

Roll No.

Total Pages : 2

BT-6/M-20

36037

GEOTECHNOLOGY-II

Paper-CE-308E

Time : Three Hours]

[Maximum Marks : 100

Note : Attempt *five* questions in all, selecting at least *one* question from each unit.

UNIT-I

1. What is earth dam ? What are the causes of failure of earth dam ? What in the criteria for safe design of earth dam. 20
2. What is stability number ? What is its utility in the analysis of stability of slopes ? Discuss stability chart and its use. 20

UNIT-II

3. (a) What do you understand by braced cuts ? Discuss lateral earth pressure on sheeting. 10
(b) Discuss design of various components of bracing. 10
4. What is Cofferdam ? Discuss each type of Cofferdam in detail with neat sketch. 20

UNIT-III

5. What are different types of sheet pile walls ? Draw the sketches showing the pressure distribution. Also discuss the procedure for checking the stability of a cantilever sheet pile wall. 20

6. Discuss anchored sheet pile with free earth support method for cohesive and Cohesionless soil. 20

UNIT-IV

7. Write notes on :

- (a) Grouting.
- (b) Bituminous stabilization.
- (c) Use of admixtures.
- (d) Reinforced earth. 20

8. (a) Discuss the design criteria for foundations of reciprocating machines. 12
- (b) What is vibration isolation ? How is it done ? 8
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