

2023

Time - 3 hours

Full Marks - 60

Answer all groups as per instructions.

Figures in the right hand margin indicate marks.

GROUP – A

1. Fill in the blanks. (all) [1 × 8]
- (a) Fusain is also called _____.
- (b) The dull earth looking bands of coal are called _____.
- (c) The calorific value of lignite is _____.
- (d) The calorific value of bituminous coal is _____.
- (e) The tipam sandstone is of _____ age.
- (f) _____ coal is derived from subaquatic plants rich in pollen, spores and cuticles.
- (g) _____ coal is derived from algae.
- (h) _____ coal is used for production of coke and gas.

[2]

GROUP – B

2. Write notes on any eight of the following within two to three sentences each. [1½ × 8

- (a) Sapropelic coal
- (b) Coal
- (c) Petroleum
- (d) Peat
- (e) Ash content
- (f) Fuel ratio
- (g) Carbonization
- (h) Rudrasagar oil field
- (i) Reservoir rocks
- (j) Brown coal

GROUP – C

3. Write notes on any eight of the following within 75 words each. [2 × 8

- (a) Ranks of coal
- (b) Cannel coal

[3]

- (c) Banded constituents of coal
- (d) Oil traps
- (e) Oil fields of Assam
- (f) Volatile matter
- (g) Evidences of drift theory
- (h) Migration of petroleum
- (i) Stratigraphic traps
- (j) Oil fields of Gujarat

GROUP – D

Answer all questions within 500 words each.

4. Describe the origin of coal. [6]

OR

Describe Indian standard coal classification.

5. Describe underground coal gasification. [6]

OR

Describe coal liquefaction.

6. Describe the origin of petroleum. [6]

[4]

OR

Describe the physical properties of coal.

7. Describe oil traps.

[6

OR

Describe plate tectonics and global distribution of hydrocarbon reserves.