moral responsibility of a manager-engineer?	BTL 2	Understand
11.	Who are called ad Consulting Engineers?	BTL 1	Remember
12.	List out the difference between the Eyewitness and Expert Witness in the Legal System.	BTL 2	Understand
13.	Summarize about honesty.	BTL 2	Understand
14.	What is meant by moral leadership?	BTL 3	Apply
15.	Differentiate Honesty and Moral Leadership.	BTL 2	Understand
16.	What are the common features involved in the code of ethics for engineers?	BTL 4	Analyze
17.	List the necessary as per the Code of Ethics by Institute of Engineers (India).	BTL 2	Understand
18.	List out the objectives of IEEE code of Ethics.	BTL 1	Remember
19.	Enumerate the fundamental principles of ASME Code of ethics.	BTL 2	Understand
20	State the any two code of ethics of Indian Institute of Materials Management.	BTL 3	Apply

21.	Examine corporate social responsibility.	BTL 3	Apply
22	What are the four Social responsibility?	BTL 1	Remember
23.	Write a note on Cyber Crime?	BTL 2	Understand
24.	Identify the threats due to Cyber Crime.	BTL 2	Understand
	PART – B		
1.	What are Multinational Corporations? Explain it with an example.	BTL 3	Apply
2.	i) What are the three versions of Relativism. (7) ii) Relate the advantages and disadvantages of MNCs. (6)	BTL 1	Remember
3.	List out the importance to study Environment Ethics. Discuss any environment issues in the ethical point of view to Engineers.	BTL 3	Apply
4.	Define Corporate Responsibility. Explain in brief.	BTL 3	Apply
5.	Mention the different types of Business Ethics. Give short notes on each.	BTL 2	Understand
6.	Compare the Principles of Business Ethics.	BTL 4	Analyze
7.	Describe In details about the global issues of weapon development.	BTL 5	Evaluate
8.	Describe the Bhopal Gas Tragedy and its effects.	BTL 5	Evaluate
9.	Discuss in detail about the moral and ethical issues involved in use of computers.	BTL 2	Understand
10.	Identify the role of engineers as "Consulting Engineers and Expert Witness.	BTL 4	Analyze
11.	Justify Engineers as Expert witnesses and Advisors with Suitable Examples.	BTL5	Evaluate
12.	What is meant by Computer Ethics? State and explain the ethical problems and explain how computer acts as an instrument for unethical behaviour. What is meant by hacking?	BTL5	Evaluate
13.	Contrast the Traits of Moral Leadership and quote the Leadership quality from Indian Culture's perspective in detail.	BTL 2	Understand
14.	Write in detail about the code Of Ethics for Corporate Members as per the Institution of Engineers (India)	BTL 1	Remember
15.	Analyze the moral and ethical issues involved in use of Computer Technology.	BTL 2	Understand
16.	Summarize the IEEE Code of Ethics.	BTL 1	Remember
17.	(i) What are the causes of Cyber Crime? (ii) Discuss the preventive measures against Cyber Crime.	BTL 4	Analyze
	PART- C		
1.	Discuss the ethical role of engineers in weapon development with suitable examples.	BTL 5	Evaluate
2.	Examine the dynamic nature of an Engineer's managerial role with suitable example.	BTL 5	Evaluate
3.	Illustrate the importance of code of conduct in current scenario.	BTL 6	Create

4.	State the types of concern for environment by the Engineers. Discuss the approaches to resolve Environmental problems. What do professional codes of ethics say about the Environment?	BTL 5	Evaluate
5.	Enumerate the code of Ethics of ASCE and IETE.	BTL 6	Create