

# GE8076 PROFESSIONAL ETHICS IN ENGINEERING

| <b>CO. NO</b> | <b>DESCRIPTION</b>                                                                                  |
|---------------|-----------------------------------------------------------------------------------------------------|
| <b>CO1</b>    | Describe the human values with regard to the individual lifestyle for the society                   |
| <b>CO2</b>    | Explain the role of ethics to the engineering field                                                 |
| <b>CO3</b>    | Describe how engineering is applied in association with ethics based on engineering experimentation |
| <b>CO4</b>    | Explain the engineering ethics-based safety, responsibilities and rights                            |
| <b>CO5</b>    | Discuss the global issues of professional ethics in engineering                                     |
| <b>CO6</b>    | Experiment the professional ethics in engineering-based product development                         |

## **QUESTION BANK PART A & PART B**

**Subject: Professional Ethics in Engineering**

**Subject Code: GE 8076 (R 2017)**

**GE8076 PROFESSIONAL ETHICS IN ENGINEERING**

**L T P C 3 0 0 3**

### **OBJECTIVE**

To enable the students to create an awareness on Engineering Ethics and Human Values, to instil Moral and Social Values and Loyalty and to appreciate the rights of others.

### **UNIT I HUMAN VALUES**

10

Morals, 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 – Spirituality – Introduction to Yoga and meditation for professional excellence and stress management.

### **UNIT II ENGINEERING ETHICS**

9

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.

### **UNIT III ENGINEERING AS SOCIAL EXPERIMENTATION**

9

Engineering as Experimentation – Engineers as responsible Experimenters – Codes of Ethics – A Balanced Outlook on Law.

### **UNIT IV SAFETY, RESPONSIBILITIES AND RIGHTS**

9

Safety and Risk – Assessment of Safety and Risk – Risk Benefit Analysis and Reducing Risk - Respect for Authority – Collective Bargaining – Confidentiality – Conflicts of Interest – Occupational Crime – Professional Rights – Employee Rights – Intellectual Property Rights (IPR) – Discrimination.

### **UNIT V GLOBAL ISSUES**

8

Multinational Corporations – Environmental Ethics – Computer Ethics – Weapons Development  
– Engineers as Managers – Consulting Engineers – Engineers as Expert Witnesses and Advisors  
– Moral Leadership – Code of Conduct – Corporate Social Responsibility.

TOTAL: 45 PERIODS

**OUTCOMES:**

- Upon completion of the course, the student should be able to apply ethics in society, discuss the ethical issues related to engineering and realize the responsibilities and rights in the society.

**TEXT BOOKS:**

1. Mike W. Martin and Roland Schinzinger, —Ethics in Engineering, Tata McGraw Hill, New Delhi, 2003.
2. Govindarajan M, Natarajan S, Senthil Kumar V. S, —Engineering Ethics, Prentice Hall of India, New Delhi, 2004.

**REFERENCES:**

1. Charles B. Fleddermann, —Engineering Ethics, Pearson Prentice Hall, New Jersey, 2004.
2. Charles E. Harris, Michael S. Pritchard and Michael J. Rabins, —Engineering Ethics – Concepts and Cases, Cengage Learning, 2009.
3. John R Boatright, —Ethics and the Conduct of Business, Pearson Education, New Delhi, 2003
4. Edmund G Seebauer and Robert L Barry, —Fundamentals of Ethics for Scientists and Engineers, Oxford University Press, Oxford, 2001.
5. Laura P. Hartman and Joe Desjardins, —Business Ethics: Decision Making for Personal Integrity and Social Responsibility, Mc Graw Hill education, India Pvt. Ltd., New Delhi, 2013.
6. World Community Service Centre, \_ Value Education,, Vethathiri publications, Erode, 2011.

Web sources:

1. [www.onlineethics.org](http://www.onlineethics.org)
2. [www.nspe.org](http://www.nspe.org)
3. [www.globalethics.org](http://www.globalethics.org)

## **Unit - I: Human Values**

### **Part - A**

**1. Write the difference between ethics, morale and values. [Apr / May 2021]**

**Ethics:** defined as the discipline that deals with what is good and bad and with moral duty and obligation.

**Morale:** are the welfare principles enunciated by the wise people, based on their experience and wisdom.

**Values:** A value is defined as a principle that promotes well-being or prevents harm.

**2. Differentiate between sympathy and empathy. [Apr / May 2021]**

**Empathy:** The ability to imagine oneself in another's place and understand the other's feelings, desires, ideas and actions.

