

Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2019

Programme Name: GSE

Course Name : Economic Geology

Course Code : GSEG 303

Nos. of page(s) : 02

Semester : IV

Time : 03 hrs

Max. Marks : 100

Instructions:

SECTION A [Attempt All Questions] =20 Marks

S. No.		Marks	CO
Q 1	Define Ore, Mineral, Radioactive mineral and Evaporitic Minerals.	1X4	CO1
Q 2	Define the tonnage and grade of Ore.	2+2	CO2
Q 3	Illustrate the type of metamorphism and SKARNS.	2+2	CO2
Q 4	What are the ore minerals of iron and copper?	2+2	
Q 5	Define any four physical properties of minerals. OR	4	CO2
	Define the coal types.	2+2	

SECTION B [Attempt All Questions]=40 Marks

Q 6	a- Explain the residual mineral segregation with example. b- Discuss the geological distribution of copper ore deposits in India.	5 5	CO3
Q 7	Write a short note on: i- Bauxite ore ii- Secondary mineral deposits iii- Veins deposits iv- Gossan Bed v- Kimberlite	2X5	CO3
Q 8	Discuss in brief, the origin and occurrences of gold in India.	10	CO3
Q 9	Explain the formation process of coal. Relate the calorific value and rank of coal. OR	5+5	CO4
	Differentiate between coal gasification and coalification.	10	

SECTION-C [Question 10 is compulsory] =40 Marks

Q 10	a- What is coal bed methane [CBM]? Explain the generation mechanism of CBM.	5+5	CO4
	b- State the Ultimate and Proximate analysis methods.	5+5	

Q 11	Explain, the geophysical exploration techniques, which used in Mineral exploration. OR a- Discuss the geological and geochemical methods for mineral exploration. b- Explain the working principle of magnetometer in mineral and ore exploration.	10+10 10+10	CO4
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