

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Fifth Semester B.Tech Degree Regular and Supplementary Examination December 2020

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

- 1 Analyse the role of biogeochemical cycles in the sustenance of ecosystems. (15)
Illustrate the natural pathways of nitrogen transfer in an ecosystem.
- 2 a) How will you classify ecosystems based on the level and source of energy? (10)
Explain each one in detail
- b) Discuss the mode of formation of carbon monoxide and its effects of on human health (5)
- 3 a) Classify air pollutants based on their source and mode of formation (5)
- b) What is meant by an aerosol? How will you classify aerosols? (5)
- c) Suggest five measures that can be adopted to control industrial air pollution? (5)

PART B*Answer any two full questions, each carries 15 marks.*

- 4 a) What is the need for water quality analysis? Which is the Indian Standard that prescribes the specifications for drinking water quality? If a water sample is found to have the following characteristics, state your observations on the quality of water (10)
- (i) pH – 6
- (ii) Turbidity – 18 NTU
- (iii) Total dissolved solids – 2350 mg/l
- (iv) Chloride – 300 mg/l
- b) Outline five major pollutants of water. (5)
- 5 a) Generalise the effects of any one water-borne disease outlined by the World Health Organisation on human health, stating the mode of occurrence. (4)
- b) Define BOD and generalise its significance in water quality. (4)
- c) Analyse the significance of segregation in solid waste management. (7)

- 6 a) What does the number or code (ranging from 1 to 7) on plastic packaging indicate? Compare various plastic products based on this number and outline the features of each. (10)
- b) Define e-waste? Identify the four e-waste components of a mobile phone after its end of life. (5)

PART C

Answer any two full questions, each carries 20 marks.

- 7 Explain ten abatement measures that can be adopted for land degradation due to anthropogenic activities. (20)
- 8 a) Outline the various urbanization activities which lead to land degradation. (10)
- b) How will you classify noise pollution based on source? Suggest four measures to control noise pollution from industries. (10)
- 9 a) Identify the effects of noise pollution on human health and non-living things. (15)
- b) Convert a sound pressure of 0.015 Pa to Sound Pressure Level(decibels). (5)
