

3. Write a short note (*any one*) : 5
- a) Rock-Eval Pyrolysis
- b) Salt Diapirs

PART – II (Marks: 20)

Answer *any four* questions.

1. Discuss the coalification process. 5
2. Explain the differences between diagenesis, catagenesis and metagenesis stages for sapropelic and humic source with a schematic diagram. 5
3. a) Discuss proximate analysis. 2
- b) Explain the characteristic features of Gondwana coal. 3
4. a) Name the laboratory techniques used to measure the combustion properties of coal. 2
- b) Explain the megascopic features of humic coal. 3
5. a) What is coal gasification? 1
- b) What are the differences between coal gasification and coal combustion? 2
- c) Classify the products of coal gasification based on their heat values. 2

B. SC. GEOLOGICAL SCIENCES EXAMINATION, 2023

(3rd Year, 2nd Semester)

FUEL GEOLOGY

PAPER – CORE/TH/03A

Time : Two hours

Full Marks : 40

(Use a separate Answer script for each Part)

PART – I (Marks: 20)

1. Answer the following questions briefly (*any five*) : 5×2=10
- a) Explain the term “Oil Window”.
- b) List the type of Source Rocks of Petroleum.
- c) Define the term “Cap Rock”.
- d) Define the term “Permeability”.
- e) List the classification of petroliferous basins of India.
- f) Define Darcy’s Laws.
2. What do you mean by migration of petroleum? Explain Primary and Secondary migration. 1+4=5

OR

Explain the organic and inorganic origin of Petroleum.