

5 SEM TDC GEO M 5

2 0 1 7

(November)

GEOLOGY

(Major)

Course : 505

[**Fossil Fuel (Coal and Petroleum)**]

Full Marks : 48

Pass Marks : 19/14

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

GROUP—A

(Coal Geology)

(Marks : 18)

1. Write on any *two* of the following : 4×2=8
- (a) Coalfields of Assam
 - (b) Ultimate analysis of coal
 - (c) Utilization of coal

2. Write a note on the origin and occurrence of coal. 8

Or

Describe the chemical composition of coal and also write about the grade of coal. 8

3. Write correct answer of the following : 1+1=2

- (a) Name the highest rank of coal.
- (b) Which of the following is extracted from coal bed?
- (i) Methane
 - (ii) Ethane
 - (iii) Propane

GROUP—B

(Petroleum Geology)

(Marks : 30)

4. Write briefly on any two of the following : 4×2=8

- (a) Crude oil
- (b) Natural gas
- (c) Shale oil

5. Write about the characteristics and importance of source rock, reservoir rock and cap rock. 8

Or

Write a note on the origin, migration and entrapment of petroleum. 8

6. Write notes on any *two* of the following : $4 \times 2 = 8$

- (a) Classification of traps
- (b) Oil-bearing horizons of North-East India
- (c) Scope of Petroleum Geology

7. Describe briefly about the petroliferous basins of India. 4

8. Write the correct answer of the following : $1+1=2$

(a) In which year was petroleum first produced in Asia?

(b) Which of the following could be an effective cap rock?

- (i) Giriyan clay
- (ii) Tipam sandstone
- (iii) Dihing boulder bed
