

1712N846

Candidate's Seat No : _____

B.Sc. Sem.-3 Examination

CC 202

Geology

Time : 2-30 Hours]

December-2022

[Max. Marks : 70

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

- Q-1 Explain twinkling, pleochroism and types of extinction with examples. (14)
- OR
- Q-1 (a) Refractive index of minerals with examples. (07)
(b) Beck's test and its effect. (07)
- Q-2 Explain tetrahedrite of symmetry with its typical forms. (14)
- OR
- Q-2 (a) Axial characters and symmetry elements of pyrite crystal. (07)
(b) Symmetry elements and axial characters of tetragonal crystal. (07)
- Q-3 Discuss structures produced due to mobility of magma and lava. (14)
- OR
- Q-3 (a) Physical sedimentary structures. (07)
(b) Structures seen in metamorphic rocks. (07)
- Q-4 Write explanatory note on origin, mode of occurrence and distribution of diamond deposits. (14)
- OR
- Q-4 (a) Origin and distribution of chromite ores. (07)
(b) Mineralogy and uses of manganese ores. (07)
- Q-5 **Attempt any seven questions out of twelve.** (14)
- (i) Give relation between R. I. and velocity of light.
(ii) Draw a stereographic projection of galena type.
(iii) State the Snell's law and its importance.
(iv) What are interference colours? How are they produced?
(v) Draw a sketch of twinning with examples.
(vi) Draw a labelled sketch of petrological microscope.
(vii) Distinguish between cone sheet and ring dyke.
(viii) Define mud crack and rain print.
(ix) Draw figures of pillow lava and ropy lava.
(x) Write the mode of occurrence of bauxite deposits.
(xi) Give mineralogy of asbestos.
(xii) What is the role of NMDC and GMDC?