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c) Van-Krevelen Evolution Path Diagram

**PART II ( 20 Marks)**

Answer **Q.6** and **any three** questions from the rest.

Each question carries same marks.

6. Write short note on (any **two**) : 2·5×2=5
- a) Grey-King Carbonization Assay.
- b) Moisture in the coal.
- c) General characteristics of Gondwana Coal.
7. Define the Lithotypes of coal. Briefly describe different lithotypes and their constitutive microscopic elements. 1+4
8. How does the peat-forming plant community and nutrient supply control the nature of coal facies. 5
9. Differentiate between peatification and coalification. Write an account of the gasses expelled during coalification. 2+3
10. Write a short note about the different types of Sulfur in coal? Why the Sulfur contents of a coal is measured always? 1+4
11. Write down the working principle of bomb calorimeter. What do you understand by 'coal in dmmf basis'? 3+2
12. Describe briefly the Syler's classification of coal. 5

Ex/SC/GEOL/UG/DSE/TH/03A/2022

**B. SC. (GEOLOGICAL SCIENCES) EXAMINATION, 2022**

( 3rd Year, 2nd Semester )

**FUEL GEOLOGY**

**PAPER – DSE/TH/03A**

Time : Two hours

Full Marks : 40

(Use a separate Answer script for each Part)

**PART I ( 20 Marks)**

**(Answer Q1 and any three from the rest) (4×5=20)**

1. Match the following :
- | OILFIELD       | STATE              |
|----------------|--------------------|
| a) Ashok Nagar | i. Gujarat         |
| b) Mangala     | ii. Andhra Pradesh |
| c) Ravva       | iii. Assam         |
| d) Mehasana    | iv. West Bengal    |
| e) Digboi      | v. Rajasthan       |
2. Discuss briefly the petroleum systems of Bombay off-shore Basin.
3. How does salt tectonics help in formation of hydrocarbon trap?
4. How do you classify the source rocks of petroleum?
5. Write a short note (any two) :
- a) Rock-Eval pyrolysis
- b) Stratigraphic Traps

[ Turn over