

B.Sc Semester-4 Examination**CC 205****Geology****April-2024****Time : 2-30 Hours]****[Max. Marks : 70**

- Instructions:** (i) Draw neat diagrams whenever necessary.
(ii) Write proper answer number.

Q-1. Describe composition, texture, fertility, profile, erosion and conservation of soil. (14)

OR

- Q-1. (a) Gravity condition of the earth. (07)
(b) Ocean as a thermostat for the earth's surface heat balance. (07)

Q-2. Explain polymorphism and pseudomorphism. (14)

OR

- Q-2. (a) Axial characters and symmetry of beryl crystal. (07)
(b) Forms of normal class of orthorhombic system. (07)

Q-3. Write explanatory note on the general principles of geomorphology and types of landforms. (14)

OR

- Q-3. (a) Properties on rocks to be used as building stones. (07)
(b) Mention the name, type and locations of building stones during your field. (07)

Q-4. Discuss conditions of entombment, preservation and modes of fossilization. (14)

OR

- Q-4. (a) Environmental factors and geological distribution of Mollusca. (07)
(b) Environmental factors and geological time range of Arthropoda. (07)

Q-5. Attempt any seven questions out of twelve. (14)

- (i) Name the soil of Ahmedabad and provide three names of transported soils.
- (ii) Give the composition and temperature of mantle.
- (iii) Why outer core is liquid and inner core is solid?
- (iv) Define fluorescence and phosphorescence.
- (v) Give symmetry elements of calcite type.
- (vi) Write importance of minerals in present era.
- (vii) Mention two second order geomorphological features.
- (viii) Give names and locality of two building stones of igneous origin.
- (ix) Give locality of two metamorphic rocks that are used as building stones.
- (x) Provide two uses of fossil study.
- (xi) Write environmental factors of brachiopods.
- (xii) Give geological distribution of echinoidea.