

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V (NEW) EXAMINATION – WINTER 2023****Subject Code:3152908****Date:13-12-2023****Subject Name:Professional Engineering Ethics****Time:10:30 AM TO 01:00 PM****Total Marks:70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

MARKS

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|------------|---|-----------|
| Q.1 | (a) What is engineering ethics? | 03 |
| | (b) Define moral autonomy. | 04 |
| | (c) State the human values and explain in detail. | 07 |
| Q.2 | (a) Write briefly about engineering experimentation? | 03 |
| | (b) Compare safety and risk. | 04 |
| | (c) Discuss about the three types of inquiries, giving an example for each. | 07 |
| | OR | |
| | (c) Compare the moral development theory of Kohlberg and Gilligan. | 07 |
| Q.3 | (a) Define civic virtue. | 03 |
| | (b) What are the general features of morally-responsible engineers? | 04 |
| | (c) Discuss about the safety lessons one can learn in the Challenger case. | 07 |
| | OR | |
| Q.3 | (a) State the importance of Industrial Standards? | 03 |
| | (b) Define the terms Profession, Professional, and Professionalism. | 04 |
| | (c) What are the main elements included in informed consent? Enumerate the conditions that would define valid consent. | 07 |
| Q.4 | (a) State the importance of loyalty and collegiality in team work? | 03 |
| | (b) What is collective bargaining. | 04 |
| | (c) Write in detail about the Three-Mile Island and Chernobyl accidents. | 07 |
| | OR | |
| Q.4 | (a) What is confidentiality? | 03 |
| | (b) Write briefly about intellectual property. | 04 |
| | (c) Discuss in detail about the employee rights. | 07 |
| Q.5 | (a) Write in brief about consulting engineering. | 03 |
| | (b) Define technology transfer. | 04 |
| | (c) Explain the role of engineers as managers. | 07 |
| | OR | |
| Q.5 | (a) List the issues in computer ethics. | 03 |
| | (b) State the different characteristic of engineers as public planner and policy makers. | 04 |
| | (c) Explain the meaning and relevance of environmental ethics. | 07 |
