

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

P. Pages : 2

Time : Three Hours



GUG/S/23/11164

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 metamorphic textures? Describe types of textures observed in metamorphic rocks.

OR

Write notes on the following.

- a) Contact metamorphism.
 - b) Retrograde metamorphism.
 - c) Factors controlling metamorphism.
 - d) Scope of metamorphic petrology.
2. Describe the metamorphism of mafic rocks.

OR

Write note on the following.

- a) Regional Metamorphism.
 - b) Paired metamorphic belt.
 - c) Blue-Schist.
 - d) Metamorphic Differentiation
3. Describe in brief the thermodynamic principles of metamorphic reactions.

OR

Write note on the following.

- a) Clausius - Clapeyron equation.
- b) Reaction Isograds.
- c) Geothermometry.
- d) Geobarometry.

4. Give an account of topographic maps & base maps for geological mapping.

OR

Write note on the following.

- a) Geological symbols in maps.
- b) Types of geological maps.
- c) Types of geological sections.
- d) Mapping methods in sedimentary rocks.

5. Write very short note on the following: -

- a) Protoliths.
- b) Pressure temperature regimes.
- c) Granulite.
- d) Eclogite.
- e) ACF
- f) AKF
- g) Two objectives of geological mapping.
- h) General principles of geological mapping.
