IIMM Assignments, Jan-June, 2014 Session

INDIAN INSTITUTE OF MATERIALS MANAGEMENT
NHQ- Education Wing
Plot Nos. 102 & 104, Institutional Area, Sector-15, CBD Belapur, Navi Mumbai- 400 614
Phone: 022-27571022 Telefax: 022-27565741

IMPORTANT POINTS TO BE NOTED BY THE STUDENT

1. Write your Name, Roll. No. and complete mailing address with Pin Code on the answer sheet.

2. Submission of assignments is compulsory and marks obtained in assignments carry 20% weight-age in the final result.

3. Students are required to secure 50% marks in assignments to pass the examination.

4. Each subject will have two assignments and each assignment carries 10 marks only.

5. Assignments must be written by the students in their own good hand writing and one copy of the same be retained with them to avoid inconvenience in the event of misplacement / loss of the same in transit.

6. The answers should be brief to the point and relevant to the questions given in the assignment. Do not reproduce your answers from the study materials sent to you.

7. Problems/queries with regard to assignments, if any, are to be discussed with respective branch / NHQ and during the contact classes.

8. Use only full escape size paper for your answers and all the answer sheets must be tagged / tied firmly with string.

9. Assignments in respect of distance mode students must reach IIMM NHQ Education Wing latest by 30 April, 2014 against Jan-June, 2014 session. No delay will be acceptable. GDMM contact mode students are required to submit their assignments at their respective branches.

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PAPER- 1
MANAGEMENT PRINCIPLES & HRP
ASSIGNMENT No-1

Que 1) Write short note on:
   a) Management Vs Administration
   b) Collective Bargaining

Que 2) a) Discuss -'Delegation provides the means by which a manager can multiply himself'.
   b) Explain seven step of MBO process with diagram.

ASSIGNMENT No-2

Que 1) a) What is trade union? What are the objectives and functions of a trade union?
   b) Define communication. Compare verbal and written methods of communication.

Que 2) Explain the following:
   a) Minimum Wages Act 1948
   b) Innovation Approach

PAPER- 2
QUANTITATIVE METHODS
ASSIGNMENT No-1

Que1) Find the basic feasible solution of the following transportation problem by north-west corner rule. Also find the optimal transportation plan.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>80</td>
</tr>
<tr>
<td>B</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>60</td>
</tr>
<tr>
<td>C</td>
<td>3</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Required</td>
<td>60</td>
<td>60</td>
<td>30</td>
<td>40</td>
<td>10</td>
<td>200 Total</td>
</tr>
</tbody>
</table>

Que2) How to identify risk? What are the different phases of risk analysis?

ASSIGNMENT No-2

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Que 1) The distribution of typing mistakes committed by a typist is given below:
Assuming a Poisson mode, find out the expected frequencies:

<table>
<thead>
<tr>
<th>No. of mistakes per page</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of pages</td>
<td>142</td>
<td>156</td>
<td>69</td>
<td>27</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

Que 2) Out of 320 families with 5 children each, what percentage would be expected to have
   a) 2 boys and 2 girls and
   b) At least one boy?
Assume equal probability for boys and girls

PAPER-3
Business Economics, Accounting and Finance
ASSIGNMENT No-1

Que 1) a) What are the implications of aggregate demand-aggregate supply model?
   b) Distinguish between a fund flow statement and a cash flow statement.

Que 2) Explain the following:
   a) Typology of markets
   b) Measurement of national income

ASSIGNMENT No-2

Que 1) a) "A satisfactory current ratio is a function of conditions of current assets and current liabilities ". Explain.
   b) Discuss salient features of foreign trade policy (2004-09 ).

Que 2) What is International Monetary Fund (IMF)? Explain responsibilities and activities of IMF.
**-PAPER – 4**

**INFORMATION TECHNOLOGY AND E-COMMERCE**

**ASSIGNMENT No-1**

Que 1) Write short note on:

a) Application of Windows XP

b) Elements of computing process

Que 2) a) What are virtual corporations? What are the benefits of virtual corporations?

b) Compare different versions of Windows operating systems.

