

M.Sc.(Geology) (CBCS Pattern) Semester-I  
**PSCGEOT03 - Paper-III : Metamorphic Petrology & Geological Mapping**

P. Pages : 2

Time : Three Hours



**GUG/W/24/11164**

Max. Marks : 80

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

1. What is metamorphism? Give details on it's nature & scope.

**OR**

Write notes on the following-

- a) Regional Metamorphism.
- b) Contact Metamorphism.
- c) Dynamic Metamorphism.
- d) Hydrothermal Metamorphism.

2. Describe the various metamorphic zones.

**OR**

Write a note on the following.

- a) Eclogite.
- b) Granulite.
- c) Blueschist.
- d) Migmatites.

3. Describe the concept of geothermometry & geobarometry.

**OR**

Write a note on the following-

- a) ACF
- b) AKF
- c) AFM
- d) Phase rule for closed & open systems.

4. Describe the mapping methods in sedimentary, Igneous & Metamorphic terrains.

**OR**

Write a note on the following-

- a) Topographic maps.
- b) Base maps
- c) Types of geological maps
- d) Geological symbols in maps.

5. Write very short notes on the following.

- a) Protolith.
- b) Transient geotherm.
- c) Granitization
- d) Anaten's
- e) Schreinemakers rule.
- f) Petrogenetic grid.
- g) Geological mapping.
- h) Types of sections.

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