

M.Sc.(Geology) CBCS Pattern Semester-III
PSCGEOT09-Paper-I : Hydrogeology and Watershed Management

P. Pages : 2

Time : Three Hours



GUG/W/23/11270

Max. Marks : 80

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- Notes : 1. All questions are compulsory and carry equal marks.
2. Draw neat sketches wherever necessary.

1. Give detail account of hydrological cycle.

OR

Write short notes on:

- a) Darcy's law.
- b) Flow net analysis.
- c) Springs.
- d) Water table contours.

2. Give detail account of chemical characteristics of groundwater in relation to domestic use.

OR

Write short notes on:

- a) Saline water intrusion.
- b) Over-exploitation of groundwater.
- c) Water logging.
- d) Radioisotopes in hydrogeological study.

3. Give detail account of surface methods of groundwater explorations.

OR

Write short notes on:

- a) Type of wells.
- b) Well completion.
- c) Unsteady flow.
- d) Selection of suitable site for well construction.

4. Give detail account of artificial recharge to groundwater.

OR

Write short notes on:

- a) Conjunctive use.
- b) Watershed.
- c) Role of NGO in watershed development.
- d) Groundwater legislation.

5. Write short notes on:

- a) Un-confined aquifer.
- b) Water table.
- c) Nitrate in groundwater.
- d) Fluoride in groundwater.
- e) Well development.
- f) Hydrograph.
- g) Importance of water resources.
- h) Roof top rain water harvesting.
