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# UPES

# UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2018

Program: BBAOG Subject (Course): Energy Economics Course Code :BDSM 184 No. of page/s: 4 Semester – IV Max. Mark: 100 Duration : 3 Hrs

Please all sections. All sections carry equal marks:

# SECTION A

10X1=10 Marks

# I. Please answer true or false or fill up the blanks as the case may be:

1.	Marginal Cost Pricing is commonly used in countries where energy utilities a	are
	owned.	
2.	result in allocative inefficiencies.	
3.	Social implications of subsidies are that it may leave the poor worse offT/	F
4.	Downsizing of the 1990s leading to the constraints of quality staff have lead to fall in investme	ent
	by IOCsT/	F
5.	Healthy competition and market efficiency are undesirable features of economyT/	F
6.	Fransmission and Distribution losses needs to be reducedTr	′F
7.	Petroleum is a complex mixtures of hydrocarbonsT	′F
8.	Sweet crude contains little sulfurT	'/F
9.	WTI is a sweet crudeT	/F
10.	LNG stands for	

# **II.** Please answer in three sentences

### 5x3=15 Marks

- 1. Briefly explain LPG, CNG ,LNG and NGL.
- 2. Explain what is meant by upstream, midstream and downstream sector giving examples of each.
- 3. Explain the concept of Geopolitics in three sentences.
- 4. Briefly explain the linkages between oil dependency and national security.
- 5. Explain your opinion about the crude oil scenario and the developing countries in middle eastern countries.

# **SECTION B**

5x5=25 Marks

# Please answer in brief:

a.Write in detail the occurance of the following:

- a. 1<sup>st</sup> Oil shock
- b.  $2^{nd}$  Oil shock
- c. Oil counter Shock...highlighting the price rises and the effects of the same.

b. Explain the term "Peaking of Oil". Explain the term bell shaped symmetric curve of Hubbert with cost perspective. Briefly explain the four schools of thought.

**c.**Explain the concept of Paper and Physical Market , explaining the players in it and the roles the NOCs play .(Take Petronas as an example).

d. Explain your understanding of liberalization of Indian Oil Industries. Explain your understanding of APM....Administered Pricing Mechanism, the characteristics, advantages and disadvantages and the consequent dismantling in April 1, 2002.

e. Give a brief note on crude oil pipeline in India ,giving the names , routes, origin , destination and the type of crude carried.

## SECTION C

- 1. Write in detail the target and the measures to be taken as proper achievement of Integrated Energy Policy.
- 2. What do you understand by energy policy and planning. Give a brief description of the oil and gas companies of HPCL, BPCL, RIL Numaligarh Refineries Ltd , Gail , IGL, NGL and IOCL

### **SECTION D**

#### 2x10=20 Marks

### Please read the case and answer the questions:

India's search for energy resources starts at home. The major areas of oil and gas production are the Bombay High and Northeast region and recent discoveries in Rajasthan and the Bay of Bengal point to substantial additional reserves. India certainly has great potential, with 5.6 billion barrels of proven reserves and an estimated 80 percent of territory unexplored for oil and gas. After years of neglect and an investment framework that did not foster international (and arguably, Indian) interest in upstream investment, the last decade has seen some reforms and increased interest in India's hydrocarbons potential. This said it is unlikely that India's domestic resources, however well exploited, will be enough to tackle the country's ever-growing needs. The result has been a mounting of India's international involvement in search of energy imports. When it comes to securing energy supplies, the world's leading importers have long recognized that the diversification of energy sources is a pivotal element, and accordingly they seek to build a rapport with energy producers worldwide. There are also obvious advantages to having a close relationship with energy producers nearer to home, including lower transport costs and the fostering of interdependence between neighboring economies .The picture provides us with a mix of opportunities and pitfalls. Three fourths of India's oil imports come from the Middle East (and 23 percent from Saudi Arabia alone) which, at 60 percent of total proven reserves, is also the world's largest concentration of hydro- carbon deposits. The domination of the Middle East in international energy markets is mostly accepted as a fact of life in India and elsewhere, and India's relationship with oil producers in the region has been affable for the past decades. However it received no special

treatment during difficult moments such as the 1973-74 oil disruptions, a harbinger of difficulties to come. Now that India's rise as an economic power is taken for granted by many in the Middle East, price deals are less and less likely (in fact Asian importers have paid

an "Asian premium" to Middle Eastern exporters for most of the past decades).Recent attempts by India to extract price concessions from Middle East producers were rebuffed with the argument that one of the world's leading importers of oil can no longer claim special

status with producers.

.This increase in Indian absolute needs, together with the geopolitical risks posed by excessive dependence on the region and its fragile sea lanes (problems include potential bottlenecks in the Hormuz Straits and increased piracy in the Redand Arabian Seas) are pushing Indian policymakers to rethink their relative dependency on the Middle East and look elsewhere, and closer to home.

Greater South Asia does contain much of the energy resources needed to power India's growth. But for a host of reasons, the region has one of the least integrated economies in the world. The obvious synergies between energy-rich and energy-dependent societies have not yet been realized but India's pressing energy demand has brought these concerns to the forefront of regional politics. Several initiatives have been mooted. Perhaps the most talked about is a longstanding idea, of a 2600-km Iran-Pakistan-India pipeline

Q1. Explain the dependence of India on the middle eastern countries for its energy supplies as given in the text.....(10) Q2. Explain the turn of the events that has made India realize that it is imperative to look for other supply sources and give YOUR opinion about this will affect the geopolitical scenario globally......(10)