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| Name: |  |
| Enrolment No: | |

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2018

Course: Economics and Management Decisions
Programme: MBA – Oil and Gas Management
Time: 03 hrs.

Semester: I
Code: ECON 7001
Max. Marks: 100

Instructions:

1. Read questions carefully before setting out to answer them
2. For questions having multiple parts in them; intelligently assign marks for the sub parts considering their importance before answering them.

SECTION A

| S. No. | | Marks | CO |
|--------|--|-------|-----|
| Q I | Statement of question | | |
| 1 | State the law of demand | 2 | 1 |
| 2 | Distinguish between extent and degree of complementarity | 2 | 1 |
| 3 | List down the characteristic features of Perfectly competitive market structure | 2 | 1 |
| 4 | Distinguish between maintenance growth and developmental growth | 2 | 1 |
| 5 | Define homogeneity and product heterogeneity | 2 | 1 |
| 6 | Explain with a numerical example why $P=D=MR=AR$ in perfectly competitive market | 2 | 1,2 |
| 7 | Distinguish between short run and long run | 2 | 1 |
| 8 | Explain opportunity costs | 2 | 1,2 |
| 9 | Distinguish between economies of scale and economies of scope | 2 | 1 |
| 10 | Distinguish between three types of goods | 2 | 1 |
| | | | |

SECTION B

Answer any Four of the following questions

| Q II | Statement of question | | |
|------|--|---|-----|
| 1 | Explain different price elasticities of demand | 5 | 1,2 |
| 2 | Explain how the price is determined in the market through the market forces using suitable diagram | 5 | 1,2 |
| 3 | Explain the relationship between AP and MP curves | 5 | 1,2 |
| 4 | Explain the properties of Iso-cost curves | 5 | 1,2 |
| 5 | Briefly explain managerial applications of the concept of income elasticity of demand | 5 | 1,3 |

SECTION-C

Answer any two of the following questions

| | | | |
|-------|---|----|-------------|
| Q III | Statement of question | | |
| 1 | Show and explain the determination of price and output under Oligopoly market structure | 15 | 1,2,3,4,5,6 |
| 2 | Explain the shifts in demand and supply with their implications on profits | 15 | |
| 3 | <p>A pen manufacturing firm earns a total revenue of Rs 15,400 selling 2,400 pens. At this output, it is incurring a total variable cost of Rs. 5,760 and average cost of Rs, 5.10 per unit per pen. The production facility of this unit is producing 186 pens per week. Given this information, find:</p> <p>How many pens should this firm produce to break even? How many weeks it would take for the firm to break even? To earn profits of 25,000, 35,000, 45,000 and 50,000 how many pens should this firm be producing How many weeks would it take the firm to achieve these profit rates</p> | 15 | 2,3,4,5,6 |
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SECTION-D

| | | | |
|------|--|----|-------------|
| Q IV | <p style="text-align: center;">Statement of question</p> <p>Analyze the following case and answer the questions followed by the case. Your answer to these questions will be evaluated for 30 marks</p> | | |
| | <p>For about 100 years De Beers, the South African company had been the unchallenged monopoly in the diamonds business. Until a few years back, De Beers could determine who could buy uncut stones, in what quantities and quality and decide which cutting centers would be used. But its share of the rough-diamond market, 80% five years ago, had reduced to 45% by mid-2004.</p> <p>Meanwhile Lev Leviev (Leviev), a former De Beers sightholder (one of the few exclusive direct buyers of De Beers rough diamonds), had emerged as the world's largest cutter and polisher of precious gems. Leviev also provided rough stones to other cutters, polishers and jewelry makers around the globe. Leviev was the diamond industry's first dealer to operate across the value chain from mining and cutting to polishing and retailing. Frustrated by De Beers' high-handed treatment of buyers, who were offered rough diamonds at take-it-or-leave-it prices and risked being permanently cut off if they resisted, Leviev had decided to operate on his own.</p> <p>Leviev had begun dealing directly with diamond-producing governments. This undermined De Beers' all-important relationship with sight holders. Leviev had taken significant business away from De Beers in Russia and Angola--two of the world's largest producers of rough diamonds.</p> <p>Leviev's defiance had inspired others like Rio Tinto, owner of Australia's Argyle mine, to bypass De Beers for the first time in 1996 and sell 42 million carats directly to polishers in Antwerp. In the early 1990s, the Russian government also began selling some of its rough supply to others despite its long time exclusive deal with De Beers. A key operator in Russia, Leviev had cultivated good relationships with the political leadership in that country.</p> | 30 | 1,2,3,4,5,6 |

Realizing that its monopoly was under threat, De Beers was also reorienting its strategy. It was trying to capture more value, undertake branding exercises and establish strong relationships with carefully selected sight holders. It remained to be seen how the battle between De Beers and Leviev would unfold.

ABOUT DE BEERS

For most of the 20th century, De Beers sold 85% to 90% of the diamonds mined worldwide. With this monopoly, it could artificially keep diamond prices stable by matching its supply to world demand.

The De Beers legacy was more than 100 years old. In 1888, Cecil Rhodes successfully consolidated South Africa's diamond mines, laying the foundation for De Beers. He formed a cartel with the ten largest merchants. Each was guaranteed a certain percentage of the diamonds coming out of De Beers' mines.

In return, they provided Rhodes with market data, enabling him to ensure a steady, controlled supply. In the subsequent years, De Beers refined its system for distributing diamonds. Its original partners in the cartel were replaced by 125 of the world's most powerful manufacturers. But the basic principle of De Beers' business model remained the same: to match the supply of diamonds with demand.

Over time, De Beers began to manage its supply chain in a unique way. Its London-based marketing arm, the Central Selling Organization (CSO), purchased the production of 13 mines owned or co-owned by De Beers in South Africa, Botswana, Namibia and Tanzania. In 1999, this amounted to more than 44% of the world's annual output. In the late 1990s, the CSO also bought diamonds worth \$120 million from Canada's Ekati mine and another \$1.5 billion from Russia, which together made up an additional 25% of the world's \$6.8 billion annual diamond production.

De Beers had no interest in polishing the diamonds. It was primarily interested in selling the sorted rough diamonds. De Beers combined rough diamonds, sorted them into 14,000 categories, and divided them into lots. Every five weeks, De Beers held what it called a "sight" and distributed the lots to its 125 partners, known as "sightholders." De Beers set the price in advance and determined the quality and quantity each sightholder received. The sightholders took the rough diamonds back to their factories, cut and polished them and then sold them to their customers throughout the world....'

Questions:

1. Summarize this case in the background of monopoly market structure
2. What aspects of monopolist market could challenge it and lead to oligopoly?
3. What kind of resource allocation inefficiencies could De Beers is bringing about in the market?