

UNIVERSITY OF PETROLEUM
AND ENERGY STUDIES



End Semester Examination, May, 2017

Program/course: BBA OG
Subject: Gas Fundamentals and Marketing
Code :BDSM 108
No. of page/s:2

Semester – IV
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.Examples of acid gases are _____ and _____.
2. Sweetening means the removal of _____ and _____.
3. HHV stands for _____.
4. DCF stands for _____.
5. The liquefaction temperature of LNG is _____ deg F.
6. An example of NGL is _____.
- 7.CNG costs _____% less than Gasoline.
8. _____ is commonly known as “firedamp”.
9. _____ is commonly used to maximize the exploitation of shale gas.
10. “ _____ ” are grains of sands to _____.

Please answer in very brief:

II.

(5x3=15Marks)

- 1.What do you understand by “payout”.
2. What is the role of new technology in making a good investment decision?
3. Write the equation of % risk and also write how to make a good investment decision.
4. What is Wobbe Number? Explain giving an equation.
- 5.bar and psi are the units of _____.

SECTION B

(5x5=25 Marks)

Please answer in brief:

1. Write a short note on the quality requirements of the end product processed gas.
2. Explain why a raw natural gas needs to be processed?
3. Write in detail the process of desorption, coalification and dewatering of CBM with neat diagrams.
4. Explain the three steps in the process of recovery of NGLs, refrigeration of gas till liquefaction and tanker storage of LNG.
5. Write and explain what is hydraulic fracturing for the shale gas giving cost and market based insight also.

SECTION C

(2x15=30 Mark)

Please answer in detail:

1. Explain with a neat block diagram the natural gas processing sequence indicating all parameters and products and the by-products.
2. Explain the environmental factors of concern in connection with the unconventional /shale gas exploration and production.

SECTION D

(2x10=20 Marks)

Please answer in detail:

1. Write in detail what is the infrastructure for CGD networking. Explain in detail the distribution plan, and diagrammatically explain the stations.
2. Give a detailed derivation of the Rangarajan Committees report on domestic gas pricing and the new domestic gas pricing mechanism.