**ASSIGNMENT No-2**

Que 1) a) Discuss RFID system? What is the application of RFID?

b) Explain Cyber Law in detail. What is the importance of it?

Que 2) a) Distinguish between dynamic RAM & static RAM.

b) Explain re-engineering process with a suitable example

**PAPER – 5**

**PURCHASING MANAGEMENT**

**ASSIGNMENT No-1**

Que 1) a) What is supplier rating? Explain key criteria used for supplier evaluation.

b) What are the various types of Purchase Orders? Explain a Purchase order with an example.

Que 2) a) What is Purchase Forecasting? What are the concepts used in Forecasting?

b) Differentiate between rate contract and running contract.

**ASSIGNMENT No-2**

Que 1) a) Explain make or buy decision. What are the factors determining make/buy/outsource decision?

b) What is excise duty? What are the various types of excise duty?

Que 2) Explain Value Engineering in detail.

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**PAPER - 6**
**BUSINESS LAWS**
**ASSIGNMENT No-1**

Que 1 a) Explain Breach of contract. What remedies are available for Breach of contract?

b) What is the process of registration under CST ACT?

Que 2 a) Define endorsement? What are the various forms of endorsement?

b) What are the different features of industrial dispute act?

**ASSIGNMENT No-2**

Que 1) Write short note on:

a) Foreign trade regulation

b) VAT Vs MODVAT

Que 2) a) Write the general provisions regarding imports and exports.

b) Discuss salient features of Arbitration Act

**PAPER - 7**
**INTERNATIONAL TRADE**
**ASSIGNMENT No-1**

Que1) a) Discuss foreign trade regulation rules, 1993.

b) Define industrial restructuring. What are the various steps of industrial restructuring?

Que2) Discuss the following in detail:

a) Trade imbalance and debt problem

b) Theory of relative advantage.

**ASSIGNMENT No-2**

Que1) a) What are the objective and functions of foreign exchange management policy?

b) Discuss the advantage & disadvantage of foreign trade investment.

Que2) a) Explain custom clearance procedure for imported and exported goods.

b) What are Incoterms and their relevance in International Trade?
PAPER - 8
OPERATIONS MANAGEMENT
ASSIGNMENT No-1

Que1) a) What is aggregate planning? What are the various steps in aggregate planning?
    b) Define Ergonomics. What are its benefits to improve productivity?

Que2) Differentiate the following:
    a) Forecasting Vs Prediction
    b) Make Vs Buy decision

ASSIGNMENT No-2

Que1) a) What is line balancing? What are the various applications of line balancing?
    b) Explain product life cycle with different stages of product life cycle.

Que2) a) What is job-shop scheduling? Explain forward and backward scheduling.
    b) Discuss the principle of waste management.

PAPER - 9
STRATEGIC MANAGEMENT

ASSIGNMENT No-1

Que1) a) Define environmental scanning. What are the objectives of an environmental scanning system?
    b) Differentiate between market focused and a resource–based strategy.

Que2) a) Discuss the various elements of Mckinsey’s 7-S Model.
    b) What is organization culture? Discuss the various characteristic of organization culture.

ASSIGNMENT No-2

Que1) a) Define resource allocation. What are the several ways of allocating resources in a systematic ways?
    b) Explain Gap Analysis with diagram

Que2) Explain the following:
    a) Low cost leadership strategy
    b) Benefits of market segmentation

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PAPER - 10
INVENTORY MANAGEMENT
ASSIGNMENT No-1

Que 1) a) Discuss the impact of inventory control on profitability of the organization.

b) What are the various methods of controlling ‘work in process’ inventory?

Que2) Write short note on the following:

a) Activity based costing

b) Dependent Vs independent demand

ASSIGNMENT No-2

Que1) a) What is the effect of overstocking and under stocking in an organization?

b) Discuss the various methods of inventory valuation.

Que2) a) What is safety stock? What are the factors responsible for determination of safety stock?

b) Discuss the various storage and order picking equipments.