**Sympathy:** The sharing of the painful feelings of another person

**3. Define work ethics. [Apr / May 2019]**

Work ethics is defined as a set of attitudes concerned with the value of work, which forms the motivational orientation.

**4. Brief on Spirituality. [Apr / May 2021, Apr / May 2019]**

Spirituality is a broad term that refers to the way of living. It emphasizes a constant awareness of the spiritual dimensions of nature.

**5. What is meant by integrity? How is it related to work ethics? [Apr / May 2021, Nov / Dec 2018]**

Integrity is defined as the virtue, which reflects a consistency of one's attitude, emotions and conduct in relation to justified moral values. Since work ethics is set of attitudes with the value of work, then a person having integrity can exhibit a very good work ethics in his profession.

**6. Define the term self-confidence. How is it related to character development? [Nov / Dec 2018]**

Self-confidence is positive attitude, wherein the individual has some positive and realistic view of himself, with respect to the situations in which one gets involved. Self-confidence will lead to character development like embodying the spirits of purity, kindness, patience, diligence, discipline, generosity of which brings great harmony.

**7. What is meant by civic virtue and how is it related to respect for others? [Apr / May 2018]**

Civic virtue is morality or a standard of righteous behavior in relationship to a citizen's involvement in society. If we have civic virtue then we are respecting the entire society, for example our parents, teachers, elders, college rules, traffic laws, family and cultural traditions, other peoples' feelings and rights.

**8. Define the term empathy and how is it related to Emotional Quotient? [Apr / May 2018]**

The ability to imagine oneself in another's place and understand the others' feelings, desires, ideas and actions. If a person having empathy then his emotional quotient will be always above average. (Emotional Quotient means emotional intelligence often as represented by a score in a standardized test)

**9. Define moral values with suitable examples. [Nov / Dec 2020, Apr / May 2017, Apr / May 2015]**

- Moral values reside both in the acts of a person chooses to do and in the results of those acts on the character of the person. They are defined as the ideals and principles that guide how people act.
- Honesty, respect for others, loyalty, responsibility for personal actions. Generosity and kindness are all examples of moral values

**10. Define the term "Service Learning" [Apr / May 2017]**

Service learning is a teaching and learning strategy that integrates meaningful community services with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.

**11. What are human values in engineering ethics? [Nov / Dec 2016]**

Human values are basic moral values one ought to possess to live as a citizen or a person. Typical human values are love, truth, right conduct, peace, non-violence, etc.

**12. List out any two aspects of honesty. [Nov / Dec 2016]**

- Truthfulness – Meeting responsibilities concerning truth-telling
- Trustworthiness – Meeting responsibilities concerning trust

**13. What are the values? [May / Jun 2016]**

A value is defined as a principle that promotes well-being or prevents harm. Example: Right conduct, Peace, Truth, Love and Non-violence

**14. What is meant by self-confidence and moral leadership? [Apr / May 2015, May / Jun IVYEAR/VIII SEMESTER]**

**2016]**

Self-confidence is positive attitude, wherein the individual has some positive and realistic view of himself, with respect to the situations in which one gets involved.

**Moral leadership:** When the leaders' goal is not only permissible but also morally valuable, then it is known as moral leadership.

**15. Define „Professionalism“. [Nov / Dec 2020, Apr / May 2015]**

It is the status of a professional which implies certain attitudes or typical qualities that are expected of a professional.

**16. List the factors that enhance the self-confidence in a person. [Apr / May 2015]**

- Positive self-image
- Your view to the world
- Deal your mistakes by yourself
- List your weakness and strength

**Part - B**

1. Write the need and importance of studying ethics and how far the study of ethics improves the behavior of an individual and boosts the organization culture. [**Apr / May 2021**]
2. What is service learning? Discuss its role in caring and sharing in society with suitable examples. [**Nov/ Dec 2020, Nov / Dec 2018**]
3. What is empathy? Discuss its role in the spiritual development for excellence in an organization with suitable examples. [**Nov / Dec 2018**]
4. What is integrity? How integrity plays a major factor in work ethics? Discuss with suitable examples. [**Nov/ Dec 2020, Apr / May 2018**]
5. What is spirituality? What are the spiritual traits to be developed for excellence in an organization? Discuss with suitable examples. [**Apr / May 2018**]
6. Explain the scope and importance of professional ethics in Engineering. [**Apr / May 2017**]
7. Explain the role of Yoga and meditation in the field of professional excellence and stress management. [**Apr / May 2021, Nov/ Dec 2020, Apr / May 2019, Nov / Dec 2016, Apr / May 2017**]
8. Explain integrity and honesty in ethics. [**Apr / May 2019, Nov / Dec 2016**]
9. Explain character and spirituality and their importance in ethics. [**May / Jun 2016**]

