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## CM-8004(2) (CBGS)

B.E. VIII Semester Examination, June 2020

Choice Based Grading System (CBGS)

Industrial Pollution Abatement

Time : Three Hours

Maximum Marks : 70

- Note:** i) Attempt any five questions.  
ii) All parts of a question should be answered together.  
iii) Answers should be brief and to the point.  
iv) Draw neat sketches/diagrams, wherever necessary.
1. a) What are the main features of the Air (Prevention and Control of Pollution) Act 1981 of Govt. of India? 7  
b) What are the harmful effects of the following on human beings:  
i) Sulphurdioxide 2.5  
ii) Carbon monoxide 2.5  
iii) Insecticides 2
  2. a) Describe the construction and working of Trickling Filter. What are the limitations of Rock trickling Filters? How are they overcome? 7  
b) What is meant by activated sludge? Describe the activated sludge process for the treatment of sewage and write the merits and demerits of this process. 7
  3. a) Enlist the briefly discuss the meteorological factors influencing air pollution. 7  
b) Write note on the following:  
i) Plume behavior 3.5  
ii) Wind rose 3.5
  4. a) Explain the principles, construction and working of Cyclone Separator. 7  
b) Explain with a neat sketch, the principles, construction and working of a settling chamber. How can its efficiency be improved? 7
  5. a) Write descriptive note on "Hazardous and non-Hazardous waste". 7  
b) Describe the Sanitary Landfill method for disposal of solid waste. 7
  6. a) Enlist the methods which are commonly used for the removal of dissolved solids. Describe and discuss the Ion Exchange Method. 7  
b) Write descriptive note on "Recycling of solid wastes". 7
  7. a) Write descriptive note on  
i) Flootation 3.5  
ii) Flocculation 3.5  
b) Write an informative note on "Water pollution laws and standards". 7
  8. a) Discuss the methods used for the collection of solid waste. 7  
b) Write descriptive note on "Concentration and digestion in sludge treatment". 7