PAPER - 11
LOGISTICS AND SUPPLY CHAIN MANAGEMENT
ASSIGNMENT No-1

Que1) a) Discuss ‘Reverse logistics –A Competitive Tool’.

b) What are the various materials used for packaging?

Que2) a) Explain inbound Vs outbound logistics. What are the various functions in logistics?

b) What are the different phases of customer service? Explain value added services.

ASSIGNMENT No-2

Que1) Discuss the following in detail

a) Cold chain infrastructure.

b) Financial and non financial methods in logistics.

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Que2) a) What is material handling? What are the various equipments used for material handling?  
b) Explain VED Analysis for inventory control.

PAPER - 12  
PACKAGING, DISTRIBUTION AND RETAIL SUPPLY CHAIN MANAGEMENT  
ASSIGNMENT No-1

Que1) a) What are the various challenges for organized retail industry?  
b) Explain how the sourcing for merchandise products is done?  

Que2) a) What is the impact of various state and local laws in developing retail policies?  
b) Explain various classifications of railway freight rates.

ASSIGNMENT No-2

Que1) a) What are the factors that influences the packaging material decision?  
b) Discuss the various methods of determination of packaging cost.  

Que2) Discuss the following in detail:  
   a) Status of packaging industry in India  
   b) Relevance of eco friendly packaging.

PAPER - 13  
RESEARCH METHODOLOGY  
ASSIGNMENT No-1

Que1) The distribution of the price of the equity share of a company in a stock exchange is shown in below table. Find the mean and standard deviation of the share price of the company.

<table>
<thead>
<tr>
<th>Share price (Rs)</th>
<th>50-60</th>
<th>60-70</th>
<th>70-80</th>
<th>80-90</th>
<th>90-100</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of sessions</td>
<td>20</td>
<td>30</td>
<td>45</td>
<td>55</td>
<td>50</td>
</tr>
</tbody>
</table>

Que2) What is diagrammatic presentation? What are the utility and advantages of diagrammatic presentation?

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ASSIGNMENT No-2

Que1) The supporters of a party claim that their party has 60% following in Delhi. To test this claim a city paper undertakes a test sample of 400 persons on the internet, 200 people supported this claim. Test at 1% level of significance whether the supporters claim is correct or not.

Que2) A sample of 100 dry battery cells tested to find the length of life produced the following results: \( \bar{x} = 12 \) hours, \( \sigma = 3 \) hours
Assuming that data to be normally distributed, what percentage of battery cells are expected to have life:
   a) More than 15 hours
   b) Less than 6 hours, and
   c) Between 10 and 14 hours

Pls refer the below value of \( z \)

<table>
<thead>
<tr>
<th>Z</th>
<th>2.5</th>
<th>5</th>
<th>1</th>
<th>0.67</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>0.4938</td>
<td>0.4772</td>
<td>0.3413</td>
<td>0.2487</td>
</tr>
</tbody>
</table>

PAPER -15
STRATEGIC COST AND FINANCIAL MANAGEMENT
ASSIGNMENT No-1

Que1) Write short notes on the following:
   a) Role of foreign investment.
   b) SEBI Codes

Que2) The expected cash flow of a project are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-100,000</td>
</tr>
<tr>
<td>1</td>
<td>20,000</td>
</tr>
<tr>
<td>2</td>
<td>30,000</td>
</tr>
<tr>
<td>3</td>
<td>40,000</td>
</tr>
<tr>
<td>4</td>
<td>50,000</td>
</tr>
<tr>
<td>5</td>
<td>30,000</td>
</tr>
</tbody>
</table>

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The cost of capital is 12%. Calculate the following:
   a) Net present value
   b) Benefit-cost ratio
   c) Internal rate of return
   d) Modified return rate of return
   e) Payback period
   f) Discounted payback period

ASSIGNMENT No-2

Que1) Differentiate between financial lease Vs Operating lease.


