

First Semester Post Graduate Diploma in Watershed Technology & Management Examination
GROUND WATER HYDROLOGY AND EXPLORATION

Paper—III

Time : Three Hours]

[Maximum Marks : 50

N.B. :— (1) All questions are compulsory and carry equal marks.

(2) Draw neat sketches wherever necessary.

1. Explain the controls of geology on ground water occurrence and distribution.

OR

Write in detail about the role of groundwater in the hydrologic cycle.

2. Write in brief on the following :—

- (a) Groundwater fluctuation map
- (b) Specific retention

OR

(c) Permeability

(d) Porosity.

3. Write in detail about the geological and surface geophysical methods for the selection of suitable site for well construction.

OR

Write in detail about the well completion and well development.

4. Write in brief on the following :—

- (a) Resistivity method
- (b) Applications of electrical methods in groundwater prospecting

OR

(c) Types of electrode configuration

(d) Field procedure for geophysical exploration.

5. Write in brief on the following :—

- (a) Seismic methods
- (b) Resistivity logging

OR

(c) Self potential logging

(d) Applications of well logging in groundwater explorations.