

# **SNS COLLEGE OF TECHNOLOGY**



## (An Autonomous Institution) Approved by AICTE and Affiliated to Anna University Accredited By NBA-AICTE & NAAC with 'A++ ' Grade DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING 19GET201 – PROFESSIONAL ETHICS AND HUMAN VALUES SEVENTH SEMESTER (2025 – 2026) TWO MARKS QUESTIONS AND ANSWERS

## UNIT - I

## 1.What are human values?

Values decide the standard of behavior. Some universally accepted values are freedom justice and equality. Other principles of values are love, care, honesty, integrity, selfrespect.

#### 2. What are ethical values?

Trustworthiness, respect, responsibility, fairness, caring is ethical values

## 3. Distinguish values from ethics and culture.

Values are mainly related to individuals and since they are related to justice, they remain the some for every one. E.g. truth, honesty, empathy, self respect. Values do not change from individual to individual. Ethics is common to a group of individuals; the group may be religious or professional. Ethics is mostly based on some codeor law and judgment of any action is based on code of conduct or law. Ethics change from individual to individual to individual to individual commonly refers to conduct of a group. E.g system of worship, marriage. It may differ from society to society, nation to nation or religion to religion.

## 4. What is integrity?

Integrity is the unity of character based on moral values. Consistency in attitudes, emotions and conduct in relations to morally justified actions and values are also the part of integrity of individual. It implies honesty, trustworthiness.

#### 5. Define work ethics

By one's work one cannot harm others. Any worker cannot escape accountability. Worker has the moral responsibility to see that no other person's right, private or freedom is impaired or transgressed

#### 6. What is service learning?

Service learning tells that one has moral responsibility to increase the desirable effects and to decrease the harmful effects. Any service should increase the desirable result.

#### 7. Mention some civic virtues?

Good citizen demand civic virtue. It is the principle of not harming the surroundings .it also includes living peacefully, respect for others, protecting the environment and being normally and ethically good.

## 8. Write short notes on caring and sharing.

Caring is the essence of moral life. Caring involves feelings, relationship, contends with other persons and protecting others and causing least damage to others. Sharing means sharing of feelings, ideas thoughts, resources and profits. Sharing is always mutually beneficial. Sharing morally acceptable feelings, resources and materials is a value.

## 9. Write notes on honesty.

Any human being should imbibe honesty-honesty in acts, honesty in speech and honesty in beliefs. Honesty is the fundamental virtue in human relationship even though in may be difficult to follow some times.

## 10. What is courage as a value?

Courage implies self respect and governs confrontations with danger and risk. It is not excessive rashes or cowardice, but it is the middle ground. Taking calculated risks and boldness in facing crises are the hallmarks of courage as a human value. It defines the mental make up of an individual in taking bold decisions even under adverse situations.

## 11. Define co-operation.

Co-operation means extending help to others, for a good cause. Co-operation may be through an idea, a suggestion, an assistance or physical work which extends to others for common benefit.

## 12. Define empathy and spirituality.

Empathy means putting self in a position of someone else and thinking as the later and reasoning suitable action. Spirituality raises a man above the materialistic world into a realm where he seeks peace and real happiness.

## 13. Define Integrity?

Integrity is the bridge between responsibility in private and professional life.

## 14. Define Compromise?

In a negative sense it means to undetermined integrity by violating one's fundamental moral principles. In a positive sense, however, it means to settle differences by mutual concessions or to reconcile conflicts through adjustments in attitude and conduct.

## 15. Give the two aspects of Honesty?

 $Truth fulness-meeting \ responsibilities \ concerning \ truth-telling. \ Trustworthiness-Meeting \ responsibilities \ concerning \ trust.$ 

## 16. Differentiate Self-respect and Self-esteem?

Self-respect: It is a moral concept; refers to the virtue properly valuing oneself. Self-esteem: It is a psychological concept; means having a positive attitude toward oneself, even if the attitude is excessive or otherwise unwarranted.

## UNIT - II

## 1. Define Ethics?

- \* Study of right or wrong.
- \* Good and evil.
- \* Obligations & rights.
- \* Justice.
- \* Social & Political deals.

## 2. Define Engineering Ethics?

\* Study of the moral issues and decisions confronting individuals and organizations engaged in engineering / profession.

\* Study of related questions about the moral ideals, character, policies and relationships of people and

corporations involved in technological activity.

\* Moral standards / values and system of morals.

## 3. What is the need to study Ethics?

\* To responsibly confront moral issues raised by technological activity.

\* To recognize and resolve moral dilemma.

\* To achieve moral autonomy.

## 4. Differentiate Moral and Ethics?

MORAL:

- •Refers only to personal behavior.
- •Refers to any aspect of human action.

•Social conventions about right or wrong conduct.

