

M.Sc.(Geology) (CBCS Pattern) Semester - IV  
**PSCGEOT13 - Paper-I : Ore Geology and Ore Microscopy**

P. Pages : 2

Time : Three Hours



**GUG/S/23/11385**

Max. Marks : 80

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

1. Give a brief account of paragenesis and zoning of ores and their significance.

**OR**

Write short notes on:

- a) Geological thermometers.
- b) Fluid inclusion in ores.
- c) Modern concept of ore genesis.
- d) Spatial distribution of ore deposits.

2. Give an account of concept of ore bearing fluids, their origin and migration.

**OR**

Write short notes on:

- a) Wall rock alteration.
- b) Structural controls of ore localization.
- c) REE in carbonatites.
- d) Chromite and PGE.

3. Discuss the stratiform and strata bound ore deposits.

**OR**

Write short notes on:

- a) Placers and palaeoplacers.
- b) Chemical sedimentation.
- c) Ni/Au laterite.
- d) Black smokers.

4. Describe in detail the application of ore microscopy in mineral dressing.

**OR**

Write short notes on:

- a) Preparation of polished section of ores.
- b) Physical properties of ore minerals under reflected light.
- c) Microhardness.
- d) Textures of ores.

5. Write short notes:

- a) Ore deposits.
- b) Plate tectonics.
- c) Cyprus type.
- d) Orthomagmatic ore
- e) Mn nodules.
- f) Porphyry association.
- g) Etch test.
- h) Structures of ores.

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