



Name:

Enrolment No:

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**

**End Semester Examination, May 2022**

**Course: Refining & Petrochemical Business**

**Program: MBA (Oil and Gas Marketing)**

**Course Code: OGOG7013**

**Semester: II**

**Time: 03 hrs.**

**Max. Marks: 100**

**Instructions: Attempt all the questions**

**SECTION A**  
**10Qx2M=20Marks**

S. No.	Define the following terms in two lines	Marks	CO
Q 1	RPO	2	CO 1
Q 2	QUENCHING OIL	2	CO 1
Q 3	PLASTICS	2	CO 1
Q 4	FRACTIONAL DISTILLATION	2	CO 1
Q 5	SULPURIZATION	2	CO 1
Q 6	FEEDSTOCKS	2	CO 1
Q 7	LDO	2	CO 1
Q 8	MS	2	CO 1
Q 9	HYDRULIC OIL	2	CO 1
Q 10	GREASES	2	CO 1

**SECTION B**  
**4Qx5M= 20 Marks**

	Answer the following questions in brief		
Q11	Describe the two basic groups of petrochemicals with some members of each group and what are their feedstock?	5	CO 1
Q12	What are the uses of aromatics (benzene & xylene) and how these are obtained from naphtha?	5	CO 2
Q13	Describe a petrochemical plant with its location, infrastructure, capacities of products produced and its global presence / business	5	CO 2
Q14	What are the main uses of ethylene & propylene and mention their current global production.	5	CO 2

**SECTION-C**  
**3Qx10M=30 Marks**

<b>SECTION-C</b> <b>3Qx10M=30 Marks</b>			
<b>Answer the following questions in detail</b>			
Q 15	LPG has been very useful in 2020 specially post CORONA-19 pandemic. Illustrate its production in complex refinery (explain both the processes). While there are other items (petroleum products) with very low sale, for a refiner's perspective what are the steps that are required necessary to take to create the balance and run the refinery to a minimal optimal level, how would you deal with this situation?	<b>10</b>	<b>CO 4</b>
Q 16	What is refinery and petrochemical integration? What are the driving factors for such integration and how it is useful for refineries as well as for the petrochemical plant?	<b>10</b>	<b>CO 2</b>
Q 17	Pipelines are a very important mode of oil and gas transportation. Please describe the pipeline / pipeline project/ activities, which are supported by IT. Differentiate cost impact on on-shore /off-shore pipeline.	<b>10</b>	<b>CO 3</b>

**SECTION-D**  
**2Qx15M= 30 Marks**

<b>SECTION-D</b> <b>2Qx15M= 30 Marks</b>			
<b>Answer the following questions in detail</b>			
<b><u>CASE- STUDY</u></b>			
<p>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 as if 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 rupeeUS 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</p>			

	<p>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 liter, while the same at BPCL pumps in the city is priced at Rs 66.37 a liter. HPCL pumps sell for Rs 66.48 per liter. Unbranded diesel at IOC pumps in Delhi costs Rs 55.61, Rs 55.66 at BPCL outlets and Rs 55.69 a liter at HPCL pumps. With daily changes, which are unlikely to be more than a few paise per liter, the political pressures for not revising rates particularly when they are to be hiked will go, sources said. Rs 3.77 a liter last revised petrol price downward 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) would be the same.</p>		
Q 18	Analyze the strategy work with respect to Oil & Gas transportation and storage of petroleum-finished products.	<b>15</b>	<b>CO 3</b>
Q 19	Evaluate and critically analyze the PSUs of Indian petroleum sector get the benefits and how they will coordinate with their pricing through their Refinery business.	<b>15</b>	<b>CO 4</b>

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