Roll No. _____

University of Petroleum Energy Studies
College of Management & Economics Studies
End-semester Examination, May 2017

Subject : Oil & Gas Economics **Semester: II**
Course : MA (EE) **Time: 3 hrs**
Course Code : MEDE 802 **MM: 100**

This paper has three pages.

SECTION – A

Each Q carries two marks. **Max Marks – 20**

1. Seismic surveys are done using _____.
2. The presence of oil during drilling is ascertained in_____.
3. A drilling contract is a contract between _____ and the_____.
4. Brent crude is found in _____.
5. EOR stands for_____.
6. The three principles of energy pricing are_____, _____, and_____.
7. Geopolitics of oil has seen _____oil shocks.
8. OPEC was formed at _____ in _____.
9. _____ refinery is the largest in the world.
10. _____ gas in an unconventional gas.

SECTION- B

Each question carries six marks. **Max Marks – 30**

1. Explain the concept of IPP, EPP and TPP pricing methods in detail.
2. What is opportunity crude, analytically explain its prospects in India and the developing world.
3. What do you understand of India's role in Geopolitics of oil, in view of the impact it has on Indian imports of crude oil and liberalization of the oil and gas sector.
4. According to you what are the various reasons for the recent crude oil turmoil and its impact on Indian upstream industry.
5. According to you what drives the Indian upstream industries consolidation?

SECTION- C

Each question carries fifteen marks. **Max Marks – 30**

1. Consider a hypothetical refinery refining crude oil.

   The products produced are:

Products	Qty (MT)	Price range (Rs)	Your Prices(Rs)
LPG	10	50-60	
Naphtha	10	100-110	
ATF	20	200-250	
Gasoline	20	70-80	
Kerosene	10	60-80	69.00(Fixed)
Diesel	10	50-60	
Lubricants	10	80-90	
Bitumen	10	150-200	
	100 MT		

   a. Let the economic constraints restrict the maximum gasoline price to Rs 69.00
   b. Operational losses are 7% spread evenly throughout the product range with max of 1% for gasoline production.
   c. Let the crude price be $59.00 per barrel.
   d. Exchange rate 1$= Rs. 67.00
   e. You have to calculate the max. GRM to be attained using a combination of product prices with Rs5.00 subsidy on diesel and Rs.10.00 on kerosene.
   f. Use the max values if the operational losses allocated by you are more than 0.5%.The max loss incurred for lubes and bitumen are 0.4% and 0.3% respectively(given).

2. Explain in detail the sequence of processes involved in an oil refinery with a neat block diagram.

SECTION- D

Each question carries ten marks. **Max Marks – 30**

1. Forward contract is a non-standardized contract between two parties to buy or sell an asset at a specified future time at a price agreed upon today whereas futures contract is a standardized contract. Explain major differences between the two contracts? (10 Marks)
2. Explain the following terms in detail: (10 Marks)
   a.) Market risk
   b.) Credit risk
3. Explain what is a benchmark crude, giving five examples? (10 Marks)