

## M.Sc. Sem-4 Examination

507

Geology

April 2022

Time : 2-00 Hours]

[Max. Marks : 50

**Attempt any three questions from section –I**

- Q - 1 Describe hydrological and runoff cycle. [14]
- Q - 2 (i) Quality of ground water. [07]  
(ii) Geological methods of ground water exploration. [07]
- Q - 3 Discuss water level fluctuations with reference to causative factors and their measurements. [14]
- Q - 4 (i) Elementary theory of ground water flow. [07]  
(ii) Radioactive methods of prospecting. [07]
- Q - 5 Write a detailed note on ground water occurrences in rocks. [14]
- Q - 6 (i) Consumptive use of surface water. [07]  
(ii) Conjunctive use of ground water. [07]
- Q - 7 Write a critical note on preparation of anomaly maps and their interpretation. [14]
- Q - 8 (i) Hydrostratigraphic units. [07]  
(ii) Alidade method of surveying. [07]

**Section – II**

- Q - 9 **Answer any eight of the following short questions.** [08]
- (i) What is piezometric level?
- (ii) Give estimation of total water available underground.
- (iii) Name the hydraulic properties of rocks.
- (iv) Define radial flow.
- (v) Give one example of sea water encroachment.
- (vi) State the methods of artificial recharge.
- (vii) Define over exploitation.
- (viii) Give full form of GPCB.
- (ix) Define water resources management.
- (x) Define CAS.
- (xi) State the parameters for geochemical prospecting.
- (xii) What are geophysical anomalies?