

2021
M.Sc
Third Semester
DSE-01
GEOLOGY
Course Code: MGLD 3.11 (A)
(Fuel Geology & Geochemistry)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Discuss in brief about the chemical analysis of coal. 14
2. Write notes on: 7×2=14
 - (i) Generations of coal-bed methane
 - (ii) Fundamentals of coal processing

UNIT-II

3. Explain the process of migration of oil and gas. 14
4. Write notes on: 7×2=14
 - (i) Chemical components of crude oil
 - (ii) Types of kerogens

UNIT-III

5. Discuss on the occurrences and association of atomic minerals in nature. 14
6. Write notes on: 7×2=14
 - (i) Bombay High oilfield
 - (ii) Source rock

UNIT-IV

7. Explain the origin of elements in the solar system. Add note on meteorite

- and its type. 10+4=14
8. Write notes on: 7×2=14
- (i) Trace element substitution
 - (ii) Atomic structure of element

UNIT-V

9. Explain in detail the U-Pb method of dating. 14
10. Write notes on: 7×2=14
- (i) Radioactive decay types
 - (ii) Stable isotope fractionation
-