2011E694 Candidate's Seat No :_____

M.Sc Sem-3 Examination

501

Geology

Time : 2-30 Hours] November-2024 [Max. Marks : 70

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

Q-1 Describe antimony and nickel deposits. (14)

OR

Q-1 **(a)** Schneiderhohn's classification of mineral deposits. (07)

(b) Functions of economic geology and geographical controls on distribution of mineral deposits. (07)

Q-2 Discuss pegmatitic deposits. (14)

OR

Q-2 **(a)** Vanadium deposits. (07)

(b) Iridium deposits. (07)

Q-3 Explain gravity concentration and heavy media separation. (14)

OR

Q-3 **(a)** Ore genesis at conservative plate margins. (07)

(b) Most important and most general geologic thermometers. (07)

Q-4 Write a detailed note on UNFC classification of economic minerals. (14)

OR

Q-4 **(a)** Principles of fluid inclusions. (07)

(b) Objectives and rules for minerals formed by government. (07)

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

(i) Define mineral region. Give one example.

(ii) Who needs to study economic geology?

(iii) Mention the types of limestone deposits.

(iv) Define endoskarn and exoskarn.

(v) Write about the only carbonatite volcano.

(vi) Name the ores related to weathered surfaces.

(vii) State the hydrophobic and hydrophilic minerals.

(viii) How hydrothermal alteration affects the stability of minerals?

(ix) Name the ores and gangue separated by electrostatic separation.

(x) State the origin of Mn-nodules.

(xi) Give the full form of PL and QL.

(xii) Write about the calculation of ore reserves at Ambaji.