1. Answer all the questions in this Section.

(a) Fill in the Blanks with appropriate words:  

(i) __________ is a continuous process of identifying, measuring and developing performance in organizations by linking each individual’s performance and objectives to the organization’s overall mission and goals.

(ii) __________ is an integrated approach to identifying, acquiring and retaining customers.

(iii) __________ represents a modern method of evaluating the performance of personnel and is a form of results-oriented appraisal.

(iv) __________ is a period to period computation which can be used to monitor the process of value creation and record historically the growth of the enterprise.

(v) __________ is the continuous process of measuring products, services or activities against the best levels of performance that may be found either inside or outside the organization.

(b) State whether the following statements are True/False. If False, rewrite the correct statement. No credit will be given, if the justification for your answer is not given.

(i) The term “Business” refers to the state of being busy for an individual, group, organization or society.

(ii) Brand Loyalty is buyer’s priority for the products of established organizations.

(iii) Competitive Analysis is a process of gathering data, creating information and making decisions.
(iv) Critical Incident Technique is one of the methods for Individual Performance Evaluation.

(v) Business Process Re-Engineering (BPR) is known by many names such as “Core Process Re-design”, “New Industrial Engineering” or “Working smarter”.

(c) Define the following terms, in just one/two sentences only: 1x2=2

(i) Target Costing

(ii) Lean Management

(d) Match the statement under Column I with the appropriate statement under Column II: 1×4=4

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) E-Commerce</td>
<td>(A) is a term used by some Computer storage manufacturers and storage service providers to describe products and services.</td>
</tr>
<tr>
<td>(ii) Data Mining</td>
<td>(B) is to increase the ‘intelligence of Decision Process and knowledge of the people involved in this process’.</td>
</tr>
<tr>
<td>(iii) A primary goal of a Data Warehouse</td>
<td>(C) is the entire process of applying a computer-based methodology for discovering knowledge from data.</td>
</tr>
<tr>
<td>(iv) Data Availability</td>
<td>(D) is a way of doing business transactions via the Internet.</td>
</tr>
</tbody>
</table>

(e) Multiple Choice Questions. Pick the correct choice: 1×4=4

(i) Business Risk

A. arises due to the default in meeting the financial obligations as and when due for payment.
B. arises due to changes in demand and supply, expectations of the investors, information flow, investors risk perception etc.
C. is determined by how the business invests its funds.
D. is defined as exposure to a loss in offshore landing, caused by events in a particular country.

(ii) ‘Risk Mapping’

A. is a procedure to identify threats and vulnerabilities.
B. denotes acceptance of the loss or benefit arising out of a risk when it takes place.
C. is one of the popular methods of measuring financial risks.
D. promotes awareness of significant risks through priority ranking, facilitating the efficient planning of resources.
(iii) One of the alternatives given below does not stand as symptoms of Corporate failure:

A. Low Profitability
B. High gearing
C. Low liquidity
D. Window-dressing

(iv) Business Process Improvement

A. is one of the models for predicting corporate failure.
B. enables the business to implement the improvements.
C. is a systematic approach to help an organization to optimize its underlying processes to achieve more efficient results.
D. stands for Improvements, Identification and procedure of operational changes to Performance Management System in Performance Improvement Strategies.

SECTION – B

This section contains 7 Questions, out of which you are required to answer any 5 Questions.

Each Question carries 16 marks.

2. (a) In view of increasing cost of operating own fleet of cars, Krish Ltd., is presently considering two proposals viz.,

(i) To hire cars with drivers from an agency @ ₹ 800 per car per month. The company will bear the cost of petrol, oil and tyres.

(ii) The executive will be given ₹ 25,000 interest-free loan repayable in 5 years to buy his own car. The company will, however, provide him free petrol and ₹ 500 per month for maintenance and driver’s wages.

Please Turn Over
If the present cost of a car is ₹ 50,000 and monthly average running is 2,000 kilometers, find out the most economic way with the help of the following data:

<table>
<thead>
<tr>
<th></th>
<th>Paise per km.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petrol</td>
<td>65</td>
</tr>
<tr>
<td>Oil</td>
<td>8</td>
</tr>
<tr>
<td>Tyre</td>
<td>7</td>
</tr>
<tr>
<td>Repair</td>
<td>10</td>
</tr>
<tr>
<td>Tax and Insurance</td>
<td>₹ 560/year</td>
</tr>
<tr>
<td>Driver’s wages and Bonus</td>
<td>₹ 720/month</td>
</tr>
<tr>
<td>Life of a car</td>
<td>5 years</td>
</tr>
<tr>
<td>Resale value at the end of 5th year</td>
<td>₹ 10,000</td>
</tr>
<tr>
<td>Assume Interest @ 18% per annum</td>
<td></td>
</tr>
</tbody>
</table>

(b) A Businessman has two independent investments A and B available to him but he lacks the capital to undertake both of them simultaneously. He can choose to take A first and then stop, or if A is successful, then take B or vice-versa. The probability of success on A is 0.7, while for B, it is 0.4. Both the investments require an initial capital outlay of ₹ 2,000 and both return nothing, if the venture is unsuccessful. Successful completion of A will return ₹ 3,000 (over cost) and successful completion of B will return ₹ 5,000 (over cost).

