

Bachelor of Information Technology Examination, 2019(4th Year, 2nd Semester)**Management**

Time: Three Hours

Full Marks: 100

Different parts of the same question should be answered together**(Answer only required number of questions. Any extra question answered shall be ignored.)**

CO 1 [25]	<p>1. Answer any one from (a) and (b) in this block 1 x 25 = 25</p> <p>(a) Explain features of management. Summarise functions of top- and mid-level management. Describe merits and demerits of scientific management. What are the benefits of MBO? 5 + 9 + 6 + 5</p> <p>(b) Enumerate the steps in decision making. Illustrate with an example various methods of decision making under uncertainty. Explain the process of finding out EVPI. 5 + 15 + 5</p>																																					
CO 2 [20]	<p>2. Answer any two from (a), (b) and (c) in this block 2 x 10 = 20</p> <p>(a) Enumerate the basic requirements of an industrial relation programme. What are the functions of trade union? 5 + 5</p> <p>(b) Explain causes of industrial disputes. 10</p> <p>(c) What are the drawbacks of wage incentive plan? Summarise straight piece rate system of wage incentive plan. 5 + 5</p>																																					
CO 3 [20]	<p>3. Answer any one from (a) and (b) in this block 1 x 20 = 20</p> <p>(a) When does a facility location decision arise? Explain locational factors of raw materials and component sources for deciding facility location. Present a sample diagram of fixed position layout. What are the advantages and disadvantages of fixed position layout? 3 + 6 + 5 + 6</p> <p>(b) (i) Explain batch production. 5</p> <p>(ii) Determine an initial basic feasible solution to the following transportation problem by using LCM and VAM: 6 + 9</p>																																					
<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2" rowspan="2"></th> <th colspan="4">Destination</th> <th rowspan="2">Supply</th> </tr> <tr> <th>D1</th> <th>D2</th> <th>D3</th> <th>D4</th> </tr> </thead> <tbody> <tr> <th rowspan="3">Source</th> <th>A</th> <td>11</td> <td>13</td> <td>17</td> <td>14</td> <td>250</td> </tr> <tr> <th>B</th> <td>16</td> <td>18</td> <td>14</td> <td>11</td> <td>300</td> </tr> <tr> <th>C</th> <td>21</td> <td>24</td> <td>13</td> <td>10</td> <td>400</td> </tr> <tr> <th colspan="2">Demand</th> <td>200</td> <td>225</td> <td>275</td> <td>250</td> <td></td> </tr> </tbody> </table>				Destination				Supply	D1	D2	D3	D4	Source	A	11	13	17	14	250	B	16	18	14	11	300	C	21	24	13	10	400	Demand		200	225	275	250	
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CO 4 [20]	<p>4. Answer any one from (a) and (b) in this block 1 x 20 = 20</p> <p>(a) Enumerate objectives of market research. What are the scopes of market research? Explain market research techniques. 7 + 7 + 6</p> <p>(b) What are the objectives of product packaging? Describe various methods of sales promotions. Define advertising. Enumerate functions of advertising. 5 + 6 + 2 + 7</p>														
CO 5 [15]	<p>5. Answer any one from (a) and (b) in this block 1 x 15 = 15</p> <p>(a) A shopkeeper estimates the annual requirements of an item as 2,000 units. He buys it from his supplier at a cost of Rs. 20 each, and the ordering cost is Rs. 100 per order. If the stock holding costs are 25% per year of stock value, how frequently should he replenish his stocks? Further, suppose the supplier offers a 10% discount on orders between 400 and 699 items, and a 20% discount on orders exceeding or equal to 700. Can the shopkeeper reduce his costs by taking advantage of either of these discounts? 5 + 10</p> <p>(b) A large Portland manufacturer wants to forecast demand for a piece of pollution-control equipment. The review of past sales, as shown below, indicates that an increasing trend is present.</p> <table border="1" data-bbox="276 976 1321 1059"> <thead> <tr> <th>Month (t)</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> </tr> </thead> <tbody> <tr> <td>Actual Demand (A_t)</td> <td>12</td> <td>17</td> <td>20</td> <td>19</td> <td>24</td> <td>-</td> </tr> </tbody> </table> <p>Smoothing constants are assigned as $\alpha = 0.2$ and $\beta = 0.4$. The company assumes the initial forecast for month 1 (F₁) as 11 units, and the trend over that period (T₁) was 2 units. Compute trend adjusted exponentially smoothed demand forecast for the month 6. 15</p>	Month (t)	1	2	3	4	5	6	Actual Demand (A _t)	12	17	20	19	24	-
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- CO1: Classify various concepts and principles of management. (K2)
- CO2: Analyse concepts of personnel management. (K4)
- CO3: Illustrate different problems of plant management. (K3)
- CO4: Interpret basics of marketing management. (K3)
- CO5: Apply various concepts of materials management and forecasting. (K3)