

B.Sc. (NEP) Sem.-4 Examination

DSC-C-241

Geology

April-2025

Time : 2-00 Hours]

[Max. Marks : 50

Instructions: Draw neat diagrams wherever necessary.**Write proper answer number.**

- Q-1. Describe isomorphism, fluorescence, and phosphorescence in minerals with suitable examples. [10]
- OR**
- Q-1. (a) Axial characters and symmetry of calcite type. [05]
(b) Typical forms of baryte type. [05]
- Q-2. Explain major types of soils occurring in Gujarat. [10]
- OR**
- Q-2. (a) Heat flow. [05]
(b) Geophysical conditions of the earth. [05]
- Q-3. Write an explanatory note on the upheaval and subsidence with examples. [10]
- OR**
- Q-3. (a) Earth's heat budget. [05]
(b) Land – air – sea interaction. [05]
- Q-4. Describe asbestos deposits with reference to its origin, mode of occurrence, uses and distribution in India. [10]
- OR**
- Q-4. (a) Tertiary coal seams of India. [05]
(b) Significance and structure of Bombay High. [05]
- Q-5. **Attempt any ten out of twelve.** [10]
- (i) Define polymorphism.
(ii) Mention the importance of minerals in the context with technological era.
(iii) Write the symmetry of beryl type.
(iv) Why ocean act as a thermostat for the earth's surface?
(v) How fertility of the soil is retained?
(vi) What are the four sections of the soil profile?
(vii) Enumerate the causes of climate change.
(viii) Define atmospheric circulation.
(ix) Give two examples of diastrophism from Gujarat.
(x) Name the minerals used in cement production.
(xi) Give present scenario of ceramic industries of Gujarat.
(xii) Give locality and names of fertilizer minerals.