

M.Sc.(Geology) (CBCS Pattern) Semester - II  
**PSCGEOT08 - Paper-IV : Structural Geology, Geodynamics and Tectonics**

P. Pages : 1

Time : Three Hours



**GUG/S/23/11210**

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 properties of rocks and their controlling factors.

**OR**

Write short notes on:-

- a) Classes of stress
- b) Theory of deformation in two dimensions
- c) Significance of geological structures in relation to strain
- d) Stress ellipsoid

2. Describe in detail Geometric classification of folds.

**OR**

Write short notes on:-

- a) Mechanism of folding
- b) Boudinage
- c) Similar fold and shear fold
- d) Decollement

3. Describe in detail causes, mechanism and dynamics of faulting.

**OR**

Write short notes on:-

- a) Ductile shear zone
- b) Mylonite's
- c) Thrust faults
- d) Development of cleavage

4. Describe in detail evolution of the Himalaya & Indian Ocean.

**OR**

Write short notes on:-

- a) Supercontinents
- b) Hot spots
- c) Pros and Cons
- d) Precambrian tectonics

5. Write short notes:-

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|------------------------|---------------------------------|
| a) Properties of rocks | b) Concept of stress and strain |
| c) Lineation           | d) Biot's law                   |
| e) Definition of joint | f) Normal fault                 |
| g) Wilson cycle.       | h) Diapers                      |

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