Draw the Decision Tree and determine the best strategy.

3. (a) Jai Ltd., has the capacity of production of 80,000 units and presently sells 20,000 units at ₹ 50 each. The demand is sensitive to Selling Price and it has been observed that for every reduction of ₹ 10 in Selling Price, the demand is doubled.

As a Cost and Management Accountant, you are required to find out

(i) What should be the Target Cost at full capacity, if the Profit Margin on Sale is 10%?

(ii) What should be the Cost Reduction Scheme, if at present, 40% of the Cost is variable, with the same % of profit?

(iii) If the rate of return desired is 15%, what will be the maximum investment at full capacity?
(b) A company is organized on decentralization lines, with each manufacturing division operating as a separate Profit Centre. Each divisional manager has a full authority to decide on sale of the division’s output to outsiders and other divisions.

Division B has always purchased its requirements of a component from Division A. But when informed that Division A was increasing its selling price to ₹ 150, the manager of Division B decided to look at outside sources.

Division B can buy the component from outside sources for ₹ 135. But Division A refuses to reduce its price in view of its need to maintain its return on the investment.

The top management has the following information:

- B’s annual purchase of the component: 1,000 units
- A’s Variable cost per unit: ₹ 120
- A’s Fixed cost per unit: ₹ 20

**Required:**

(i) Will the company be benefited as a whole, if Division B bought the component at ₹ 135 from outside sources?

(ii) If Division A did not produce the material for Division B, it could use the facilities for other activities resulting in a cash operating savings of ₹ 18,000. Should Division B then purchase from outside sources?

4. (a) M/s. ABC Ltd., provides the following details on its new product.

Years 1 and 2: R&D costs: ₹ 4,80,000; Design costs: ₹ 3,20,000.

Assume that this R&D costs and Design costs represents the total costs incurred in 2 years.

Years 3 to 6: Other Functional costs:

<table>
<thead>
<tr>
<th>Function</th>
<th>One-time costs (₹)</th>
<th>Variable cost/unit (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>2,00,000</td>
<td>50</td>
</tr>
<tr>
<td>Marketing</td>
<td>1,40,000</td>
<td>48</td>
</tr>
<tr>
<td>Distribution</td>
<td>1,00,000</td>
<td>32</td>
</tr>
<tr>
<td>Customer Service</td>
<td>1,60,000</td>
<td>60</td>
</tr>
</tbody>
</table>

Please Turn Over
The sale quantities during the Product-Life-Cycle at various selling prices are:

<table>
<thead>
<tr>
<th></th>
<th>Option-I</th>
<th>Option-II</th>
<th>Option-III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling price/unit (₹)</td>
<td>800</td>
<td>960</td>
<td>1,200</td>
</tr>
<tr>
<td>Sale Quantity in units</td>
<td>10,000</td>
<td>8,000</td>
<td>5,000</td>
</tr>
</tbody>
</table>

Ignoring the time value of money, compute the net incomes generated over the Product-Life-Cycle at various prices. Which price should the company select? 6+4=10

(b) Pay Offs of three acts A, B and C and the states of nature X, Y and Z are given below:

<table>
<thead>
<tr>
<th>State of nature ↓</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>-20</td>
<td>-100</td>
<td>200</td>
</tr>
<tr>
<td>Y</td>
<td>200</td>
<td>-50</td>
<td>-50</td>
</tr>
<tr>
<td>Z</td>
<td>400</td>
<td>600</td>
<td>300</td>
</tr>
</tbody>
</table>

The probabilities of the states of nature are 0.3, 0.4 and 0.3 respectively.

Calculate the Expected Monetary Value (EMV) for the above data and select the best act. 2+2=4

Also find the EVPI.

5. (a) Why 'Total Productivity Management' (TPM) is suggested by many companies? 6
(b) How the Process, People and Product are related with 'Total Quality Management' (TQM)? 6
(c) What is meant by 'Decision Support System'? State the four components of Decision Support System? 2+2=4

6. (a) What is meant by the term “Spread Sheet”? 2
(b) How the Scorecards and Dashboards are used interchangeably? 4
(c) Mention the steps which are involved in ‘Data Mining Problems’? 10
7. (a) How Enterprise Risk Management (ERM) is creating a corporate culture in a rapidly changing business environment?
   
   (b) Write the needs of implementation of Enterprise Risk Management (ERM).
   
   (c) Write a short note on Value-at-Risk (VaR) method. How it helps in determining financial risk in a business?

8. (a) State the areas in which the causes of sickness for a project may arise and show their effects.
   
   (b) What is meant by ‘Performance Improvement Zone’?
   
   (c) Write the important steps for running a Business Process Improvement and Management?