H.P.A.S. (Main)—2011

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 Sections. All questions carry equal marks.

Section I

1. (a) Management as a systematic body of knowledge:
Discuss its relevance to the managers with suitable examples. 20

(b) Explain any two of the following: 10

(i) Five principles of management

(ii) Five functions of management

(iii) Techniques of decision making.
2. (a) Discuss the modern personality theories and its impact on the organizational performance. 15

(b) What do you mean by OB? Explain its importance to the organizations of 21st century. 15

3. (a) How do you evaluate yourself in terms of your needs for achievement, affiliation and power? 15

(b) Imagine you as leader plan a venture capital company with 50 software consultants and management experts. What traits do you think will qualify you as an effective leader to the Company? 15

4. (a) Discuss the modern communication methods in Indian Corporate Scenario. 15
(b) Write notes on any two:

(i) Organizational change;

(ii) External forces of Business Environment;

(iii) Centralization Vs. Decentralization.

Section II

5. (a) Describe the important characteristics of Indian Economy. Explain briefly the account of natural resources.

(b) Explain any two of the following:

(i) Demand Analysis and Forecasting;

(ii) National Income;

(iii) Regulatory Policies.
6. (a) What is policy of Central Govt. towards the public sector? Explain impact of industrial policy on Public Sector Firms.

(b) Write notes on any two:

(i) Capital budgeting;

(ii) Cost benefit analysis;

(iii) Cost + pricing decisions.

Section III

7. (a) Old hens can be bought at Rs. 20 and young ones at Rs. 50 each. Old hens lay 3 eggs per week and young hens lay 5 eggs per week, each egg being worth Rs. 2. A hen costs Rs. 2 per week to be fed. If there are only Rs. 700 available for
purchasing hens, how many hens of each kind be bought in order to have a maximum profit per week, assuming that it is not possible to house 20 hens at a time.

(b) Explain any two of the following:

(i) Optimization under constraints;

(ii) Maxima and minima of several variables;

(iii) Utility of Simplex method.

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 unit transport cost (in Rs.)
from each factory to each destination:

<table>
<thead>
<tr>
<th>Factory</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5</td>
<td>1</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>B</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>80</td>
</tr>
<tr>
<td>C</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Demand</td>
<td>75</td>
<td>20</td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

Since there is not enough supply some of the demand at the three destinations 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) Write notes on any two:

(i) Game theory;

(ii) Classical optimization;

(iii) Graphical solution.
Section IV

9. (a) Given the following data, estimate the marks in mathematics obtained by a student who has scored 60 marks in English:

Mean of marks in Mathematics = 80

Mean of marks in English = 50

SD of marks in Mathematics = 10

Coefficient of correlation = 0.4

(b) Explain any two of the following:

(i) Need to study Poisson and Normal distribution;

(ii) Decision making under risk;

(iii) Replacement theory.

P.T.O.
10. (a) Calculate trend value from the following data using the method of least square:

<table>
<thead>
<tr>
<th>Year</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>7</td>
</tr>
<tr>
<td>1995</td>
<td>9</td>
</tr>
<tr>
<td>1996</td>
<td>12</td>
</tr>
<tr>
<td>1997</td>
<td>15</td>
</tr>
<tr>
<td>1998</td>
<td>18</td>
</tr>
<tr>
<td>1999</td>
<td>23</td>
</tr>
</tbody>
</table>

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

(i) Binomial Application;

(ii) Decision Tree;

(iii) Tests of Hypothesis.