## ETHICS:

•Involves defining, analyzing, evaluating and resolving moral problems and developing moral criteria to guide human behavior.

•Critical reflection on what one does and why one does it.

•Refers only to professional behavior.

## 5. What is the method used to solve an Ethical problem?

- Recognizing a problem or its need.
- Gathering information and defining the problem to be solved or goal to beachieved.
- Generating alternative solutions or methods to achieve the goal.
- Evaluate benefits and costs of alternate solutions.
- Decision making & optimization.
- Implementing the best solution.

## 6. What are the Senses of Engineering Ethics?

- An activity and area of inquiry.
- Ethical problems, issues and controversies.
- Particular set of beliefs, attitudes and habits.
- Morally correct.

## 7. Differentiate Micro-ethics and Macro-ethics?

Micro-ethics : Deals about some typical and everyday problems which play animportant role in the field of engineering and in the profession of an engineer.

Macro-ethics : Deals with all the societal problems which are unknown and suddenlyburst out on a regional or national level.

## 8. What are the three types of Inquiry?

- Normative Inquiry Based on values.
- Conceptual Inquiry Based on meaning.
- Factual Inquiry Based in facts.

## 9. What are the sorts of complexity and murkiness that may be involved in moral situations?

- Vagueness
- Conflicting reasons
- Disagreement

#### 10. What are the steps in confronting Moral Dilemmas?

- Identify the relevant moral factors and reasons.
- Gather all available facts that are pertinent to the moral factors involved.
- Rank the moral considerations in order of importance as they apply to the situation.
- Consider alternative courses of actions as ways of resolving dilemma, tracing the full implications of each.
- Get suggestions and alternative perspectives on the dilemma.
- By weighing all the relevant moral factors and reasons in light of the facts, produce areas on judgement.

## 11. Define Moral Autonomy?

- Self-determining
- Independent
- Personal Involvement
- Exercised based on the moral concern for other people and recognition of good moral reasons

## 12. Give the importance of Lawrence Kohlberg's and Carol Gilligan's theory?

Kohlberg gives greater emphasis to recognizing rights and abstract universal rules. Gilligan stresses the importance of maintaining personal relationships based on mutualcaring.

## 13. Give the need for Authority?

Authority provides the framework in which learning can take place.

#### 14. What are the criteria required for a Profession?

- Knowledge
- Organization
- Public Good

#### 15. Give the general criteria to become a Professional engineer?

- Attaining standards of achievement in education, job performance or creativity in engineering that distinguish engineers from engineering technicians and technologists.
- Accepting as part of their professional obligations as least the most basic moral responsibilities to the public as well as to their employers, clients, colleagues and subordinates.

#### 16. Define Integrity and Compromise?

Integrity is the bridge between responsibility in private and professional life. In a negative sense it means to undetermined integrity by violating one's fundamental moral principles. In a positive sense, however, it means to settle differences by mutual concessions or to reconcile conflicts through adjustments in attitude and conduct.

#### 17. Give the two aspects of Honesty?

- Truthfulness meeting responsibilities concerning truth-telling.
- Trustworthiness Meeting responsibilities concerning trust.

## 18. Differentiate Self-respect and Self-esteem?

Self-respect: It is a moral concept; refers to the virtue properly valuing oneself. Self-esteem: It is a psychological concept; means having a positive attitude toward oneself, even if the attitude is excessive or otherwise unwarranted.

#### 19. What are the two forms of Self-respect?

a. Recognition self-respect

b. Appraisal self-respect

#### 20. What are the senses of Responsibility?

a. a virtueb. obligationsc. general moral capacities of peopled. liabilities and accountability for actionse. Blame worthiness or praiseworthiness

## UNIT-III

#### 1. What are the conditions required to define a valid consent?

- The consent was given voluntarily.
- The consent was based on the information that rational person wouldwant, together with any other information requested, presented to themin understandable form.
- The consenter was competent to process the information and makerational decisions.

## 2. What are the two main elements which are included to understand informed consent?

Informed Consent is understood as including two main elements: i. Knowledge [Subjects should be given not only the information they request, but all the information needed to make a reasonable decision]. ii. Voluntariness [Subjects must enter into the experiment without being subjected to force, fraud, or deception].

## 3. What are the general features of morally responsible engineers?

- a. Conscientiousness.
- b. Comprehensive perspective.
- c. Autonomy.
- d. Accountability.

## 4. What is the purpose of various types of standards?

- a. Accuracy in measurement, interchangeability, ease of handling.
- b. Prevention of injury, death and loss of income or property.
- c. Fair value of price.
- d. Competence in carrying out tasks.
- e. Sound design, ease of communications.
- f. Freedom from interference.

## 5. Define Code and roles of codes?

Code is a set of standards and laws.

