

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
EIGHTH SEMESTER B.TECH DEGREE EXAMINATION, MAY 2019

Course Code: FS482

Course Name: RESPONSIBLE ENGINEERING

Max. Marks: 100

Duration: 3 Hours

PART A

Answer all questions, each carries 2 marks.

Marks

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| 1 | Describe the types of courage. | (2) |
| 2 | Define engineering ethics. | (2) |
| 3 | What are the two elements of informed consent? | (2) |
| 4 | Define risk. | (2) |
| 5 | List down any four elements of Intellectual Property Rights. | (2) |
| 6 | List the types of employee rights with example. | (2) |
| 7 | What does code of conduct mean in an organisation? | (2) |
| 8 | What are the qualities required for an engineer as an expert adviser? | (2) |

PART B

Answer all questions, each carries 3 marks.

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| 9 | Explain the relation between moral, ethics and law. | (3) |
| 10 | List down the professional roles to be played by an engineer. | (3) |
| 11 | Define the benefits of standards. | (3) |
| 12 | State the drawbacks of Lowrence's initial definition of safety. How was it modified? | (3) |
| 13 | Explain occupational crimes with examples. | (3) |
| 14 | Write short note on professional rights with examples. | (3) |
| 15 | Discuss the role of engineers in defence industry. | (3) |
| 16 | Brief on corporate social responsibility with example. | (3) |

PART C

Answer six full questions, each carries 10 marks.

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| 17 | a) Explain service learning and its characteristic features. | (5) |
| | b) Explain role of time management in professionalism. | (5) |
| OR | | |
| 18 | a) Explain civic virtue and its importance. | (5) |
| | b) Explain the term integrity and its need for an engineering professional. | (5) |

- 19 a) Explain the types of moral inquiry. (6)
b) Explain the terms ethical pluralism and ethical relativism. (4)
- OR
- 20 Explain the various ethical theories. (10)
- 21 a) Explain the responsibilities of engineer as an experimenter. (8)
b) List any four societies with codes of ethics. (2)
- OR
- 22 Explain the functions and limitations of codes of ethics. (10)
- 23 Discuss the case study of “The Bhopal Gas Tragedy.” List the causes which resulted into the accident and its impact. (10)
- OR
- 24 a) Explain risk benefit analysis. (5)
b) Explain the elements for reducing risk. (5)
- 25 Explain conflicts of interest, its types and methods to avoid it. (10)
- OR
- 26 Explain the responsibility of engineers towards employer. (10)
- 27 Explain the role of engineers as professional consultants. (10)
- OR
- 28 Explain in detail about computer ethics. (10)