**10. Explain the importance of self-confidence in ethics. [May / Jun 2016]**

## **Unit - II: Engineering Ethics**

### **Part – A**

**1. What is engineering ethics? [Apr / May 2021, Nov / Dec 2020]**

Engineering ethics may be defined as the identification, study and resolution of ethical problems occurring in the practice of the engineering profession.

**2. What is the need for engineering ethics? [Apr / May 2021]**

- Stimulating the moral imagination
- Recognizing ethical issues
- Developing analytical skills
- Drawing out sense of responsibility
- Addressing unclarity, uncertainty and disagreement.

**3. What do you understand by “Balanced outlook on Law”?[Nov / Dec 2020]**

The „balanced outlook on law“ in engineering practice stresses the necessity of laws and regulations and also their limitations in directing and controlling the engineering practice.

**4. What are moral Dilemma? [Apr / May 2021, Apr / May 2019, Nov / Dec 2016]]**

Moral dilemmas are situations in which moral reasons come into conflict, or in which the application of moral values are problems, and one is not clear of the immediate choice or solution of the problems.

**5. State any two methods that can be applied when testing is appropriate? [Apr / May 2019]**

- Scenario analysis
- Failure modes and effects analysis
- Fault-tree analysis
- Even-tree analysis

**6. Define the term moral autonomy. [Nov / Dec 2018]**

Moral autonomy is defined as, decisions and actions exercised on the basis of moral concern for other people and recognition of good moral reasons.

**7. List the theories of right action. [Apr / May 2021, Nov / Dec 2018]**

Utilitarian theory (Act and Rule utilitarian), Duty ethics theory, The rights theory, The virtue theory, Self-realization theory, Justice (fairness) theory



**8. What are the merits of moral autonomy? [Apr / May 2018]**

- The **moral autonomy** relates to the individual ideas whether right or wrong conduct which is independent of ethical issues.
- The concept of moral autonomy helps in improving self-determination.
- **Moral Autonomy** is concerned with independent attitude of a person related to moral/ethical issues.

**9. Write the uses of ethical theories. [Apr / May 2018]**

- In understanding moral dilemma. They provide clarity, consistency, systematic and comprehensive understanding
- It provides helpful practical guidance in moral issues towards the solution
- Are useful in expressing everyday moral experience and justifying the professional morality

**10. State the importance of ethical theories. [Apr / May 2017]**

- Ethical theories provide part of the decision-making foundation for Decision Making.
- When ethics are in play because these theories represent the viewpoints from which individuals seek guidance as they make decisions.

**11. State Kohlberg's theory. [Nov / Dec 2016]**

According to Kohlberg, the people progressed in their moral reasoning through a series of stages. His theory is based on the foundation that morality is a form of reasoning that develops in structural stages. The three levels of moral development suggested by Kohlberg are:

- Pre-conventional level
- Conventional level
- Post-conventional level

**12. State Gilligan's theory. [May / Jun 2016]**

According to Gilligan theory, males have a tendency to over-ride the importance of moral rules and conviction while resolving moral dilemmas; whereas females have a tendency to try hard to preserve personal relationship with all people involved in a situation.

**13. What is meant by consensus? [May / Jun 2016]**

Consensus means „General agreement“. Example: The consensus of the universities is that they should conduct university examination twice in a year.

**14. List the advantages of industrial standards. [Apr / May 2015]**

Standards help manufacturers reduce costs, anticipate technical requirements, and increase productive and innovative efficiency. The positive effects of industrial standards in areas such as trade, the creation of Single Market for products and services, and innovation.

