Code No: R05410104 **R05** **Set No. 2**

IV B.Tech I Semester Examinations,November 2010
ENVIRONMENTAL ENGINEERING - II
Civil Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. What do you understand by Hazard waste treatment? Explain any one control method. [16]

2. (a) What kind of pollutants is removed by activated carbon column? How they are regenerated.
   (b) How the Ultra Filtration is useful for Industrial Process. [8+8]

3. A city generates 50,000 tonnes of solid waste per year and a sanitary landfill is being contemplated to handle the waste on the city outskirts. It is expected that the waste will be delivered by a truck on a 5 d/week basis. The solid waste has a mean density of 250 kg/m3. It will be spread in 0.75 m layers and compacted to 0.25m. A daily soil cover of 0.15 m and an intermediate cover of 0.30m will be used. A final cover of 1.0m over the stack of 2 cells is recommended. Ignoring the soil volume between the stacks, determine the annual horizontal area covered by the solid waste. [16]

4. Minimisation of MSW generation will be directly resulting in the conservation of natural resources - Discuss in detail with examples. [16]

5. (a) Give the various operational problems faced with fabric filters?
   (b) What is Electrostatic precipitator? Explain with the help of sketches the parallel plate single stage and cylindrical two stage electrostatic precipitator. [8+8]

6. (a) Define air pollution and explain the sources of pollution.
   (b) What is PAN? How is it formed? Describe its formation by drawing photolytic cycle. [8+8]

7. When, why and how the technique of proportioning is used in the treatment of effluent treatment and reuse? [16]

8. What are the different types of pollutions? Write down the main sources of pollutions? Explain in detail about noise pollution. [16]

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Code No: R05410104 **R05** **Set No. 4**

IV B.Tech I Semester Examinations,November 2010
ENVIRONMENTAL ENGINEERING - II
Civil Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) Define air pollution and explain the sources of pollution.
   (b) What is PAN? How is it formed? Describe its formation by drawing photolytic cycle. [8+8]
2. (a) Give the various operational problems faced with fabric filters?
   (b) What is Electrostatic precipitator? Explain with the help of sketches the parallel plate single stage and cylindrical two stage electrostatic precipitator. [8+8]
3. What are the different types of pollutions? Write down the main sources of pollutions? Explain in detail about noise pollution. [16]
4. A city generates 50,000 tonnes of solid waste per year and a sanitary landfill is being contemplated to handle the waste on the city outskirts. It is expected that the waste will be delivered by a truck on a 5 d/week basis. The solid waste has a mean density of 250 kg/m3. It will be spread in 0.75 m layers and compacted to 0.25m. A daily soil cover of 0.15 m and an intermediate cover of 0.30m will be used. A final cover of 1.0m over the stack of 2 cells is recommended. Ignoring the soil volume between the stacks, determine the annual horizontal area covered by the solid waste. [16]
5. Minimisation of MSW generation will be directly resulting in the conservation of natural resources - Discuss in detail with examples. [16]
6. When, why and how the technique of proportioning is used in the treatment of effluent treatment and reuse? [16]
7. (a) What kind of pollutants is removed by activated carbon column? How they are regenerated.
   (b) How the Ultra Filtration is useful for Industrial Process. [8+8]
8. What do you understand by Hazard waste treatment? Explain any one control method. [16]

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Code No: R05410104 **R05** **Set No. 1**

IV B.Tech I Semester Examinations,November 2010
ENVIRONMENTAL ENGINEERING - II
Civil Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. A city generates 50,000 tonnes of solid waste per year and a sanitary landfill is being contemplated to handle the waste on the city outskirts. It is expected that the waste will be delivered by a truck on a 5 d/week basis. The solid waste has a mean density of 250 kg/m3. It will be spread in 0.75 m layers and compacted to 0.25m. A daily soil cover of 0.15 m and an intermediate cover of 0.30m will be used. A final cover of 1.0m over the stack of 2 cells is recommended. Ignoring the soil volume between the stacks, determine the annual horizontal area covered by the solid waste. [16]

2. What do you understand by Hazard waste treatment? Explain any one control method. [16]

3. (a) Define air pollution and explain the sources of pollution.
   (b) What is PAN? How is it formed? Describe its formation by drawing photolytic cycle. [8+8]

4. What are the different types of pollutions? Write down the main sources of pollutions? Explain in detail about noise pollution. [16]

5. When, why and how the technique of proportioning is used in the treatment of effluent treatment and reuse? [16]

6. Minimisation of MSW generation will be directly resulting in the conservation of natural resources - Discuss in detail with examples. [16]

7. (a) Give the various operational problems faced with fabric filters?
   (b) What is Electrostatic precipitator? Explain with the help of sketches the parallel plate single stage and cylindrical two stage electrostatic precipitator. [8+8]

8. (a) What kind of pollutants is removed by activated carbon column? How they are regenerated.
   (b) How the Ultra Filtration is useful for Industrial Process. [8+8]

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Code No: R05410104 **R05** **Set No. 3**

IV B.Tech I Semester Examinations,November 2010
ENVIRONMENTAL ENGINEERING - II
Civil Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. A city generates 50,000 tonnes of solid waste per year and a sanitary landfill is being contemplated to handle the waste on the city outskirts. It is expected that the waste will be delivered by a truck on a 5 d/week basis. The solid waste has a mean density of 250 kg/m3. It will be spread in 0.75 m layers and compacted to 0.25m. A daily soil cover of 0.15 m and an intermediate cover of 0.30m will be used. A final cover of 1.0m over the stack of 2 cells is recommended. Ignoring the soil volume between the stacks, determine the annual horizontal area covered by the solid waste. [16]

2. What are the different types of pollutions? Write down the main sources of pollutions? Explain in detail about noise pollution. [16]

3. (a) What kind of pollutants is removed by activated carbon column? How they are regenerated.
   (b) How the Ultra Filtration is useful for Industrial Process. [8+8]

4. (a) Define air pollution and explain the sources of pollution.
   (b) What is PAN? How is it formed? Describe its formation by drawing photolytic cycle. [8+8]

5. When, why and how the technique of proportioning is used in the treatment of effluent treatment and reuse? [16]

6. (a) Give the various operational problems faced with fabric filters?
   (b) What is Electrostatic precipitator? Explain with the help of sketches the parallel plate single stage and cylindrical two stage electrostatic precipitator. [8+8]

7. Minimisation of MSW generation will be directly resulting in the conservation of natural resources - Discuss in detail with examples. [16]

8. What do you understand by Hazard waste treatment? Explain any one control method. [16]

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