06CE6154

EXAM SLOT: E

Reg. No _____

Name _____

A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY

M.TECH DEGREE EXAMINATION, MAY 2016

SECOND SEMESTER

Branch: Civil Engineering

Industrial Water Pollution Control

Time: 3 Hours **Max. Marks: 60**

PART A

Answer ALL questions

1. Why is it important to carry out EIA for major industries?
2. Explain the process of equalization as a strength reduction method.
3. Compare the effluent characteristics of a cotton and wool textile industry
4. What are the general characteristics of plating industry wastewater?

(4 x 5 marks =20 marks)

PART B

5. Describe briefly a typical problem caused by industrial pollution in India

(10 marks)

OR

6. Explain in detail the effect of industrial waste disposal on streams.

(10 marks)

7. Explain neutralization of industrial waste. Discuss the methods adopted for neutralization of alkaline wastes. (10 marks)

OR

8. How is it decided whether raw, partially treated or completely treated industrial waste has to be discharged to sewers? (10 marks)

9. Explain the characteristics of waste, waste management and treatment methods adopted in rubber industry (10 marks)

OR

10. Discuss the industrial manufacturing process in a paper and pulp industry.

(10 marks)

11. Explain the industrial manufacturing process and waste water characteristics in a Petrochemical industry (10 marks)

OR

12. Explain the characteristics of waste and treatment methods in a Fertilizer industry. (10 marks)

(4 x 10 marks =40 marks)

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06CE6154 **Reg. No _____**

Name _____

A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY

M.TECH DEGREE EXAMINATION, APRIL/MAY 2017

SECOND SEMESTER

Branch: Civil Engineering

Industrial Water Pollution Control

Time: 3 Hours **Max. Marks: 60**

PART A

Answer ALL questions

1. Unnecessary disposal of industrial effluent in sewer line affects the efficiency of sewage treatment plant. Explain the statement.
2. Explain the process of equalization as a strength reduction method.
3. Explain the waste management techniques adopted in a fishing industry.
4. What are the general characteristics of plating industry wastewater?

(4 x 5 marks =20 marks)

PART B

5. Discuss the effect of disposal of industrial waste on streams. (10 marks)

OR

6. What is the need of environment impact assessment for major industries? (10 marks)

7. Discuss about the joint treatment of partially treated industrial waste with domestic sewage. (10 marks)

OR

8. Discuss about the methods that can be adopted for accomplishing volume reduction of industrial waste. (10 marks)

9. Give a flow diagram for cannery industry waste water treatment. Explain different waste management techniques that can be adopted in a canning industry. (10 marks)

OR

10. Discuss the industrial manufacturing process and characteristics of wastewater in a sugar industry. (10 marks)

11. Discuss about nuclear power plant industry effluent. What are the treatment techniques that can be adopted for a nuclear power plant industry effluent? (10 marks)

OR

12. Discuss the industrial manufacturing process and characteristics of wastewater in an oil refinery (10 marks)

(4 x 10 marks =40 marks)

E

06CE6154 **Reg Number.....**
Name.....

A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY
M.TECH DEGREE EXAMINATION, APRIL/MAY 2018
SECOND SEMESTER
BRANCH: CIVIL ENGINEERING
SPECIALIZATION: ENVIRONMENTAL ENGINEERING
INDUSTRIAL WATER POLLUTION CONTROL(ELECTIVE III)

Time: 3 Hrs **Maximum Marks:60**

PART A

Answer ALL Questions

1. What do you mean by EIA? Explain its significance for the industries.

2. Write a brief note on joint treatment of industrial waste and municipal sewage.

3. Explain the wastewater treatment techniques adopted in a rubber industry.

4. Explain the waste disposal method in nuclear power plants

4 x 5 marks = 20 marks

PART B

5. What are the damages caused by the industrial pollution in river? Explain with a case study.

OR

6. Unnecessary disposal of industrial effluent in sewer line affects the efficiency of sewage treatment plant. Explain the statement.

7. What are the methods of achieving strength reduction of industrial waste? Explain with examples.

OR

8. What do you mean by pre-treatment of industrial waste? Briefly explain different pre-treatment methods and its significance.

9. Explain the manufacturing process, characteristics of waste, waste management and treatment methods adopted in alcohol producing industry.

OR

10. Discuss the industrial manufacturing process and characteristics of wastewater in a dairy industry.

11. Explain the industrial manufacturing process and waste water characteristics in a Fertilizer industry.

OR

12. Explain the characteristics of waste and treatment methods in a metal plating industry.

4 x 10 marks = 40 marks

Exam Slot: E

06CE 6154 **Reg Number.....**
Name.....

A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY
M.TECH DEGREE EXAMINATION, MAY/JUNE 2019
SECOND SEMESTER

Environmental Engineering

Industrial Water Pollution Control

Time: 3 Hrs **Maximum Marks:60**

PART A

Answer ALL Questions

1. What do you mean by Environmental Impact Assessment? What is the need of conducting EIA study for the commencement of a new Industry?

2. Differentiate between Effluent standards and Stream standards

3. What management practices can be adopted to reduce the volume and strength of wastewater produced from a tanning industry?

4. Compare the manufacturing process in a steam power plant and a nuclear power plant.

4 x 5 marks = 20 marks

PART B

5. Bring out the parameters to be analysed to check the problems associated with the disposal of untreated industrial wastewater in waterbodies. What are the damages in river caused industrial pollution?

OR

6. Explain the significance of disposing industrial waste in a municipal sewage treatment plant. List the problems caused due to this combined treatment. Which are the important factors considered to analyse the effect of this combined treatment?

7. Explain the significance of pre-treatment of industrial waste. Discuss about the methods that can be adopted for accomplishing strength reduction of industrial waste. Explain with examples.

OR

8. Discuss the importance of neutralization and proportioning as a waste strength reduction method. What are the different methods of neutralization of an industrial waste?

9. Draw and elaborate the flow chart showing the manufacturing process of Pulp and Paper Production Industry. Show the sources of waste and characteristics of wastewater produced in the industry.

OR

10. Explain the characteristics of waste water produced during the manufacturing of rubber products from latex. Draw and explain a layout of wastewater treatment plant to treat this waste.

11. Describe the characteristics of wastewater produced in a fertilizer production industry. What type of treatment can be adopted to treat the wastewater produced in that industry?

OR

12. Write a note on petrochemicals. Illustrate the manufacturing process of petrochemical industry. What are the characteristics of wastewater produced?

4 x 10 marks = 40 marks