

M.Sc Semester-4 Examination

507

Geology

April-2024

Time : 2-30 Hours]

[Max. Marks : 70

Instructions: (i) Draw neat diagrams whenever necessary.
(ii) Write proper answer number.

Q-1 Define and distinguish the terms hydrogeology and geohydrology. (14)
Add a note on classification of subsurface water.

OR

Q-1 (a) Hydraulic characteristics of aquifers. (07)
(b) Hydrogeology of wetlands. (07)

Q-2 Write a note on methods of pumping test. (14)

OR

Q-2 (a) Direct methods of artificial recharge. (07)
(b) Preventions from sea water encroachment. (07)

Q-3 Discuss groundwater management resources. (14)

OR

Q-3 (a) Groundwater in volcanic rocks. (07)
(b) Groundwater legislation. (07)

Q-4 Discuss Geological and Geochemical prospecting. (14)

OR

Q-4 (a) Geological mapping using compass. (07)
(b) Principles of theodolite. (07)

Q-5 **Attempt any seven questions out of twelve.** (14)

- (i) Give one economic importance of groundwater.
- (ii) Define watershed with example.
- (iii) What are radio isotopes?
- (iv) Name the hydrological properties of rocks.
- (v) Define hydrostratigraphic unit.
- (vi) State the causative factors of water level fluctuations.
- (vii) State the porosity range for sandstone.
- (viii) State consumptive use of surface water.
- (ix) Give full form of CGWB and GWRDC.
- (x) Give standard size of a sample.
- (xi) What is plane table survey?
- (xii) What is magnetic anomaly?

