

G 1664

(Pages : 2)

Reg. No.....

Name.....



B.TECH. DEGREE EXAMINATION, MAY 2015

Eighth Semester

Branch : Civil Engineering

CE 010 804 L02—ENVIRONMENTAL GEOTECHNIQUES (Elective III) (CE)

(New Scheme—2010 Admission onwards)

[Regular/Supplementary]

Time : Three Hours

Maximum : 100 Marks

Part A

Answer all questions.

Each question carries 3 marks.

1. Define clay mineralogy.
2. What is atterberg limits ?
3. What fact shows in groundwater contamination ?
4. Which one is the important criterion for selection of sites for waste disposal ?
5. How would you describe about the rigid liners ?

(5 × 3 = 15 marks)

Part B

Answer all questions.

Each question carries 5 marks.

6. Draw the main function and diagram of inter sheet and inter layer bonding in the clay minerals.
7. Which are the statements support the properties of soils ?
8. How would you summarize the sources of groundwater contamination ?
9. Briefly explain the potential problems in soils due to contaminants.
10. Describe about the ground modification techniques in waste management.

(5 × 5 = 25 marks)

Part C

Answer all questions.

Each question carries 12 marks.

11. Draw and explain the kaolinite mineral and montmorillonite mineral with suitable diagram.

Or

12. Give a description about any one of the method for the identification of minerals.

Turn over

13. Discuss in detail about the importance of mineralogical composition in soil expansion.

Or

14. With the help of neat diagram explain organic matter on properties of soil.

15. Write in detail about classification of hazards.

Or

16. Describe the distinction between compositions of different wastes.

17. Comment on the hydrological aspects of selection of waste disposal sites with suitable diagram.

Or

18. Illustrate the subsurface disposal techniques with neat block diagram.

19. Briefly describe mechanical modification in containment techniques.

Or

20. List and explain the different cause of chemical modification in containment control systems.

(5 × 12 = 60 marks)