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital</td>
<td>200,000</td>
<td>300,000</td>
<td>Plant &amp;</td>
<td>200,000</td>
<td>300,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Machinery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share premium</td>
<td>-</td>
<td>10,000</td>
<td>Land &amp; Buildings</td>
<td>50,000</td>
<td>110,000</td>
</tr>
<tr>
<td>8% debentures</td>
<td>100,000</td>
<td>50,000</td>
<td>Investments</td>
<td>10,000</td>
<td>50,000</td>
</tr>
<tr>
<td>General reserve</td>
<td>50,000</td>
<td>80,000</td>
<td>Stock</td>
<td>80,000</td>
<td>60,000</td>
</tr>
<tr>
<td>P&amp;L a/c</td>
<td>50,000</td>
<td>70,000</td>
<td>Debtors</td>
<td>90,000</td>
<td>80,000</td>
</tr>
<tr>
<td>Provision for taxation</td>
<td>30,000</td>
<td>40,000</td>
<td>Cash &amp; bank</td>
<td>70,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Proposed Dividend</td>
<td>20,000</td>
<td>30,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sundry creditors</td>
<td>50,000</td>
<td>70,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>500,000</td>
<td>650,000</td>
<td></td>
<td>500,000</td>
<td>650,000</td>
</tr>
</tbody>
</table>

Additional information:
1. Investment costing Rs 8,000 was sold for Rs 15,000, the profit being created to P & L a/c.
2. An interim dividend of Rs 20,000 was paid during the year.
3. Accumulated depreciation on:

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land &amp; Building</td>
<td>30,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Plant &amp; Machinery</td>
<td>40,000</td>
<td>60,000</td>
</tr>
</tbody>
</table>

4. Depreciation charged during the year:
   a) Land & Building | 10,000 |
   b) Plant & Machinery | 20,000 |

5. Debentures were redeemed at par

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Profit and loss a/c (balance) 1997

\[
\begin{array}{c|c}
Add: & Rs, \\
Profit for 1998 & 50,000 \\
Less: Interim dividend & 40,000 \\
\hline
90,000 & \\
20,000 & \\
\hline
70,000 & \\
\end{array}
\]

PAPER-16
BUSINESS STRATEGIES AND WORLD CLASS PRACTICES
ASSIGNMENT No-1

Que 1) a) Discuss India’s global competitiveness and manufacturing excellence.
   b) What are Deming’s Deadly Disease and Sins?
Que 2) a) Define Balance Score Card. How it is useful for world class management?
   b) Discuss Shingo’s approach to quality management.

ASSIGNMENT No-2

Que 1) a) What is process capability? What are the reasons for conducting process capability study?
   b) Explain various manufacturing challenges of the information age.
Que 2) Describe the following:
   a) Hall’s framework of value-added engineering
   b) The PO-p System

PAPER-17
ADVANCED SUPPLY CHAIN MANAGEMENT
ASSIGNMENT No-1

Que 1) a) What are the various elements involved in the integration of supply chain process?
   b) Explain Best of Breed versus Single-Vendor ERP solutions.

Que 2) Discuss the following:
   a) Regional differences in logistics
   b) Inventory classification models

ASSIGNMENT No-2

Que 1) a) Discuss risk pooling with various reasons for variability in customer demand.
   b) Explain order processing cycle with diagram.

Que 2) Explain Bull Whip effect. Discuss the various methods for coping with the Bull Whip effect?
PAPER- 18.a
PROJECT MANAGEMENT
ASSIGNMENT No-1

Que 1) Following table gives data on normal time, normal cost and crash time, crash cost for a project. The indirect cost per day is Rs 10.
   a) Draw the network for the project
   b) Find critical path
   c) Determine minimum total time and corresponding cost.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Normal</th>
<th>Crash</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time (days)</td>
<td>Cost (Rs)</td>
</tr>
<tr>
<td>1-2</td>
<td>6</td>
<td>60</td>
</tr>
<tr>
<td>1-3</td>
<td>4</td>
<td>60</td>
</tr>
<tr>
<td>2-4</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>2-5</td>
<td>3</td>
<td>45</td>
</tr>
<tr>
<td>3-4</td>
<td>6</td>
<td>90</td>
</tr>
<tr>
<td>4-6</td>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>5-6</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>6-7</td>
<td>3</td>
<td>45</td>
</tr>
</tbody>
</table>

Que2) Write short note on the following:
   a) Current issues in project management
   b) Features of matrix organization

ASSIGNMENT No-2

Que1) a) What is network crashing? What are the techniques used for network crashing?
   b) Discuss the importance of Audit and review in project management
Que2) Draw a network corresponding to the following information and obtain the following:
   a) Early and late start and completion time
   b) Determine the critical activities.

