

**End Semester /Reappear (Semester IV) Examination May 2025**

**Programme: Diploma (MiE)**

**Full Marks: 70**

**Course: Mining Geology II**

**Time: 3 Hrs.**

**Course Code: 8D.253**

**Enrolment no. \_\_\_\_\_**

**Section I**

**1. Short Answer type questions. Answer any four.**

**4 x 5 = 20**

- a. Explain how we find out the elements of Fold in open earth surface.
- b. What do you understand by the ferrous & non – ferrous minerals.
- c. Define the term associated Dissemination deposits & Segregation.
- d. Identify the common minerals found in ores? Which state in India is known as the mineral state of India and why?
- e. Explain the origin of petroleum. Also mention the role of source rock and reservoir rock in the petroleum origination.
- f. Write down the difference between fold and faults.

**Section II**

**Long Answer type questions. Answer any three.**

**3 x 10 = 30**

2. Compare the Archean and Gondwana systems in terms of their economic importance.
3. Evaluate the processes involved in the development of unconformities. What are the key features used to recognize of recognition them in the field?
4. Illustrate the process resources & reserve with examples.
5. Write the names of the main eras in the geological time scale.
6. Explain the factors that contribute to the creation of traps that allow petroleum to accumulate in reservoir rock.

**Section III**

**Application based questions. Answer any one.**

**1 x 20 = 20**

7. Explain the three primary sources of petroleum formation, highlighting their differences. Support your answer with clear and well-labeled diagrams.
8. Summarize the roles of geophysical, geochemical, and geographical techniques in geological studies and applications.
9. Prepare a field report detailing the formation, classification, and identification of various types of unconformities in a specific region. Include relevant sketches to support the explanation.