**Part - B**

1. Discuss in detail on the Ethical behavior of an individual is it same when he is “alone or in a Group of company” and “Should ethics be prompted or imposed”. [Apr / May 2021]
2. Write short notes on “Moral dilemmas”. [Nov / Dec 2020].
3. Discuss the role and importance of Ethics in Engineering. [Apr / May 2019 (Part C)]
4. Discuss in detail the various ethical theories and their uses. [Apr / May 2019, Nov / Dec 2016]
5. What is moral autonomy? Compare and contrast the theories of moral autonomy by Kohlberg and Gilligan. [Apr / May 2021, Nov / Dec 2020, Apr / May 2015, Nov / Dec 2018, Apr / May 2018, Apr / May 2017]
6. Discuss the motives for professionalism and the models for professional engineers. [Nov / Dec 2020, Nov / Dec 2018]
7. What is professionalism? Compare the motives for professionalism and the models for professional engineers. [Apr / May 2018]
8. Discuss the role of „Self-interest“ with an example. [Apr / May 2017]
9. Discuss in detail about the concept of (i) Moral dilemma (ii) Moral Autonomy [Nov / Dec 2016]
10. Discuss in detail the various theories about right action. [Nov / Dec 2016]
11. Discuss in detail about the senses of Engineering Ethics. [Nov / Dec 2016]
12. Write a brief note on the types of inquiries. [Apr / May 2019, Apr / May 2015]

**Unit - III: Engineering as Social Experimentation**

**Part – A**

**1. What reasons lead to many repetitions of past mistakes? [Apr / May 2021]**

The absence of interest and channels of communication, ego in not seeking information, guilty upon the failure, fear of legal actions, and mere negligence have caused many a failure.

**2. What are the general features of morally responsible engineers? [Apr / May 2021]**

- A conscientious commitment to live by moral values
- A comprehensive perspective on relevant information
- Unrestricted free-personal involvement in all steps of the project development
- Be accountable for the results of the project

**3. What are the uncertainties that occur in Model Design? [Apr / May 2019, Apr / May 2017]**

The uncertainties may include uncertainties in the

- (i) Design calculations
- (ii) Exact properties of raw materials used
- (iii) Constancies of materials processing and fabrication
- (iv) Nature of working of final product

**2. What is the Code of Ethics? [Apr / May 2019]**

- The primary aspect of codes of ethics is to provide the basic framework for ethical judgment for a professional
- The codes of ethics, also referred as codes of conduct, express the commitment to ethical conduct shared by members of a profession. In other words, these codes furnish common. Agreed-upon standards for professional conduct.

**3. What are the advantages of codes of ethics? [Nov / Dec 2018]**

- Sets the right culture
- Builds a good reputation
- Attracts outstanding employees
- Helps remain in compliance with laws and regulations

**4. What are the limitations of standardized experimentation? [Nov / Dec 2018]**

- In standardized experiments there will be control group (used only when the project is limited to laboratory experimentation)
- “Informed consent” is not applicable in standardized experimentation

**5. What are the limitations of codes of ethics? [Apr / May 2021, May / Jun 2016, Apr / May 2018]**

- **General and vague wordings.** Many statements are general in nature and hence unable to solve all problems

- **Not applicable to all situations.** Codes are not scared, and need not be accepted without criticism. Tolerance for criticism of the codes themselves should be allowed.

**6. What are the merits of standardized experimentation? [Apr / May 2018]**

- Standardized experiments reduces the production costs
- Reduces time
- Quality is achieved easily
- It helps the manufacturer, customers and the public in keeping competitiveness

**7. What is meant by engineering experimentation? [Apr / May 2017]**

The engineering experimentation involves human beings as experimental subjects. In fact, clients and customers have more control. As they own the authority of that project. So here the experimental subjects are out of the engineering experimenter's control, unlike standard experiments.

**8. How does the law facilitate ethics in engineering? [Apr / May 2017]**

- The laws can authoritatively establish reasonable minimal standards of professional conduct
- The laws can provide a self-interested motive for most of the people and corporations to comply
- The laws act as a protector of ethical engineers. That means, they serve as a powerful support and defense to those who wish to involve in ethical activities.

**9. What is the need to view engineering projects as experimentation? [Nov / Dec 2016]**

In engineering, each and every stage of product or process development experiments are conducted. There may be many uncertainties at each stage. But engineers cannot afford to delay projects until all the information is received. Thus the final outcome of an experiment could be uncertain. That is why, engineering projects are viewed as experimentation.