- ♣Inspiration and Guidance
- ♣Support
- ♣Deterrence and Discipline
- ♣Education and Mutual Understanding
- Contributing to the Profession's Public Image
- ♣Protecting the Status Quo
- ♣Promoting Business Interests

7. Give the limitations of codes?

 $\Im$  Codes are restricted to general and vague wording.

- $\Im$  Codes can't give a solution or method for solving the internal conflicts.
- $\Im$  Codes cannot serve as the final moral authority for professional conduct.
- $\Im$  Codes can be reproduced in a very rapid manner.

## 8. What are the problems with the law in engineering?

- a. Minimal compliance
- b. Many laws are without enforceable sanctions.

## 9. What is the need to view engineering projects as experiments?

i. Any project is carried out in partial ignorance.

ii. The final outcomes of engineering projects, like those of experiments, are generally uncertain.

iii. Effective engineering relies upon knowledge gained about products before and after they leave the factory – knowledge needed for improving current products and creating better ones.

## 10. Differentiate scientific experiments and engineering projects?

Scientific experiments are conducted to gain new knowledge, while "engineering projects are experiments that are not necessarily designed to produce very much knowledge".

#### 11. What are the uncertainties occur in the model designs?

a. Model used for the design calculations.

- b. Exact characteristics of the materials purchased.
- c. Constancies of materials used for processing and fabrication.
- d. Nature of the pressure, the finished product will encounter.

## UNIT-IV

## 1.Define Collegiality?

Collegiality is a kind of connectedness grounded in respect for professional expertise and in a commitment to the goals and values of the profession and collegiality includes adis position to support and cooperate with one's colleagues.

## 2. What are the central elements of collegiality?

i. Respect

- ii. Commitment
- iii. Connectedness
- iv. Cooperation

## 3. What are the two senses of Loyalty?

i. Agency Loyalty – Acting to fulfil one's contractual duties to an employer. It's amatter of actions, whatever its motives.

ii. Identification Loyalty - Has as much as to do with attitudes, emotions, and a sense of personal identity as it does with actions.

#### 4. When may an Identification Loyalty be said as obligatory?

i. Employees must see some of their own important goals as met by and through a group in which they participate.ii. Employees must be treated fairly, each receiving his or her share of benefits and burdens.

# 5. What is the relationship between the Loyalty to the company and Professional responsibility to the public?

i. Acting on professional commitments to the public can be a more effective way to serve a company than a mere willingness to follow company orders.

ii. Loyalty to companies or their current owners should not be equated with merely obeying one's immediate supervisor.

iii. An engineer might have professional obligations to both an employer and to thepublic that reinforce rather than contradict each other

## 6. Define Institutional Authority?

Institutional Authority is acquired, exercised and defined within organizations. It maybe defined as the institutional right given to a person to exercise power based on the resources of the institution.

## 7. Define Expert Authority?

Expert authority is the possession of special knowledge, skill or competence toperform task or give sound advice.

## 8. What is the basic moral task of salaried engineers?

The basic moral task of salaried engineers is to be aware of their obligations to obey employers on one hand and to protect and serve the public and clients of the other.

## 9. What are the guidelines to reach an agreement?

i. Attack problem and not people.

ii. Build trust.

iii. Start with a discussion and analysis of interests, concerns, needs. It begin with interests, not positions or solutions.

iv. Listen.

v. Brainstorm; suggesting an idea does not mean one aggress with it. Develop multiple options.

vi. Use objective criteria whenever possible. Agree on how something will be measured.

## 10. Define confidential information?

Confidential information is information deemed desirable to keep secret.

## 11. What are the criteria for identifying that information is "labeled" confidential at the workplace?

\* Engineers shall treat information coming to them in the course of their as confidential.

\* Identify any information which if it became known would cause harm to the corporation or client.

\* Confidential information is any information that the employer or client would like to have kept secret in order to compete effectively against business rivals.

## 12. What are the terms associated with Confidentiality?

i.Privileged Informationii. Proprietary Informationiii. Patentsiv. Trade secrets

## 13. How will you justify the obligation of confidentiality?

The obligation of confidentiality can be justified at two levels.

FIRST Level : Moral Considerations Respect for autonomy Respect for promises Regard for public wellbeing

SECOND Level : Major Ethical Theories Rights Ethicists Duty Ethicists Rule-utilitarians Act-utilitarians

## 14. Define Conflicts of Interest?

Conflict of interests is a situation in which two or more interests are not simultaneously realizable. It is the disagreement between public obligation and self-interest of an official.

## 15. Why does a conflict of interests arise?

a. Financial Investments

- b. Insider Trading
- c. Bribed. Giftse. Kickbacks

## 16. What is a Bribe?

A Bribe is a substantial amount of money or goods offered beyond a stated business contract with the aim of winning an advantage in gaining or keeping the contract.

