2023

B.A./B.Sc.

Sixth Semester

DISCIPLINE SPECIFIC ELECTIVE - 4

GEOLOGY

Course Code: GLD 6.21 (Fuel Geology)

Total Mark: 70 Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Elaborate on the concept of coal macerals and microlithotypes. 14

2. Write notes on the following:

 $7 \times 2 = 14$

- (a) Basic classification of coal
- (b) Trace elemental analysis of coal

UNIT-II

3. Write in detail about the concept, procedure and advantages of underground coal gasification.

14

4. Write notes on the following:

 $7 \times 2 = 14$

- (a) CBM formation
- (b) Advantages and disadvantages of coal liquefaction process

UNIT-III

- 5. Explain in detail with necessary diagrams the migration of crude oil in nature.
- 6. Write notes on the following:

 $7 \times 2 = 14$

- (a) Physical properties of crude oil
- (b) Difference between inorganic and organic origin theories of crude oil

UNIT-IV

/.	Discuss about the different types of hydrocarbon traps.	14
8.	Write notes on the following: 7×2 (a) Cap rocks and its types (b) Chemical reservoir rocks	=14
UNIT-V		
9.	Discuss how radioactive minerals originate and occurs in nature. Also mention some of the thorium reserves in India.	14
10	. What are gas hydrates? Explain its importance.	14