

B. Sc. SECOND YEAR GEOLOGY PRACTICAL 2019-20

The Examination will be of four hours duration.

Maximum Marks 75

Petrology

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| 1. Study of rocks in hand specimens | 08 |
| 2. Microscopic study of rocks | 07 |

Structural Geology

- | | |
|---|----|
| 3. Interpretation and drawing of section of simple geological map | 10 |
| 4. Problem of true and apparent dips | 05 |

Stratigraphy

- | | |
|---|----|
| 5. Stratigraphic rocks. | 10 |
| 6. Sketch map of Indian formations and palaeographic period | 05 |
| 7. Field report | 15 |
| 8. Viva-Voce | 05 |
| 9. Record | 10 |

Total

 75

STRUCTURAL GEOLOGY:

1. Study of topographic maps. Interpretation of topography from contour maps.
2. Orientation of planes and lines; dip, strike, pitch and plunge. Use of clinometer compass.
3. Study and interpretation of outcrop patterns. True and apparent thickness of beds, study of simple geological maps and drawing of sections.
4. Basic principles of stereographic and orthographic projections.

PETROLOGY:

(1) Identification of igneous, metamorphic and sedimentary rocks in hand specimens as per list given below:

Igneous Rocks: -

Granite, granodiorite, syenite, diorite, anorthosite, norite, gabbro, pyroxenite, peridotite, nepheline syenite, pegmatite, dolerite, basalt and rhyolite.

Metamorphic Rocks: -

Quartzite, marble, granite gneiss, mica schist, phyllite, slate, amphibolite, charnockite, mylonite and migmatitic gneiss.

Sedimentary Rocks: -

Sandstone, limestone, shale, conglomerate, arkose, grit, greywacke, and breccia.

(2) Petrographic study of the following rocks under microscope: granite, syenite, diorite, gabbro, dolerite, rhyolite, basalt, mica schist, granite gneiss, amphibolite, marble, sandstone and limestone.

STRATIGRAPHY:

- Identification and description of important stratigraphic rocks of India and their assignment to respective stratigraphic position.
- Plotting of following stratigraphic units and their equivalents in the outline map of India. Delhi-Aravalli fold belts, Main Vindhyan Basin, Gondwana Supergroup, Deccan Traps and Siwalik Group.
- Preparation of palaeogeographic maps of Permocarboniferous and Cretaceous periods.

FIELD WORK:

Field work for 5-day for training in geological mapping of rock units and measurement of Structural features.

Fieldwork is compulsory. Students not taking part in the fieldwork shall not be allowed to appear in the examination.