



Roll No. \_\_\_\_\_

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

**Subject : Petro Economics  
Course : BBA (OG)  
Course Code : MDSO 821**

**Semester: IV  
Time: 3 hrs  
MM: 100**

**This paper has three sections.**

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**SECTION – A**

**Each question carries 5 marks**

**Max Marks – 50**

**Write Notes /Comments**

- A.1. Explain the correlation between supply and demand strategies related to petroleum sector as per Indian perspectives.
- A.2. Define the concept of opportunity cost with suitable examples of macroeconomics criteria.
- A.3. What is the price elasticity of demand and what is the formula for measuring it.
- A.4. What are the processes involved in petroleum refining and describe the different – different products we get from typical refinery.
- A.5. What are the three major types of crude oil and how they different from each other.
- A.6. Describe the history for growth of Indian refinery industry.
- A.7. An electric motor consumes 100 watts (a joule per second (J/s)) of power to obtain 90 watts of mechanical power. Determine its efficiency?
- A.8. What is the Gulf of Mexico disaster and which organization get what impact due to that.

On the basis of that compare the petroleum sector policies in India.

- A.9. Reasons of declining the oil prices and their impact on Oil Importing, Exporting and Developing countries (Brief Description).
- A.10. Define the PEAK OIL THEORY.

## SECTION- B

**Each question carries 10 marks (Answer any Three)**

**Max Marks – 30**

- B.1. Saudi Arabia's Capital Market Authority (CMA) on 18 August issued new rules allowing foreign investors to buy shares directly in initial public offerings (IPOs). The change is part of a broader aim to lower Saudi Arabia's overreliance on oil export revenue and help the government earn billions of dollars by selling some of their state-owned assets. One of these assets is the Saudi Arabian Oil Co., or Aramco, which has an estimated value of around US\$2 trillion? The government expects to earn as much as US\$100 billion by selling 5 percent of Aramco in an IPO expected to take place in 2017.
- As per above case Saudi organization facing problems due to oil pricing. Is it an encouraging step for the organization to issue the IPO like this.
  - The changes in the policy by Saudi government will increase the completion in the oil market or just a step to generate the money.
- B.2. Compare the ideal coefficients of performance of the same heat pump installed in Delhi and Chennai.
- DELHI :  $T_{\text{hot}} = 70^{\circ}\text{F}$ ,  $T_{\text{cold}} = 40^{\circ}\text{F}$
- CHENNAI:  $T_{\text{hot}} = 70^{\circ}\text{F}$ ,  $T_{\text{cold}} = 15^{\circ}\text{F}$
- B.3. Mention ten organizations of Petroleum sector and their present projects in India
- B.4. Describe top ten factors which are affecting crude oil prices in world.

## SECTION- 3

### Case Study

Max Marks – 20

#### Petrol, diesel prices to change every day from May 1, trial run in five cities

Come May 1, petrol and diesel prices will change every day in sync with international rates, much like it happens in most advanced markets. State-owned fuel retailers Indian Oil Corp (IOC), Bharat Petroleum Corp Ltd (BPCL) and Hindustan Petroleum Corp Ltd (HPCL), which own more than 95% of nearly the 58,000 petrol pumps in the country, will launch a pilot for daily price revision in five select cities from May 1 and gradually extend it across the country.

Petroleum minister Dharmendra Pradhan indicated that the government has encouraged market-based pricing of fuels. “From political to economic diplomacy, energy sector of India has gained international recognition by efficient implementation of initiatives,” he said. Pradhan however made it clear that the government will not force a decision for daily revision of fuel prices.

“Every day change in pricing of petroleum products is a recommendation of experts. The government has nothing to do with it. “Ultimately, we will be driving towards market linked rates on a daily basis at all pumps across the country,” IOC chairman B Ashok told PTI. A pilot for daily revision of petrol and diesel price will be first implemented in Puducherry, Vizag in Andhra Pradesh, Udaipur in Rajasthan, Jamshedpur in Jharkhand and Chandigarh, he said.

State fuel retailers currently revise rates on the 1st and 16th of every month based on average international price of fuel in the preceding fortnight and currency exchange rate. Instead of using fortnightly average, pump rates will reflect daily movement in international oil prices and rupee-US dollar fluctuations. It is technically possible to change rates daily but we have to first do a pilot. Once pilot is done and its implications studied, we will extend it to other parts of the country,” he said. While Ashok said the pilot is to be “launched within one month” and did not

give a specific date, industry sources said the pilot is planned to be launched on May 1. Daily price change will remove the big leaps in rates that need to be effected at the end of the fortnight and consumer will be more aligned to market dynamics. While petrol price was freed from government control in June 2010, diesel rates were deregulated in October 2014. Technically, oil companies have freedom to revise rates but often they have been guided by political considerations. Rates differ by only a few paise between pumps of the three state fuel retailers. Unbranded petrol at IOC pumps in Delhi costs Rs 66.29 per litre, while the same at BPCL pumps in the city is priced at Rs 66.37 a litre. HPCL pumps sell for Rs 66.48 per litre. Unbranded diesel at IOC pumps in Delhi costs Rs 55.61, Rs 55.66 at BPCL outlets and Rs 55.69 a litre at HPCL pumps. With daily changes, which are unlikely to be more than a few paise per litre, the political pressures for not revising rates particularly when they are to be hiked will go, sources said. Petrol price was last revised downward by Rs 3.77 a litre on April 1 and diesel rates were cut by Rs 2.91. This was the first revision in two-and-half-months as oil firms did not change prices during assembly elections in five states, including Uttar Pradesh and Punjab. Ashok said prices of petrol and diesel in a particular market (city or town) will be the same.

C.1. Is this strategy work in Indian market which is a mixed economics. Don't you think it is a step towards open market for petroleum sector in India?

C.2. How the PSUs of Indian petroleum sector get the benefits and how they will coordinate with their old pricing system.