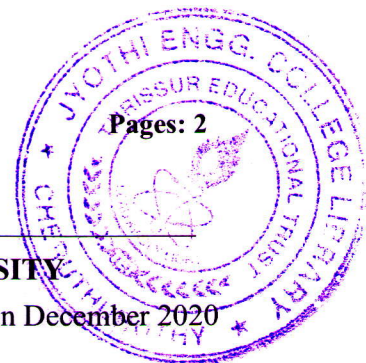


F

03000CE371092002



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)
