

Roll No.

Total Pages : 2

CMDQ/D-23

5217

HYDROGEOLOGY

Paper–GT–704

Time allowed : 3 Hours]

[Maximum Marks : 100

Note : Attempt **five** questions in all, selecting **one** question from each unit. Question No. **1** is compulsory. All questions carry equal marks.

Compulsory Question

1. Brief the following:

- (i) Drainage basin
- (ii) Limitation of Darcy's law
- (iii) Temperature logging
- (iv) Groundwater pollution.

UNIT-I

2. Classify rocks according to their water-bearing properties.

3. Write notes on the following:

- (a) Vertical distribution of water
- (b) Porosity.

UNIT-II

4. Discuss Darcy's law and its application.

5. Give details on determination of permeability in the laboratory.

UNIT-III

6. Explain the surface exploration method for groundwater exploration.

7. Give details on resistivity logging.

UNIT-IV

8. Discuss the water quality criteria for drinking purpose.

9. Comments on the following:

- (a) Water level fluctuations.
- (b) Vector diagram.