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2008 – 2009
M.Sc. (I SEMESTER) EXAMINATION
APPLIED GEOLOGY
HYDROGEOLOGY – I
GLM - 7006
Maximum Marks: 70
Duration: Two Hours

Answer all the questions.

1. Describe the 'Hydrologic Cycle'. Explain the man's interference in various parts of this cycle. Explain with suitable illustration. (8)

OR

- 1'. Write short notes on the following:

- (a) Porosity and permeability
- (b) Transmissivity and specific yield
- (c) Hydraulic conductivity and storativity

2. What do you understand by 'Water Budget'? Discuss the various methods for calculating the water balance of a catchment area. (9)

3. Describe the 'Steady Flow' in a well operating in a 'Confined aquifer' using Theiem's equation. (9)

OR

- 3'. Write short notes on the following:

- (a) Well Loss
- (b) Unsteady ground water flow in confined aquifer.
- (c) Determination of permeability in the laboratory.

4. Briefly describe the surface and subsurface geophysical methods used for ground water exploration. Also specify the most applicable method and its limitation. (9)
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