

**Sixth Semester B. Sc. Examination**  
**GEOLOGY**  
**Paper - II**

**(Elementary Hydrogeology and Geomorphology)**

Time : Three Hours ]

[ Max. Marks : 50

N. B. : (1) All questions are compulsory and carry equal marks.  
(2) Draw neat sketches wherever necessary.

1. Give an account of the following :—  
(A) Hydrologic cycle  
(B) Water table

**OR**

Give an account of the following :—  
(C) Cone of depression  
(D) Influent and effluent seepages.

2. Give an account of Ground water provinces of India.

**OR**

Describe hydrological properties of following rocks  
(B) Granite and Basalt  
(C) Limestone and shale.

3. Give an account of the following :—  
(A) Mackins concept of graded stream  
(B) Rectangular and Annular drainage pattern.

**OR**

Give an account of the following :—

(C) Scope and aim of Geomorphology  
(D) Mass wasting.

4. (A) Describe the topography developed over folded rocks.

**OR**

Give an account of the following :—

(B) Sinkholes and caverns,  
(C) Fault scarp and fault line scarp.

5. Write on the following in not more than **two** sentences (solve any **ten**) :—

(A) Give any two characters of zone of aeration.  
(B) Give any two characters of zone of saturation.  
(C) Connate water  
(D) Aquitard  
(E) Aquifuse  
(F) Unconfined aquifer  
(G) Inversion of topography  
(H) Soil profile  
(I) Profile of equilibrium  
(J) Resequent rift block mountain.  
(K) Nappe  
(L) Klippe.