

Code No: RT32356D

R13

SET - 1

**III B. Tech II Semester Supplementary Examinations, November - 2017**  
**INDUSTRIAL POLLUTION CONTROL ENGINEERING**  
(Agricultural Engineering)

Time: 3 hours

Maximum Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answering the question in **Part-A** is compulsory  
3. Answer any **THREE** Questions from **Part-B**

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**PART -A**

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|---|----|--|------|
| 1 | a) | Mention the effluent guidelines.                           | [3M] |
|   | b) | Write about BOD curve and its controlling.                 | [4M] |
|   | c) | What is ion exchange treatment process?                    | [4M] |
|   | d) | Explain the methods of sampling of gaseous pollutants.     | [3M] |
|   | e) | Describe briefly the collection of gaseous air pollutants. | [4M] |
|   | f) | What are the advantages and disadvantages of scrubbers?    | [4M] |

**PART -B**

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|---|----|--|-------|
| 2 | a) | Classify the air pollution sources.  | [4M]  |
|   | b) | Describe the effects of emissions of chemical industries on the environment.                     | [8M]  |
|   | c) | Give an account of Air Act and water act.  | [4M]  |
| 3 | a) | Define BOD and write the application of BOD data.  | [4M]  |
|   | b) | Write about the sources & characteristics of pollutants in paper & pulp Industry.                | [8M]  |
|   | c) | What are the advantages & limitations of COD?  | [4M]  |
| 4 | a) | Describe the sludge treatment process and disposal.  | [8M]  |
|   | b) | Explain the different methods of primary treatment.  | [8M]  |
| 5 | a) | What are the advantages & disadvantages of anaerobic treatment processes over aerobic processes? | [4M]  |
|   | b) | Describe different types of air pollutants.  | [12M] |
| 6 | a) | Explain about the devices used for sampling gaseous air pollutants.                              | [8M]  |
|   | b) | Write the principle of the equipments used for collection of particulate air pollutants.         | [8M]  |
| 7 | a) | Explain different methods of particulate emission control.                                       | [6M]  |
|   | b) | Describe fabric filter system used to control particulate emission.                              | [6M]  |
|   | c) | What are the advantages and disadvantages of cyclone separators?                                 | [4M]  |

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