

M.SC.(Geology) (CBCS Pattern) Third Semester
PSCGEOT09 - Hydrogeology and Watershed Management Paper-I

P. Pages : 1

Time : Three Hours



GUG/W/18/11270

Max. Marks : 80

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

1. Describe in detail hydrological cycle.

OR

Write short notes on:-

- | | |
|-----------------------|------------------------------------|
| a) Confined aquifers. | b) Water table contour maps. |
| c) Seepages. | d) Groundwater provinces of India. |

2. Give a detailed account of groundwater quality and environmental aspects.

OR

Write short notes on:-

- a) Environmental effects of over-exploitation of groundwater.
- b) Preventive measures of saline water intrusion.
- c) Water logging problems.
- d) Radioisotopes in hydrogeological studies.

3. Describe in detail surface methods of groundwater exploration.

OR

Write short notes on:-

- a) Collection of hydrogeological data.
- b) Design of wells.
- c) Hydrographs.
- d) Methods of well construction.

4. Describe in detail management of groundwater resources.

OR

Write short notes on:-

- | | |
|------------------------------------|--|
| a) Conjunctive use of groundwater. | b) Artificial recharge to groundwater. |
| c) Groundwater legislation. | d) Role of NGO's in watershed development. |

5. Write short notes.

- a) Aquifer system.
- b) Reynolds numbers
- c) Causative factors of groundwater level fluctuations.
- d) Fluorosis
- e) Steady flow
- f) Pump test
- g) Watershed characters.
- h) Rainwater harvesting.
