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(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 briefly on any *two* of the following :

4×2=8

- (a) Mode of occurrence of coal
- (b) Proximate analysis of coal
- (c) Utilization of coal

(2)

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

Or

Write briefly on the geology of the Makum Coalfield of Assam. 8

3. (a) What is the rank of coal? 1

(b) Fill in the blank : 1

Amongst all the elements present in coal, ___ is the chief constituent which increases with the maturity of coal.

GROUP—B

(Petroleum Geology)

(Marks : 30)

4. Write explanatory notes on any *two* of the following : 4×2=8

(a) Characteristics of reservoir rock

(b) Types of reservoir rock

(c) Chemical composition of crude oil

5. Write about the origin of petroleum. Write about the role of palaeontology in search of petroleum deposit. 4+4=8

Or

Describe geology and structure of either Digboi or Moran Oilfields. 8

(3)

6. Write explanatory notes on any *two* of the following : 4×2=8

(a) Assam-Arakan basin

(b) Classification of traps

(c) Shale gas and shale oil

7. Write a note on Bombay Offshore Oilfield. 4

Or

Describe the primary migration of petroleum with proper sketches. 4

8. Answer the following as directed :

(a) Digboi Oilfield was discovered in the year ____.

(Fill in the blank) 1

(b) What is kerogen? 1
