

**ANNA UNIVERSITY :: CHENNAI – 600 025**

**MODEL QUESTION PAPER**

**B.E. / B.TECH. DEGREE PROGRAMMES**

**GE035 PROFESSIONAL ETHICS**

**Time: Three Hours**

**Maximum : 100 Marks**

**Answer All The Questions**

**PART – A (10 x 2 = 20 Marks)**

1. What is meant by voluntary risk?
2. “When in Rome do as Romans do”? – Explain it in the context of ethical relativism.
3. Explain when the act of gift receiving becomes an act of bribe?
4. What are the several roles of an engineer in the society?
5. What is moral autonomy?
6. What are the steps to be taken in dealing with moral dilemmas?
7. What is the role of an engineer in responsible experimentation?
8. How can a product be tested for safety?
9. What are the special moral issues intrinsic to the defense industry?
10. Write briefly on loyalty as a professional obligation.

**PART – B (5 x 16 = 80 Marks)**

- 11.i) Briefly explain, some of the most commonly discussed cases of computer abuse. (6)
- ii) What is technology transfer and appropriate technology? (6)
- iii) What are the areas, which illustrate some of the special responsibilities of consulting engineers? (4)

- 12.a) What are the important problems in Moral dilemmas? What are the main levels of moral development in the theories proposed by Lawrence Kohlberg and Carol Gilligan? Explain each one with an example.

**OR**

- 12.b) i) What are the functions and limitations of “Codes of Ethics”? (8)  
ii) Is code of Ethics different from code of conduct? Explain. (8)

- 13.a) In the late 1960s. Ford designed a small car Pinto and brought it into market at a rapid pace. The gas tank was between the rear axle and the bumper. The prescribed rear impact tests have been conducted and the design was found to be alright. The gas tank caught fire at an impact very marginally higher than the value stipulated in the impact test.

Ford engineers calculated that paying the insurance claims of the accident victims would be much cheaper than changing the design at that stage.

What responsibilities do engineers have in situations like this? Is it appropriate to undertake safety improvement at any cost?

**OR**

- 13.b) i) Explain in detail the effect of information on risk assessment. (8)  
ii) Describe the concept of risk benefit analysis? (8)

- 14.a) Many accidents are caused by using cellular phones while driving. The risk of accident is four times greater when the driver is using the cell phone. This is the same as driving the car drunk. 23 countries have banned the use of cell phone while driving.

Cell phones and the means of mounting them in automobiles are designed by engineers. What responsibility do engineers have regarding this problem?

- 14.b) i) What is an Intellectual Property Right? (2)  
ii) Discuss briefly the various forms of Intellectual Property Rights? (14)

- 15.a) i) Write briefly on the sequence of events that occurred during the launch of the Challenger space ship? (8)

ii) Write briefly how the challenger disaster can be observed as a poor ethical episode with respect to the acts of (8)

- 1) deliberate deception
- 2) failure to seek out the truth
- 3) allowing one’s judgment to be corrupted

4) engineers with no right to free speech

**OR**

15.b) A country engineer in Virginia demanded a 25% kickback in secret payments for highway works contract he issued. Allan Kammerer, a young Vice-President of a struggling consulting firm agreed to this condition. Allan cited that bringing work to his concern and retaining his employees is the main reason for the decision. Discuss the Normative or moral issues involved in this case.

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