**10. Enumerate the roles of codes in ethics of profession. [Nov / Dec 2016]**

- Inspiration and Guidance
- Deterrence and Discipline
- Contributions to Public Image
- Education and Mutual Understanding

**11. Differentiate scientific experiments and engineering projects. [Apr / May 2021, May / Jun 2016]**

| S. No. | Scientific experiments                                                  | Engineering projects                                                                                    |
|--------|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 1      | Scientific experiments are carried out with certainties                 | Engineering projects, like the standard experiments are carried out in partial uncertainties            |
| 2      | The final outcomes of Scientific experiments are also generally certain | The final outcomes of engineering projects are also generally uncertain like those of other experiments |

**12. Why engineers are considered as responsible experimenters? [Apr / May 2015]**

- Engineering projects, like the standard experiments, are carried out in partial uncertainties
- The final outcomes of engineering projects are also generally uncertain like those of other experiments.

**13. Define „informed consent“. [Apr / May 2015]**

The experimenters whose experiments involve human subjects have moral and legal obligations to inform about all the relevant facts about the experiments to the person who participates in experiments.

**(Hint: Informed consent is practiced in medical experimentation)**

**Part B**

1. Write short notes on the following: (i) Employee rights (ii) Professional Rights (iii) Occupational Crimes. [Nov/ Dec 2020]
2. Explain the characteristics of Morally Responsible Engineers. [Apr / May 2019]
3. Compare and contrast engineering experiments with standard experiments. [Nov / Dec 2018, Apr / May 2018]
4. Discuss the models of research ethics with suitable examples. [Nov / Dec 2018]
5. What is research ethics? Discuss the models of research ethics with suitable examples. [Apr / May 2018]
6. Explain the Challenger space shuttle disaster. Discuss the violation of moral ethical and professional codes of standards in it. Write a conclusion to avoid such disaster in future. [Nov /Dec 2020, Apr / May 2015, Apr / May 2018]
7. What is the importance of codes of ethics? Explain in detail. [Apr / May 2021, Apr / May 2017]

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8. How can an engineer become a responsible experimenter? Explain in detail. **Apr / May**

**2021, May / Jun 2016, Nov / Dec 2016, Apr / May 2017]**

9. Explain in detail about balanced outlook on law. [**Nov / Dec 2016]**

10. Discuss on the roles played by the codes of ethics set by professional societies. [**May / Jun 2016]**

11. Explain how the codes of ethics guide an engineer in the professional behavior. [**Apr / May 2019, Apr / May 2015]**

## **Unit - IV: Safety, Responsibilities and Rights**

### **Part - A**

1. **Define confidentiality.** [**Apr / May 2021]**

Confidentiality means keeping the information on the employer and clients, as secrets. It is one of the important aspects of team work.

2. **State the industrial definition on safety.** [**Nov / Dec 2020]**

A thing is safe with respect to a given person or group at a given time, if its risks were full known, if those risks would be judged acceptable in light of settled value principles.

3. **What is meant by Disaster?** [**Nov / Dec 2020]**

A disaster is a result from the combination of hazard, vulnerability and insufficient capacity or measures to reduce the potential chances of risk.

4. **Differentiate Bribe from Gift.** [**Nov / Dec 2020]**

- Gifts are not bribes as long as they are gratuities of smaller amounts. But bribes are illegal and immoral because they are worth of substantial amounts.
- Gifts may play a legitimate role in the normal conduct of business, whereas a bribe influences the judgment.

5. **What is Hired Gun?** [**Apr / May 2021, Nov / Dec 2020]**

Hired gun refers to an expert who is biased and does not appear to be impartial. He / she adapts his / her expert evidence to the requirements of the party that calls him / her as a witness. A hired gun expert is easily recognizable.

6. **What is Professional Right?**[**Apr / May 2019]**

Professional rights are the rights possessed by virtue of being professionals having special

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moral responsibilities.

Example:

- Right to exercise one's professional judgment on the basis of his conscience
- Right to refuse to involve in unethical activities

**7. Define the term safety and relate it to risk. [Apr / May 2018, Nov / Dec 2018]**

Safety is defined as the risk that is known and judged as acceptable.

Probability of safety = 1 – Probability of risk

Risk = Probability of occurrence x Consequence in magnitude

**8. What is meant by conflict of interest?**

A conflict of interest occurs when the employee has more than one interest. A professional conflict of interest is the situation where the professional has an interest that, if pursued, might prevent him from meeting these obligations to his employees or clients.

