This question paper contains **2** printed pages]

Roll No. | | | | | | | | | | |

S. No. of Question Paper : **811**

Unique Paper Code : **219301** **G**

Name of the Paper : **GEHT-301: Structural Geology**

Name of the Course : **B.Sc. (Hons.) Geology**

Semester : **III**

Duration : **Three Hours** Maximum Marks : **75**

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt any *five* questions.

All questions carry equal marks.

1. Write explanatory notes on the following :

   (*a*) Pure shear and simple shear homogeneous deformation

   (*b*) Genetic aspects of folding

2. How would you identify folds in the field ? Give their geometric classification based on :

   (*i*) Interlimb angle .

   (*ii*) Dip isogons.

3. Write short notes on any *three* of the following :

   (*a*) Top - bottom criteria in rock sequences

   (*b*) Intersection lineation

   (*c*) Joints in folded sequence

   (*d*) Klippe and Tectonic window

P.T.O.

4. Write explanatory notes on any *two* of the following :

   (*i*) Strain ellipse concept

   (*ii*) Tectonites and their significance

   (*iii*) Identification criteria of fold and faults in the field

5. How would you distinguish between Fault and Joint ? Give the geometric classification of faults.

6. Write short notes on :

   (*i*) Pi and beta diagram

   (*ii*) Strain marker

   (*iii*) Sedimentary Structure

   (*iv*) Joints in volcanic terrain.

7. Distinguish between the following :

   (*i*) Slaty cleavage & Crenulation cleavage

   (*ii*) Upright fold & Recumbent fold

   (*iii*) Normal Fault & Strike - slip fault

8. Diagrammatically show and label any *three* of the following :

   (*i*) Plunging and non-plunging fold

   (*ii*) Upright and neutral fold

   (*iii*) Normal fault and strike slip fault

   (*iv*) Angular unconfomity and thrust