

Reg. No.: 920214105003

## Question Paper Code: 41167

## B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2018 Fifth/Sixth/Seventh/Eighth Semester

Civil Engineering

GE6075 - PROFESSIONAL ETHICS IN ENGINEERING

(Common to: B.E. Agriculture Engineering/B.E. Automobile Engineering/B.E. Biomedical Engineering/B.E. Computer Science and Engineering/B.E. Electrical and Electronics Engineering/B.E. Electronics and Communication

Engineering/B.E. Electronics and Instrumentation Engineering/B.E. Geoinformatics Engineering/B.E. Industrial Engineering/B.E. Instrumentation and Control Engineering/B.E. Manufacturing Engineering/B.E. Materials Science and Engineering/B.E. Mechanical Engineering/B.E. Mechatronics Engineering/B.E. Production Engineering/B.Tech. Chemical Engineering/B.Tech. Fashion Technology/B.Tech. Food Technology/B.Tech. Information Technology/B.Tech. Petroleum Engineering/B.Tech. Plastic Technology/B.Tech. Polymer Technology/B.Tech. Textile Chemistry/B.Tech. Textile Technology)

(Regulations 2013)

Time: Three Hours

Maximum: 100 Marks

## Answer ALL questions

PART - A

(10×2=20 Marks)

- 1. What is meant by civic virtue and how is it related to respect for others?
- 2. Define the term empathy and how is it related to Emotional Quotient.
- 3. What are the merits of moral autonomy?
- 4. Write the uses of ethical theories.
- 5. What are the limitations of codes of ethics?
- 6. What are the merits of standardized experimentation?
- 7. Define the term safety and relate it to risk.
- 8. What is meant by confidentiality and why it is needed?
- 9. What are the advantages of MNCs to host country?
- 10. What is code of conduct and mention its significance?



(5×13=65 Marks)

11. a) What is integrity? How integrity plays a major factor in work ethics? Discuss with suitable examples.

(OR)

- b) What is spirituality? What are the spiritual traits to be developed for excellence in an organization? Discuss with suitable examples.
- 12. a) What is moral autonomy? Compare and contrast the theories of moral autonomy by Kohlberg and Gilligan.

(OR)

- b) What is professionalism? Discuss the motives for professionalism and the models for professional engineers.
- 13. a) Compare and contrast engineering experiments with standard experiments.

(OR)

- b) What is research ethics? Discuss the models of research ethics with suitable examples.
- 14. a) Discuss the testing strategies for safety with suitable examples. Mention the difficulties in assessing the personal risks.

(OR)

- b) '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.
- 15. a) Discuss the ethical role of engineers in weapon development with suitable examples.

(OR)

b) Discuss the ethical role of engineers as a consulting engineer with suitable examples.

PART - C

(1×15=15 Marks)

16. a) 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.

(OR)

b) 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.