HPAS (Main)—2012

MANAGEMENT

Paper I

Time : 3 Hours

Maximum Marks : 150

Note :— Attempt five questions in all. Solve any two questions from Section I. Solve at least one question from each other Section. All questions carry equal marks.

Section I

1. (a) How do you visualise the application of fundamental concepts of OB in an organization known to you?

20

P.T.O.
(b) Explain any two of the following: 10

(i) Emerging trends in management thoughts

(ii) Small group and intergroup behaviour

(iii) Importance of motivation theories.

2. (a) Review leadership theories in the present global context. How changes in leadership affected in Indian Companies with suitable examples? 20

(b) Write notes on any two of the following: 10

(i) Management by objectives

(ii) Management process

(iii) Organisational design.

3. (a) Define conflict. How does it help the organization? 15

Explain with suitable examples.
(b) Imagine you as CEO of a software company. What method of communication would you adopt in your organization? Why? 15

4. (a) Describe at least three points in the decision-making process at which information plays an important role. 15

(b) Explain any two of the following: 15

(i) Centralisation Vs. Decentralisation

(ii) Management Information System

(iii) Dynamics of organizational behaviour.

Section II

5. (a) Do you think that the present economic environment is favourable to business organizations? Discuss with suitable example. 20

P.T.O.
(b) Explain any two of the following: 10

(i) National Income

(ii) Structure of Indian Economy

(iii) Demand analysis and Forecasting.

6. (a) Critically examine the working of monetary system in our country. 15

(b) Explain any two of the following: 15

(i) Pricing decisions under different market structures

(ii) Macro policies on enterprise decisions and plans

(iii) Capital budgeting.
Section III

7. (a) A confectionary company mixes three types of toffees to form one kilogram toffee pack. The pack is sold at Rs. 17. The types of toffees cost Rs. 20, Rs. 10 and Rs. 5 per kg respectively. The mixture must contain at least 0.3 kg of first type of toffees and the weight of the first two types of toffees together must at least be equal to the third type. Determine the optimal mix for maximum profit.

(b) Explain any three of the following:

(i) Game Theory of $2 \times 2$

(ii) Dual simplex method

(iii) Graphical solution

(iv) Maxima and minima of single.
8. (a) The following table shows all the necessary information on the availability of supply to each factory of Best Industries Ltd. The requirement of each destination and the unit transport cost (in Rs.) from each factory to each destination:

<table>
<thead>
<tr>
<th>Factory</th>
<th>Destination</th>
<th>Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>A</td>
<td>05</td>
<td>01</td>
</tr>
<tr>
<td>B</td>
<td>06</td>
<td>04</td>
</tr>
<tr>
<td>C</td>
<td>03</td>
<td>02</td>
</tr>
</tbody>
</table>

| Demand | 75 | 20 | 50 |

Since there is not enough supply some of the demand at the three destination may not be
satisfied. For the unsatisfied demand, let the penalty cost be Rs. 1, 2 and 3 respectively. Find the optimum solution using VAM.

(b) Explain any two of the following:

(i) Application Areas of Linear Programming
(ii) Simplex method waiting lines
(iii) Utility of classical optimization.

Section IV

9. (a) The following data relate to the number of passenger cars (in million) sold from 2002 to 2009:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>6.7</td>
</tr>
<tr>
<td>2003</td>
<td>5.3</td>
</tr>
</tbody>
</table>

P.T.O.
2004  4.3  
2005  6.1  
2006  5.6  
2007  7.9  
2008  5.8  
2009  6.1  

(i) Fit a straight line trend to the data through 2007 only.

(ii) Use your result in (i) to estimate your production in 2009 and compare with the actual production.

(b) Explain any two of the following:

(i) Need of Testing Hypothesis

(ii) Utility of central tendencies

(iii) Optimum strategies.
10. (a) The following table shows the ages (X) and Blood pressure (Y) of 8 persons:

<table>
<thead>
<tr>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>62</td>
</tr>
<tr>
<td>63</td>
<td>53</td>
</tr>
<tr>
<td>45</td>
<td>51</td>
</tr>
<tr>
<td>36</td>
<td>25</td>
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<tr>
<td>72</td>
<td>79</td>
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<tr>
<td>65</td>
<td>43</td>
</tr>
<tr>
<td>47</td>
<td>60</td>
</tr>
<tr>
<td>25</td>
<td>33</td>
</tr>
</tbody>
</table>

Obtain the regression equation of Y on X and find the expected blood pressure of a person who is 49 years old.
(b) Write short notes on any two:

(i) Application of Poisson and Normal

(ii) Decision-making under risk distribution

(iii) Replacement Theory.