**9. What is meant by confidentiality and why it is needed? [Apr / May 2018]**

Confidentiality means keeping the information on the employer and clients, as secrets. It is one of the important aspects of team work. It is very much needed that, the rights of stakeholders and right to the intellectual property of the company are protected.

**10. What is the use of risk analysis? [Apr / May 2015, Apr / May 2017]**

Risk analysis is the review of the risks associated with a particular event or action. It is applied to projects, information technology, security issues and any action where risks may be analyzed on a quantitative and qualitative basis.

**11. Define the term „collective bargaining“. [Apr / May 2021, Nov / Dec 2020, Nov / Dec 2016, Apr / May 2017]**

It is the bargain by the trade union for improving the economic interests of the worker members. The process includes negotiation, threatening verbally, and declaration of „Strike“.

**12. Define „Risk“ in professional ethics perspective. [Apr / May 2021, Nov / Dec 2016]** According to professional ethics perspective, risk is potential that something unwanted and harmful may occur.

**13. Differentiate between Risk analysis and Risk benefit analysis. [May / Jun 2016]**

**Risk analysis:** The process of identifying, assessing and reducing risks to an acceptable level.

**Risk benefit analysis:** Risk benefit analysis is a technique, similar to cost-benefit analysis used to

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analyze the risk in a project and to determine whether the project should be carried out or not.

**14. Define „collegiality“. What are its elements? [Apr / May 2015]**

Collegiality is the tendency to support and cooperate with the colleagues. It is a virtue essential for the team work to be effective.

**Part B**

1. Define the concept of confidentiality in professional ethics. [Nov/ Dec 2020]
  2. Discuss on the importance of Collective Bargaining. [Apr / May 2021, Nov/ Dec 2020, Apr / May 2019]
  3. Explain the procedure in risk benefit analysis and discuss its role in reducing risks with suitable examples. [Nov/ Dec 2020, Nov / Dec 2018]
  4. Discuss the „faithful agent argument“ and „public service argument“ of collective with suitable examples. [Nov / Dec 2018]
  5. Discuss the testing strategies for safety with suitable examples. Mention the difficulties in assessing the personal risks. [Apr / May 2018]
  6. „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. [Apr / May 2018]
  7. Explain the Bhopal gas tragedy. Discuss the violation of moral, ethical and professional codes of standards in it. Write conclusion to avoid such tragedy in future. [Apr / May 2015, Apr / May 2018]
  8. Describe the concept of Risk-Benefit analysis and Fault free analysis with an example. [Nov/ Dec 2020, Apr / May 2015, Apr / May 2017]
  9. Discuss in detail about the “Employee Rights” and its role in the organizations. [Apr / May 2019, Apr / May 2017]
  10. Define the term Risk and Safety. How we, Engineers assess the safety? [Nov / Dec 2016]
  11. Discuss **Event Tree analysis** with some practical example of risk analysis. [Nov / Dec 2016]
  12. What are the factors that affect risk acceptability? What is the use of knowledge of risk acceptance to engineer? [May / Jun 2016]
  13. Discuss the significance of intellectual property rights. Also explain the legislation covering IPR in India. [Apr / May 2021, Nov/ Dec 2020, May / Jun 2016]
  14. Discuss the significance of loyalty and collegiality in team work. [Nov/ Dec 2020, Apr / May 2019]
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2015]

## **Unit - V: Global Issues**

### **Part - A**

#### **1. Define appropriate technology. [Apr / May 2021]**

Identification, transfer, and implementation of most suitable technology for a set of new situations, is called appropriate technology.

#### **2. What are the International rights listed by Donaldson? [Apr / May 2021]**

Donaldson proposes standards for international institutions by which to protect fairness and freedom, ownership of property, free speech, and minimum education and subsistence levels.

#### **3. What is Global rule? [Nov / Dec 2020]**

The term Global ethical rule refers to a set of common moral values and ethical standards which are shared by the different faiths and cultures on Earth. These common moral values and ethical standards constitute a humane ethic, or, the ethic of humanity.

#### **4. What is CSR (Corporate Social Responsibility)? [Apr / May 2019, Nov / Dec 2018]** Corporate social responsibility means that organizations have also ethical and societal responsibilities that go beyond their economic responsibilities.

#### **5. What is Environmental Ethics? [Apr / May 2021, Apr / May 2019]**

Environmental ethics is the study to explore the ethical roots of the environmental movement and to understand what ethics tells us about our responsibility to the environment.

