L. S. RAHEJA COLLEGE OF ARTS AND COMMERCE, DEPARTMENT OF ECONOMICS

BUSINESS ECONOMICS II

WORKBOOK

FYBCOM SEMESTER II

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ASSISTANT PROFESSOR
DEPARTMENT OF ECONOMICS
Q.1 Complete the following revenue schedule of a perfect competition firm and comment on the relationship between TR, MR and AR under perfect competition.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Price</th>
<th>TR</th>
<th>AR</th>
<th>MR</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
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</tbody>
</table>
Q.2. Complete the following revenue schedule of a Monopoly firm and comment on the relationship between TR, MR and AR under Monopoly.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Price</th>
<th>TR</th>
<th>AR</th>
<th>MR</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>30</td>
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<tr>
<td>2</td>
<td>28</td>
<td></td>
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<tr>
<td>3</td>
<td>26</td>
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<td></td>
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<tr>
<td>4</td>
<td>24</td>
<td></td>
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<tr>
<td>5</td>
<td>22</td>
<td></td>
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<tr>
<td>6</td>
<td>20</td>
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<td>7</td>
<td>18</td>
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<td>8</td>
<td>16</td>
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<td>9</td>
<td>14</td>
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<td>10</td>
<td>12</td>
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Q.3. Identify and explain various profit conditions depicted in the following diagram.
Q.4. Following diagram shows condition of supernormal profit under perfect competition. Do you agree with the above statement? Justify your answer.

[Diagram showing supply and demand curves with supernormal profit highlighted]

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Q.5 A firm is currently producing 100 electric bulbs per month and sells them in a perfectly competitive market at Rs. 40 each. The marginal cost of producing the 100th bulb is Rs. 39 and the marginal cost of producing the 101st bulb is Rs. 40. To maximise profit, what should the firm do?

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MODULE 2

Q.1. Redraw and explain the following diagram.
Q.2. What is product differentiation? Discuss with the help of five examples.
Q.3. Identify, redraw and explain the following diagram.
Q.4. Identify, redraw and comment on the following demand curve.
Q.5. Identify, redraw and discuss the following diagram.
Q.6. Identify, redraw and explain the following diagram.
MODULE 3

Q.1. Suppose, the firm has capacity to produce 5000 units of a commodity. It uses 80% of its capacity and is considered as the standard output. The total variable cost incurred is ₹ 16000 and the overhead cost is ₹ 8000. The mark up decided by the firm is 50%. Estimate the price per unit with the help of mark-up pricing.
Q.2. A firm produces 100 units of commodity X at the total fixed cost of ₹ 2000 & total variable cost of ₹ 3000. Find the price which the firm would charge to its customers if it wants to make profit margin of 25% on cost. The firm uses cost plus pricing method.
Q.3. If total cost of producing a commodity A is ₹ 5000 and mark-up fixed by the firm is ₹ 2000. Total Output to be sold is ₹ 700 units. Calculate the price per unit.
Q.4. If the cost of product is ₹ 1500 per unit and the market expects 30% profit on costs. Calculate selling price.

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Q.5. If the cost of product is ₹ 500 per unit and the market expects 50% profit on costs. Calculate selling price.

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Q.6. XYZ International expects to incur the following costs in its business in the upcoming year.

Total production cost = ₹ 300000
Total Sales and administration cost = ₹ 200000
Company wants to make profit of ₹ 300000
And ABC expects to sell 4000 units of its product.

On the basis of above information, calculate full cost price.
Q.1. Calculate Payback period for the following data and find most suitable project.

<table>
<thead>
<tr>
<th>Projects</th>
<th>Initial Investment (In Rupees)</th>
<th>Net annual Cash Inflows (In Rupees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10000</td>
<td>5000</td>
</tr>
<tr>
<td>B</td>
<td>10000</td>
<td>4000</td>
</tr>
<tr>
<td>C</td>
<td>10000</td>
<td>2000</td>
</tr>
<tr>
<td>D</td>
<td>10000</td>
<td>3000</td>
</tr>
</tbody>
</table>
Q.2. Suppose an initial investment in a project is Rs. 5000 and following are the annual cash flows. Calculate payback period.

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Cash flows</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>1000</td>
</tr>
<tr>
<td>Second</td>
<td>1500</td>
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<tr>
<td>Third</td>
<td>2500</td>
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<tr>
<td>Forth</td>
<td>4000</td>
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<tr>
<td>Fifth</td>
<td>6000</td>
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</tbody>
</table>
Q.3. Suppose there are two projects A and B, with an initial investment of Rs. 50000 each. Cash flows of both the projects are given below. Calculate payback period and find most suitable project.

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Cash flows For Project A</th>
<th>Annual Cash flows For Project B</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>20000</td>
<td>10000</td>
</tr>
<tr>
<td>Second</td>
<td>30000</td>
<td>20000</td>
</tr>
<tr>
<td>Third</td>
<td>50000</td>
<td>30000</td>
</tr>
<tr>
<td>Forth</td>
<td>70000</td>
<td>50000</td>
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<tr>
<td>Fifth</td>
<td>90000</td>
<td>60000</td>
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</tbody>
</table>
Q.4. Suppose an initial investment in a project is Rs. 30000 and annual cash flows are as follows. Calculate payback period.

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Cash flows</th>
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</thead>
<tbody>
<tr>
<td>First</td>
<td>6000</td>
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<tr>
<td>Second</td>
<td>9000</td>
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<tr>
<td>Third</td>
<td>13000</td>
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<tr>
<td>Forth</td>
<td>18000</td>
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<tr>
<td>Fifth</td>
<td>25000</td>
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</tbody>
</table>
Q.5. If an initial investment is Rs. 50000 in a project. The project generates annual cash inflows of Rs. 15000, Rs. 20000 and Rs. 25000 for 3 years respectively. If rate of discount is 10 % p.a. then calculate NPV and find out whether project should be accepted or rejected.
Q.6. If an initial investment is Rs. 22000 in a project. The project generates annual cash inflows of Rs. 7000, Rs. 9000, Rs. 12000 and Rs. 15000 for 4 years respectively. If rate of discount is 12 % p.a. then calculate NPV and find out whether project should be accepted or rejected.

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Q.7 If a sum of Rs. 1000 is invested in a project, it will earn Rs. 1500 at the end of one year. Calculate IRR.

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Q.8 If a sum of Rs. 3000 is invested in a project, it will earn Rs. 3500 at the end of one year. Calculate IRR
Q.8. If a sum of Rs. 20000 is invested in a project, it will earn Rs. 100000 at the end of one year. Calculate IRR

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