

MA  
Meth

**COLLEGE OF ENGINEERING, PUNE**  
(An Autonomous Institute of Government of Maharashtra)  
**Affiliated to University of Pune**

**(ML 101) Professional Ethics and Human Values**

**Semester - I**

Programme: F.Y. B. Tech  
Academic Year: 2012-13  
Duration: 3.0 Hours

Divisions: VI, VII, VIII, IX, X  
Date: 04.12.2012  
Max. Marks: 50

Instructions:

1. Figures to the right indicate full marks.
2. Begin each answer on a fresh page. Neatness will be rewarded.
3. Mobile phones are not permitted in the examination hall.

Answer any FIVE of the following questions:

**Q1. Correct the following statements (Write the CORRECT statement. Merely negating the given statement will not fetch you any marks):** (10 marks)

1. Simple technology is suitable for large scale production of goods, employing sophisticated machines and equipment.
2. Appropriate technology is developed to cater to the needs of rich industrial houses to help them earn high profits.
3. Whistle blowing is the ethical way in which a policeman stops traffic on the road.
4. The use of plastic bags is not environmentally sustainable because they are bio-degradable.
5. Appropriate technology uses imported resources for manufacture of goods.
6. Over the centuries, the toxicity of e-waste is lost compared with toxicity of nuclear waste.
7. Mass production makes use of human resources and employs primitive technology.
8. High technology is the right technology for the cottage industry.
9. Appropriate technology is difficult to operate and needs to be maintained by highly skilled persons.
10. Moral dilemmas arise because of one's ability to choose between different moral alternatives.
11. The technology of production by the masses is harmful to ecology.
12. The headquarters of MNCs are located away from their home countries.
13. MNCs do business in their home countries because labour is expensive there.
14. Production by the masses is large scale production of goods, employing sophisticated technology.
15. Mass production is labour intensive.
16. Mass production makes use of intermediate technology.
17. Mass production is the technology of the poor.
18. Production by the masses is meant for only the rich and the powerful.
19. The technology of mass production requires very small investment to install.
20. Mass production is an inherently non-violent technology.

**Q2. (a) What is meant by transfer of technology? Is it always an advantage to import technology from more developed countries? Explain with ethical reasons.** (5 marks)

**Q2. (b) What is a Multinational Corporation (MNC)? Discuss the role of MNCs in technology transfer, bringing out their advantages and disadvantages from the ethical angle.** (5 marks)

Q3. Write short notes on *any TWO* of the following to explain how we may deal with the environmental hazards in the following: (10 marks)

- (a) Plastic waste
- (b) Deforestation
- (c) e-waste
- (d) Industrial effluents

Q4. (a) What is meant by the term *Corporate Sustainability*? How does it differ from *Corporate Social Responsibility*? (5 marks)

Q4. (b) *Technology can have no legitimacy unless it inflicts no harm*. What does this mean? Explain, with examples, the role of corporations in harnessing environmentally and socially sustainable technologies. (5 marks)

Q5. (a) What is meant by *alternative sources of energy*? Explain with examples. Why is it an ethical responsibility of engineers to conserve energy? (5 marks)

Q5. (b) What are the advantages and disadvantages of *nuclear technology*? Do you think *nuclear energy* is the fuel of the future? Why or why not? (5 marks)

Q6. (a) What are *intellectual property rights*? Why is it unethical to use or copy software for which one has not paid? (5 marks)

Q6. (b) Does computerisation cause unemployment? Discuss your stand on this with convincing reasons. (5 marks)

Q7. A world without oil: (10 marks)

*Imagine it is now 50 years in the future and you have grown wiser and older. The earth's oil resources and other fossil fuels have got almost completely depleted resulting in very little oil left in the world. Write an essay describing life as well as the state of technology and development 50 years after 2012, when you were a young student at COEP. You may write using EITHER ONE of the following approaches:*

- (a) Assume that people in your young days took all precautions to harness alternative technologies and energy sources with experimentation. Describe the progress and technologies being used in the future and the state of human civilization.

OR

- (b) Assume that people in your young days did not do enough to harness alternative fuels. Describe the resultant situation 50 years thence. You need not be too pessimistic here. Perhaps, professionals of the future took steps to rectify the damage. Describe how they might have done this to save the earth.