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**UNIVERSITY OF PETROLEUM
AND ENERGY STUDIES**



End Semester Examination, April, 2017

Program/course: BBA OG
Subject: Gas Fundamentals and Marketing
Code : BDSM 104
No. of page/s: 3

Semester – VI
Max. Marks : 100
Duration : 3 Hrs

Please answer all sections.
All sections carry equal marks.

SECTION A

(10X1=10Marks)

Please fill up the blanks:

I.

1. Avantika Gas Limited is a _____ company.
2. Unconventional gas production accounts for _____% of US gas production.
3. 'Quiet Revolution' is associated with _____ gas.
4. VOC stands for _____.
5. Alaska's resources are estimated to be in excess of _____ m³.
6. _____ is a unit of porosity.
7. _____ is a sleeping giant as concerns CBM with reserves upto _____ trillion cu.m
8. Probable gas reserves of the Russian federation are estimated to be at _____ 164.2 tcm.
9. The fall in KGD6 production is due to _____ and _____ in the fields.
10. JCC stands for _____ prices for LNG for Qatar import.

II. Please answer in three sentences each.

(5x3=15 Marks)

1. Write in brief the business functions of CGD.
2. What is the pressure formation of CNG?
3. Why is Methane a dangerous nuisance to the mining industry.
4. What is Van Der Waals forces.
5. What do you know about Sakhalin-2 project?

SECTION B

(5X5=25 Marks)

Please write in brief:

1. Write features of a CGD system. Explain how a CGD company is a commodity business. What are the benefits of natural gas? Explain with a neat diagram, what are the types of CNG stations.
2. Explain what is CNG? Explain its characteristics. Write a short note on the Piped Natural Gas-explaining how it works.
3. Explain with the supporting factors why Russia is in a very strong position in Global gas Market. Write a few lines about the three Russian companies . Give your analytical opinion on how Russian gas supply program to Asia and Europe shall further strengthen its stronghold in the gas business.
4. Write about the prevailing gas regime in the country. Explain the effects of increase in gas prices on the Power, Fertilizer and the Petrochemical industry.
5. Write in in detail about the Domestic Gas pricing and the New Domestic Gas Pricing of India, in detail.

SECTION C

(2X15= 30 Marks)

Please answer in detail:

1. What is LNG? Write in detail about the stages involved in the LNG chain, with a neat diagram. Explain also the liquefaction technology and the process. What is the special feature about its storage? Explain with diagrams.
2. Give the global proven global coal reserves for the top 5 countries. Write about the potential of CBM resources CBM resources in India, giving the region-wise location of coalfields. Explain the process of desorption , coalification and de-watering with neat diagrams.

SECTION D

(2X10=20 Marks)

Please answer in detail:

1. Which are the major North American Shale Reserves. Give the definition of Unconventional Gases as given by National Petroleum Council. What is hydraulic Fracturing? Express the environmental concerns attached.
2. What is considered a good investment, considering all factors? What is Wobbe Number and Heating value. Write about the adherence to the specification requirements to meet the desired fuel quality.