

FIRST SEMESTER B.A./B.Sc. DEGREE EXAMINATION, NOVEMBER 2020

(CUCBCSS)

Geology

GLY 1B 01—EARTH SYSTEM AND PROCESS

Time : Three Hours

Maximum : 80 Marks

Draw neat sketches wherever necessary.

Part A (Objective Type Questions)

Answer all questions.

Each question carries 1 mark.

1. An example for a dormant volcano.
2. A natural hazard which is highly disastrous in coastal regions.
3. Period of Halley's comet.
4. Half life of C-14.
5. Who proposed Nebular Hypothesis.
6. Composition of continental crust.
7. Planet known as sister of earth.
8. The instrument which is used for measuring earthquake intensity.
9. Process of weathering of rock layers like onion peel.
10. Branch of Geology deals with the study of minerals.

(10 × 1 = 10 marks)

Part B (Short Answer Type Questions)

Answer any ten questions

Each question carries 2 marks.

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|---------------------|---------------------|
| 11. Asteroids. | 12. Active volcano. |
| 13. Epicentre. | 14. Core. |
| 15. Fold mountains. | 16. Leaching. |

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17. Magma.
18. Slide.
19. Fissure eruption.
20. Lahars.
21. Icesheets.
22. Asthenosphere.

(10 × 2 = 20 marks)

Part C (Paragraph Type Questions)

*Answer any five questions.
Each question carries 6 marks.*

23. Isostasy.
24. Origin of earthquakes.
25. Ozone layer depletion.
26. Age determination of earth.
27. Soil profile.
28. The Tidal Hypothesis.
29. Solar system.
30. Meteorites.

(5 × 6 = 30 marks)

Part D (Essay Type Questions)

*Answer any two questions.
Each question carries 10 marks.*

31. Describe in detail about causes and effects of landslides.
32. Describe about different types of weathering, products of weathering and factors influencing weathering.
33. Give a detailed account of the interior of the earth based waves on the study of seismic
34. Give a detailed account of volcanoes, their products and different types of volcanic eruption.

(2 × 10 = 20 marks)

**FIRST SEMESTER (CBCSS—UG) DEGREE EXAMINATION
NOVEMBER 2020**

Geology

GEO 1C 01—INTRODUCTION TO REMOTE SENSING AND GIS

(2019 Admissions)

Time : Two Hours

Maximum : 60 Marks

Answer all questions.

Draw neat sketches wherever necessary.

Section A (Short Questions)

Answer at least eight questions.

Each question carries 3 marks.

All questions can be attended.

Overall Ceiling 24.

1. Sidelap and Overlap.
2. Fiducial marks.
3. Relief displacement.
4. Panchromatic films.
5. Stereo plotter.
6. Active remote sensing.
7. Atmospheric windows.
8. Diffuse reflection.
9. Blackbody radiation.
10. Map scale.
11. Datum.
12. Cadastral maps.

(8 × 3 = 24 marks)

Turn over

Section B

*Answer at least **five** questions.
Each question carries 5 marks.
All questions can be attended.
Overall Ceiling 25.*

13. Drift, tilt and crab in aerial photographs.
14. Types of aerial cameras.
15. EMR spectrum and its characteristics.
16. Types of EMR scattering.
17. Components of GIS.
18. GIS softwares.
19. Map projections.

(5 × 5 = 25 marks)

Section C

*Answer any **one** question.
The question carries 11 marks.*

20. Explain image interpretation in aerial photography and remote sensing with special reference to the elements involved.
21. Describe the functions and data structures in GIS. Add a note on the limitations of GIS.

(1 × 11 = 11 marks)

**FIRST SEMESTER (CBCSS—UG) DEGREE EXAMINATION
NOVEMBER 2020**

Geology

GEO 1B 01—ESSENTIALS OF GEOLOGY

(2019 Admissions)

Time : Two Hours

Maximum : 60 Marks

Answer all questions.

Draw neat sketches wherever necessary.

Section A

Answer at least eight questions.

Each question carries 3 marks.

All questions can be attended.

Overall Ceiling 24.

1. Palaeontology.
2. Jovian planets.
3. Asteroids.
4. Plate margins.
5. Eons and Eras.
6. Interfacial angle.
7. Cubic system.
8. Rock cycle.
9. Seismograph.
10. Mercalli's Scale.
11. Pyroclastic materials.
12. Marine erosion.

(8 × 3 = 24 marks)

Turn over

Section B

*Answer at least **five** questions.
Each question carries 5 marks.
All questions can be attended.
Overall Ceiling 25.*

13. Layered structure of the Earth.
14. Nebular Hypothesis.
15. Methods of determination of age of Earth.
16. Types of chemical bonding in minerals.
17. Causes, effects and prediction of earthquakes.
18. Types of mass wasting.
19. Global distribution of volcanoes and earthquakes.

(5 × 5 = 25 marks)

Section C

*Answer any **one** question.
The question carries 11 marks.*

20. Give an account of the Geological Time Scale.
21. Describe the topography of the ocean floor.

(1 × 11 = 11 marks)