

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

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

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
**FIFTH SEMESTER B.TECH DEGREE EXAMINATION, DECEMBER 2017**

**Course Code: CE371**

**Course Name: ENVIRONMENT AND POLLUTION (CE)**

Max. Marks: 100

Duration: 3 Hours

**PART A**

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

- |   |   | Marks |
|---|---|-------|
| 1 | a) "Everything is connected to everything else" comment on it.  | (5)   |
|   | b) Illustrate the population growth curve in detail.  | (5)   |
|   | c) What are the major pollution problems caused by urban areas?   | (5)   |
| 2 | a) Which do you think is a greater danger to man?<br>i) Pesticides used by farmers and householders or<br>ii) Toxic substances released by industrial plants.<br>Justify your answer. | (8)   |
|   | b) List out the major types of particulate matter, their sources and effects.   | (7)   |
| 3 | a) What do you mean by photochemical smog and how is it produced?   | (5)   |
|   | b) What are the main sources and effects of fluoride emissions to the atmosphere?   | (5)   |
|   | c) What is lapse rate and stability of atmosphere?  | (5)   |

**PART B**

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

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|---|---|------|
| 4 | a) Cooling towers are used in many industrial plants as a means for increasing water cycle within the plant. Outline the advantages and disadvantages of their approach | (5)  |
|   | b) Differentiate the water quality characteristics between surface water and groundwater sources.   | (5)  |
|   | c) What is BOD? What is its environmental significance?   | (5)  |
| 5 | a) Give the technical, economical and psychological considerations taken into account when you would run a sanitary landfill operation in your city.                    | (10) |
|   | b) Give the importance of pyrolysis in Municipal solid Waste Management.  | (5)  |
| 6 | a) Give the importance of C/N ratio in Municipal solid waste disposal.  | (5)  |
|   | b) Elaborate the various MSW sources, its classification and characteristics  | (10) |

**PART C**

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

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|---|--|------|
| 7 | a) What are the various problems associated with management of plastic wastes?   | (5)  |
|   | b) What are "Tailings" and give its importance in land pollution.  | (5)  |
|   | c) Identify the various environmental problems of "Ship breaking"  | (5)  |
|   | d) Write the importance of pH of soil to control the soil pollution  | (5)  |
| 8 | a) Identify the various land pollution abatement process and explain each.   | (8)  |
|   | b) What are the different problems encountered in open dumping of wastes?  | (5)  |
|   | c) List the major sources and effects of land pollution  | (7)  |
| 9 | a) Mention typical values of acceptable levels of sound as per the Is codes for:<br>i) Rural areas                      ii) Urban residential areas<br>iii) City areas                      iv) Industrial areas | (10) |
|   | b) Enlist and explain the measures to be adopted to protect the sound reception.   | (10) |

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