

M.Sc. (Geology)(with Credits)-Regular-Semester 2012 Sem I (CBCS Pattern) (New Course)
PSCGEOT03 - Paper-III : Metamorphic Petrology and geological Mapping

P. Pages : 2

Time : Three Hours



GUG/S/18/8101

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 metamorphic textures.

OR

Write short notes on.

- a) Nature and scope of metamorphism.
- b) Agents of metamorphism.
- c) Contact metamorphism.
- d) Protolith types.

2. Describe in detail regional metamorphism of pelitic rocks.

OR

Write short notes on.

- a) Green-schist facies.
- b) Metamorphic zones.
- c) Metasomatism.
- d) Tectonic controls of metamorphism.

3. Describe in detail the concepts of geothermometry and geobarometry.

OR

Write short notes on.

- a) AFM diagram.
- b) Fugacity.
- c) ACF diagram.
- d) Isograds and reaction Isograds.

4. Describe in detail topographic maps and base maps for geological mapping.

OR

Write short notes on.

- f) Objectives of geological mapping.
- b) Types of geological maps.
- g) Mapping methods in igneous terrains.
- d) Principles of geological mapping.

5. Write short notes.

- a) Ocean floor metamorphism.
- b) Impact metamorphism.
- c) Regional metamorphism.
- d) Metamorphic differentiation.
- e) Gibb's free energy.
- f) Enthalpy.
- g) Precession required in geological mapping.
- h) Geological symbols in maps.
