



## M.Sc. IV Semester Degree Examination, October - 2023

### APPLIED GEOLOGY Groundwater Exploration (NEP)

Time : 3 Hours

Maximum Marks : 70

**Note :** Answer *any five* of the following questions, each question carries **equal** marks.

1. Explain the following : 14
  - (a) Hydrological cycle.
  - (b) Groundwater flow and recharge.
2. Add a note on : 14
  - (a) Groundwater exploration techniques.
  - (b) Vertical distribution of groundwater.
3. Answer the following : 14
  - (a) Types of aquifer and its parameters.
  - (b) Role of toposheet and remote sensing in groundwater exploration.
4. Discuss the following : 14
  - (a) Groundwater quality.
  - (b) Hydro geochemical facies.
5. Write a note on : 14
  - (a) Groundwater protection.
  - (b) Darcy law.
6. Explain the following : 14
  - (a) Well types.
  - (b) Groundwater prospecting.
7. Discuss the following : 14
  - (a) Application of groundwater modelling.
  - (b) Standards of drinking and irrigation water.
8. Write a short note on : 14
  - (a) Pumping test.
  - (b) Exploratory bore well.
  - (c) Specific capacity of wells.

