

Reg No.: \_\_\_\_\_

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
**FIFTH SEMESTER B.TECH DEGREE EXAMINATION(R&S), DECEMBER 2019**

**Course Code: CE371**

**Course Name: ENVIRONMENT AND POLLUTION**

Max. Marks: 100

Duration: 3 Hours

**PART A**

*Answer any two full questions; each carries 15 marks.*

Marks

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|---|--|--|
| 1 | a) Explain the multidisciplinary nature of environment with the help of a flow diagram? (5)  |  |
|   | b) What are the different modes of entry of environmental pollutants on human body system? (5)   |  |
|   | c) Name the major global environmental issues faced by today's world and how do they affect the stability of the environment. (5)  |  |
| 2 | a) Differentiate between primary and secondary air pollutant, with examples. (5)   |  |
|   | b) Give the list of pollutants emitted from (i) non metallic industry (ii) iron and steel industry (iii) thermal power plants (iv) cement industry and (v) oil refineries. (5) |  |
|   | c) How do atmospheric stability conditions affect the behaviour of plume released from stacks? (5)   |  |
| 3 | a) What is meant by population explosion? What are its consequences? (3)   |  |
|   | b) How is biosphere linked to other spheres of environment? (4)  |  |
|   | c) What is smog? Why does Delhi have so much smog in recent years? (4)   |  |
|   | d) How do air pollutants affect the plants and animals? (4)  |  |

**PART B**

*Answer any two full questions; each carries 15 marks.*

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|---|---|--|
| 4 | a) What are the impacts when waste water with high BOD is discharged to water bodies? (5)   |  |
|   | b) In the recent flooding events of Kerala, large number of motor vehicles and electronic equipments were drowned. Discuss about the probable pollutants that would have caused pollution of water resources due to the disaster. (5) |  |
|   | c) What is the intention of providing water quality standards? Give the names of any three authorised bodies who prescribe standards for potable water. (5)   |  |
| 5 | a) With the help of a flow diagram, give the various elements of an engineered solid (5)  |  |

waste management programme.

- b) What is meant by sanitary land filling? What are its advantages and disadvantages? (5)
- c) Why is glass considered as a perfect product for recycling? How it is recovered from waste material? (5)
- 6 a) What is acid mine drainage? How are surface water bodies affected due to this? (4)
- b) Moderately hard waters are preferred for domestic purposes. Why? (3)
- c) Construction industries effectively utilise waste plastic. How this is materialised? (4)
- d) Informal sector e-waste activities are becoming a crucial source of environment to food-chain contamination. How? (4)

### **PART C**

*Answer any two full questions; each carries 20 marks.*

- 7 a) How is land degradation linked to water logging? How can this be prevented? (6)
- b) Suggest safe and environment-friendly methods to clean up polluted soil. (7)
- c) What are bio-pesticides? How do they achieve pest management in an environment-friendly manner? (7)
- 8 a) Differentiate between (i) sound power level and sound intensity (ii) intermittent noise and impulse noise (iii) sound pressure level and sound pressure (6)
- b) What are the components of a sound level meter? Mention the function of each component. (7)
- c) Is urban planning effective in controlling noise pollution? Justify your answer. (7)
- 9 a) Mention the human induced activities that are responsible for landslides. (5)
- b) What is rapid urbanisation? What is its impact on land? (5)
- c) Give an account of the impacts of noise pollution on human beings. (5)
- d) Enlist and explain the various measures that can be adopted to protect the receiver while controlling noise pollution (5)

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