## 17. What is a Gift?

Gifts are not bribes as long as they are small gratuities offered in the normal conduct of business.

18. What is called Kickbacks?

Prearranged payments made by contractors to companies or their representatives in exchange for contracts actually granted are called kickbacks.

## 19. What are the types of Conflicts of interest?

- i. Actual conflict of interest
- ii. Potential conflict of interest
- iii. Apparent conflict of interest

## 20. What are the forms of Conflicts of interest?

- i. Interest in other companies
- ii. Moonlighting
- iii. Insider information

## 21. How will you solve the Conflict problems?

i. Finding the creative middle way.ii. Employing Lower-level considerations.iii. Making the hard choice.

## 22. What is called 'White-collar crime'?

Occupational crimes are illegal acts made possible through one's lawful employment. It is the secret violation of laws regulating work activities. When committed by office workers of professionals, occupational crime is called 'white-collar crime'.

## 23. What are the essential elements of IPR?

- i. Patents
- ii. Copyrights
- iii. Trademarks
- iv. Trade secrets

## UNIT-V

## 1. What are the different ways to create an ethical climate?

The following are the ways to create an ethical climate:

•Ethical values must be accepted and appreciated by the managers and employees with its full complicated features.

•The sincere use of ethical language has to be recognized as a justifiable part of the company.

•The management has to create a strong confidence among the employees that the management is more

serious about ethics by establishing moral tone in words, in policies and also by personal example.

•The management has to establish some procedures for resolving conflicts.

## 2. What are the important forms of conflicts that may arise for an engineering project manager?

The important forms of conflicts that may arise for an engineering project manager are,

- Conflicts based on schedules.
- Conflicts which arises in evolving the importance of projects and the department.
- Conflicts based on availability of personal for a project.
- Conflicts over technical matters.
- Conflicts which arises due to administrative procedure.
- Conflicts of personality.
- Conflicts over cost or expenditure.

## 3. What are the principles for conflict resolution?

The following are the principles for conflict resolution:

- People must be separated from the problem
- Focus must be only on interest and not on positions
- Various options must be generated
- An evolution criteria should be established

## 4. Who are referred as consulting engineers?

Consulting engineers are those involved in private practice. For the services rendered by them, they will be paid some fees. They won't be compensated by salaries from employers. They are the sole employer of their practice. So they have greater freedom to take decisions on the tasks undertaken by them.

## 5. What are the rules framed by NSPE in case of professional advertisements?

The rules framed by NSPE (National Society of Professional Engineers) in case of professional advertisements are as follows:

- The use of statements containing a material misrepresentation of fact or omitting a material fact necessary to keep the statement from being misleading.
- Statements intended or likely to create an unjustified expectation.
- Statements containing prediction of future success.
- Statements containing an opinion as to the quality of the engineer's services. Statements intended or likely to attract clients by the use of slogans, jingles or sensational language format.

## 6. What do you mean by appropriate technology?

Appropriate technology means identification, transformation and implementation of the most suitable technology for a new set of conditions.

#### 7. What are the ill effects of acid rain?

Bacteria's that are essential for life systems to be active are killed. High acidity results in reduced growth and killing of fishes. Vanishing of greenery and destruction of forests. Germination of seeds is affected affecting the growth of trees.

#### 8. What do you mean by technology transfer?

Technology transfer is a process of changing the technology to a new setting and implementing it. Technology includes hardware such as machines and installations as well as techniques such as technical, organizational and managerial skills and procedures.

#### 9. What are the ethical issues or questions that arise in environmental protection?

Often the questions that arise in the ethical issues are, Who is affecting? Who are affected? Does the environment gets disturbed? When do the disturbances takes place and how does it happen?

#### 10. Quote some examples of pollution that spoiled the environment?

Some examples of pollution that affected the environment are Bhopal gas tragedy, Chernobyl nuclear plant explosion, Artificial rains, Meuse valley disaster at Belgium,Oleum gas leak in Delhi, HPCL disaster in Vizag, Donova (USA)steel and chemical plantdisaster, Tehri Dam in U. P. state, etc.

#### 11. What is computer ethics?

Computers contribute to a variety of moral problems. In order to evaluate andact appropriately with such problems, a new field of applied ethics termed as 'computerethics' has been developed.

#### 12. Give any ten commandments of computer ethics?

- a. Don't use a computer to harm other people.
- b. Don't interfere with other people's computer works.
- c. Don't snoop around in other people's computer files.
- d. Don't use a computer to steal.
- e. Don't use a computer to bear false witness.

## 13. What is hacking?

When computers are the main objects of an unethical act, it will create some ethical issues. This kind of act is called hacking