

**CLASS XII
GEOLOGY
THEORY**

STRUCTURE OF QUESTION PAPER

(Same for the Semester I & II)

Time: 3 Hours

M. Marks: 70

CCE/Int.Assessment: 10

1. There will be one theory paper for each semester comprising of 29 Questions. All questions will be compulsory.
2. Marks for each question are indicated along with.
3. Questions No. 1 to 10 are very short answer type i.e one line or few words.
Question carrying one mark each. 1x10=10
4. Questions No. 11 to 15 are very short answer type carrying 2 marks each,
Answer to each Question will be in 20-25 words. 2x5=10
5. Question No. 16 to 25 are short answer type questions carrying 3 marks
each, Answer to each question will be in 40 to 50 words. 3x10=30
6. Question No. 26 to 29 are long answer type questions carrying 5 marks.
Answer to each question will be in 175-200 words. 5x4=20

Semester:-I

1. Physical Geology:

The earth-origin, age and interior -Elementary idea.

2. Structural Geology :

Elementary idea of folds faults and unconformity their identification by major features, geometric classification, Mountain their types from Geosynclines to mountains.

3. Palaeontology :

Fossils their utility, Elementary idea of the evolution of life during geologic past.

Morphological features of brachiopods molluskces trilobites. Elementary idea of Gonwana plants and shivalik vertebrates.

Practical :

1. Reading and interpretation of geological maps and topographical sheets. Preparation of cross section along given lines in the geological maps.

(SEMESTER -II)

Theory	Time: 3 Hours	Marks: 70
Practical	Time:3 Hours	Marks: 30
CCE/Int.Assessment		Marks :20

1.Stratigraphy

The story of the rocks the Precambrian Era, the Palaeozoic Era The Mesozoic Era, The Cenozoic Era. A general survey of the Indian geopoic sub divisions. Configuration of India, their broad divisions.

2.Petrology

Subdivisions of rocks - Broad classification of the various types of rocks Sedimentary, Igneous and Metamorphic General idea of the important structures found in those rocks. General idea of the minerological, Composition of these rocks.

3.Mineralogy

Minerals as constituents of rocks. General survey of the rocks, forming minerals, like quartz, feldspars, micas, pyroxenes, amphiboles. Some important physical properties of these minerals.

4.Crystallography

The crystal its type, general morphological characters of crystals of the cubic system. General idea of the various crystallographic system.

5.Economic Geology

Mineral wealth, its economic significance. A general survey of the economic mineral deposits of India, their distribution particularly of coal, iron, petroleum, gold, copper, lead and zinc.

Practical :

- 1.Megascopic identification of important rocks and minerals.
2. Distribution of mineral deposits in India and their location. Plotting on an outline map of India.
3. Identification of some important plants and animals(Vertebrate and invertebrate) Fossils.

PRACTICAL(Syllabus)

Time: 3 Hours

Max. Marks: 30

- (i) Megascopic identification of important rocks and minerals.
- (ii) Reading and interpretation of geological maps and topographical sheets. Preparation of cross-section along given lines in the geological maps.
- (iii) Distribution of mineral deposits in India and their location-plotting on an outline map of India.
- (iv) Identification of some important plants and animals (vertebrate and invertebrate) Fossils.

STRUCTURE OF QUESTION PAPER(Practical)

The examiner will set the question paper on the spot. The distribution of marks in the paper will be as follows:

1. At least 10 minerals will be given to the students for identification. Students are required to attempt/ identify 5 minerals out of these. This question will carry 5 marks.
2. 10 Fossils will be given to the students for identification. Student will identify 5 fossils out of these. This question will carry 5 marks.
3. The examiner will ask the student to plot an online map of India the distribution of deposits of any two minerals. The student will attempt any one. This will carry 7 marks.
4. The examiner will give two geographical maps for study and for the identification of their various features. Students are required to attempt any one of these two maps. This question will carry 8 marks.
5. 5 marks are reserved for notebook and record.

Note: - The Practical Exam will only be conducted in semester -II.