#### **6. What are the demerits of MNCs to host country? [Nov / Dec 2018]**

- Social and cultural disturbance
- Loss of jobs for the home country, and loss or exploitation of natural resources,
- political instability for the host countries

are some of the demerits of MNCs to host country

#### **7. What are the advantages of MNCs to host country? [Apr / May 2018]**

- Inexpensive labour
- Availability of natural resources
- Conducive-tax atmosphere and

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- Virgin market for the products

**8. What is code of conduct and mention its significance? [Apr / May 2018, Nov / Dec 2016]**

Codes of conduct, also referred as codes of ethics, express the commitment to ethical conduct shared by members of a profession. In other words, these codes furnish common, agreed-upon standards for professional conduct.

**Significance:**

- A well-designed code of conduct is a foundation for an effective ethics and compliance program.
- It is the core from which other policies and procedures are designed.

**9. What do you mean by IPR? [Apr / May 2019, May / Jun 2016, Apr / May 2017]**

Intellectual property (IP) is a property that results from mental labour. Intellectual property is the information and original expression that derives its original value from creative ideas with a commercial value.

**10. How is corporate social responsibility practiced? [Apr / May 2017]**

- Corporate social responsibility (CSR) is a management concept whereby companies integrate social and environmental concerns to their business operations and interactions with their stakeholders on a voluntary basis.
- CSR is generally understood as being the way through which a company achieves a balance of economic, environmental and social imperatives, while at the same time addressing the expectation of shareholders and stakeholders.

**11. What is meant by computer ethics? [Nov / Dec 2016]**

Computer ethics is the study of ethical issues that are associated primarily with computing machines and the computing profession.

**12. What is moral leadership? [May / Jun 2016]**

When the leaders' goal is not only permissible but also morally valuable, then it is known as moral leadership. In other words, moral leadership means employing morally permissible means to stimulate groups to move toward morally desirable ends.

**13. What is meant by globalization? [May / Jun 2016]**

Globalization means integration of countries through commerce, transfer of technology, and exchange of information and culture.

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**14. What do you understand by „business ethics“? [Apr / May 2015]**

Business ethics is concerned with truth and justice and has variety of aspects such as the expectation of society, fair competition, advertising, public relations, social responsibilities, consumer autonomy, and corporate behavior.

**13. What does whistle blowing mean? [Nov / Dec, 2008]**

Whistleblowing is defined as conveying information by an employee, on an important moral problem to somebody in a position to take action on the problem. Further, this is done outside the approved organizational channels.

**Part - B**

1. What is cyber crime? Discuss in detail the various cyber crimes in the context of Ten Commandments of Computer Ethics. [Apr / May 2021]
2. Discuss in detail the concept of Business Ethics and Environmental Ethics in the context of technological development and for the sustenance of sustainable development. [Apr / May 2021, Nov/ Dec 2020].
3. Develop a model code of conduct for Multinational Corporation which is employing mainly software engineers. [Nov/ Dec 2020]
4. With various examples explain the various ethical issues faced by an consultant engineer. How an engineer can create a good ethical climate in any industry. [Apr / May 2021 (Part C)]
5. Explain the significance of Environmental Ethics for an Engineer by giving examples of environmental issue. [Apr / May 2019 (Part C), Apr / May 2015]
6. Discuss the ethical role of engineers as consultants with suitable examples. [Apr / May 2018, Nov / Dec 2018]
7. Discuss the ethical role of engineers as expert witness with suitable examples. [Nov/ Dec 2020, Nov / Dec 2018]
8. Discuss the ethical role of engineers in weapon development with suitable examples. [May / Jun 2016, Nov / Dec 2018 (Part C), Apr / May 2018]
9. Discuss in detail about the moral and ethical issues involved in use of computers. [Nov/ Dec 2020, Apr / May 2019, Apr / May 2017]

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- 10.** Explain the role of engineers as consultant and expert witnesses. [**Apr / May 2019, Apr / May 2017**]
- 11.** Explain in detail the various advantages and disadvantages of MNCs. [**Nov / Dec 2016**]
- 12.** Discuss the scope and functions of corporate responsibility. [**Nov / Dec 2016**]
- 13.** Justify Engineers as Expert witness and advisors with suitable examples. [**May / Jun 2016**]
- 14.** Discuss the various global issues that have an impact on business. [**Apr / May 2015**]