**M. Sc.:[FINAL YEAR]**

**End Semester**

**Examination (IV Semester: 2020-2021)**

**SEMESTER: [IV] COURSE:[ M. Sc.]**

**Subject Name with Subject Code:[GEOEXPLORATION, CC-10]**

***Time: 2 Hours. Total Marks: 70***

***Notes:***

1. Attempt **ALL** parts from **SECTION A** (Total 20 Marks). Each part is of 2 Marks.

2. Attempt any **FOUR** parts from **SECTION B** (Total 20 Marks). Each part is of 5 Marks.

3. Attempt any **TWO** parts from **SECTION C** (Total of 30 Marks). Each part is of 15 Marks.

4. Attempt all Sections.

5. Marks are written against each Section.

6. Missing data if any may be suitably assumed and mentioned.

**MODEL QUESTIONS**

**SECTION-A [20 Marks]**

Attempt **ALL** parts. All parts carry **TWO** marks. **[2\*10 = 20]**

**Multiple Choice Questions**

**1.**

**2.**

**3.**

**4.**

**5.**

**6.**

**7.**

**8.**

**9.**

**10.**

**SECTION-B [20 Marks]**

Attempt any **FOUR** parts. Each part carries **FIVE** marks. **[5\*4=20]**

**11.** Write a note on primary and secondary geochemical dispersion patterns.

**12.** Give an account on the various methods of sampling of rocks, soil, vegetation and stream sediment.

**13.** Describe the difference between background, threshold and anomaly with the help of examples.

**14.** Give an account on non-coring bit Rotary Bits and Percussive Bits.

**15.** Explain in short about the Drilling Fluids.

**16.** Explain core-logs in detail.

**17.** Write in brief about coring bit.

**18**. Explain state of recovery of core in brief.

**19.** Write the significance of Bore-hole logging.

**SECTION-C [30 Marks]**

Attempt **TWO** parts. Each part carries **FIFTEEN** marks. **[15\*2 =30]**

**18.** Describe the geophysical gravity methods used for mineral exploration.

**19.** Describe the various criteria used for prospecting of mineral deposits.

**20.** Describe the geophysical magnetic methods used for mineral exploration.

**21.** Give a detail account on Gamma ray log and Electrical Resistivity log.

**22.** Explain elaborately about the components of the Drilling System.

**23.** Explain the components of the circulatory systems.

**24**. Explain in detail sonic log, neutron log and density log.

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