

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

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| 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? | (8) |
| | i) Pesticides used by farmers and householders or | |
| | ii) Toxic substances released by industrial plants. | |
| | Justify your answer. | |
| | 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: | (10) |
| | i) Rural areas ii) Urban residential areas | |
| | iii) City areas iv) Industrial areas | |
| | b) Enlist and explain the measures to be adopted to protect the sound reception. | (10) |
