

MSc (Integ) in App Geo Sem 5 Examination

AGL - 302

Fuel Geology

May 2022

Time : 2-00 Hours]

[Max. Marks : 50

Instructions : All questions in **Section –I** carry equal marks.
 Attempt any **Three** questions in **Section-I**.
 Questions I in **Section-II** is **COMPULSORY**.

Section-i

Q-I	A Describe in detail the coal formation process and major coal forming periods with emphasis on environmental conditions and ideal time	7
	B Describe in detail coal classification based on its genesis	7
Q-II	A Describe in detail proximate analysis and its significance	7
	B Write a note on coal quality based on its chemical, physical and performance properties	7
Q-III	A write a detailed note on ranks and grades of coal. Also write 10 uses of coal	7
	B Explain in detail – on what major factors does the formation of coal depend upon (explaining each factor)	7
Q-IV	A Write a detailed note on all the coal litho types	7
	B Describe in detail ultimate analysis and its significance	7
Q-V	A write a detailed note on coal liquefaction and gasification process	7
	B write a detailed note on what is CBM, its formation, characteristics, storage and significance	7
Q-VI	A write a note on the Indian scenario on CBM	7
	B write in detail on all the important pre-requisites of metallurgical coke	7
Q-VII	A Explain in detail the methods of prospecting and exploration of atomic minerals	7
	B explain in detail the formation of crude oil and natural gas	7
Q-VIII	A explain the classification framework of petroleum resources	7
	B explain all the sources of radioactivity and the major atomic minerals of the world	7

P.T.O

QIX	MCQs	8
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- 1) There are _____ theories on the formation of coal
 - a) 1
 - b) 3
 - c) 2
 - d) 4

- 2) Kerogen is _____
 - a) insoluble
 - b) soluble
 - c) both
 - d) None

- 3) cap rock should have very high permeability
 - a) true
 - b) false
 - c) any
 - d) both

- 4) gas-oil contact lies above the water-oil contact
 - a) true
 - b) false
 - c) any
 - d) both

- 5) Dead organisms are transformed into petroleum and natural gas in _____
 - a) Absence of air
 - b) presence of air
 - c) Presence of sun light
 - d) none

- 6) Useful substances obtained from petroleum and natural gases are called _____
 - a) Petroleum products
 - b) Biochemicals
 - c) petrochemicals
 - d) chemicals

- 7) The layer containing petroleum oil and gas is _____
 - a) Above water
 - b) Below water
 - c) Between sand and water
 - d) Below sand

- 8) Boiling point of petrol is _____
 - a) Below 10 C
 - b) 35C to 70C
 - c) 170C to 250C
 - d) 70C to 120C