<table>
<thead>
<tr>
<th>Activity</th>
<th>1-2</th>
<th>1-3</th>
<th>2-6</th>
<th>3-4</th>
<th>3-5</th>
<th>4-6</th>
<th>5-6</th>
<th>5-7</th>
<th>6-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration (Days)</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>7</td>
<td>4</td>
<td>6</td>
<td>5</td>
<td>19</td>
<td>10</td>
</tr>
</tbody>
</table>
PAPER- 18.b
DECISION SUPPORT SYSTEM
ASSIGNMENT No-1

Que 1) a) Discuss ‘Decision - Making is a Recursive Process’.
   b) What is data warehouse framework? Explain data staging layer.
Que 2) Discuss the following in detail
   a) Numerosity Reduction
   b) Architecture of data warehouse.

ASSIGNMENT No-2

Que1) a) What is the relationship between EDP, MIS and DSS?
   b) Discuss various risk and uncertainty of Decision-Making.

Que2)a) Explain principle of component analysis in decision making with detail.
   b) Discuss the role of User- Interface in decision support system.

PAPER- 18.C
OPERATIONS RESEARCH
ASSIGNMENT No-1

Que1) Write short notes on the following;
   a) Methodology of operation research
   b) Markov Chains

Que 2) A person wants to decide the constituents of a diet which will fulfill his daily requirements of
proteins, fats and carbohydrates at the minimum cost. The choice is to be made from four different types
of foods. The yields per unit of these foods are given in below table.

<table>
<thead>
<tr>
<th>Food Type</th>
<th>Proteins</th>
<th>Fats</th>
<th>Carbohydrates</th>
<th>Cost per unit (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>45</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>85</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>65</td>
</tr>
<tr>
<td>Minimum Requirement</td>
<td>800</td>
<td>200</td>
<td>700</td>
<td></td>
</tr>
</tbody>
</table>

Formulate linear programming model for the problem.

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resubmit assignments.
ASSIGNMENT No-2

Que1) A particular item has a demand of 9000 units/year. The cost of procurement is Rs 100 and the holding cost per unit is Rs 2.40 per year. The replacement is instantaneous and no shortages are allowed. Determine the following:
   a) The economic lot size
   b) The numbers of orders per year
   c) The time between orders
   d) The total cost per year if the cost of one unit is Rs 1

Que2) In a railway marshalling yard, goods trains arrive at a rate of 30 trains per day. Assume that the inter-arrival time follows an exponential distribution and the service time distribution is also exponential with an average of 36 minutes. Calculate
   a) The probability that the yard is empty
   b) Average queue length assuming that the line capacity of the yard is 9 trains.

PAPER-18.d
MARKETING MANAGEMENT
ASSIGNMENT No-1

Que1) Differentiate the following:
   a) Selling concept Vs Marketing concept
   b) Marketing segmentation and targeting

Que2) a) Define a new product. What steps would you recommend for generating new product ideas for a mobile phone manufacturer?
   b) Discuss various methods used to conduct quality research.

PAPER-18.e
TOTAL QUALITY MANAGEMENT
ASSIGNMENT No-1

Que 1) a) What are the barriers in TQM implementation? Discuss the ways to remove these barriers.
   b) Distinguish between quality and total quality using "little q" and 'Big Q' factors

Que 2) a) What is SQC? Give benefit of quality control.
   b) Explain different types of sampling methods with examples

Note: As per IIMM NHQ circular dated 21.12.2012, (uploaded on www.iimm.org,) late receipt of assignments with late fees @ Rs. 200/- per paper can be accepted till 15th May, 2014 only. Written Exams scores without assignments will be invalid, hence such students will be required to re-appear in even passed theory papers and resubmit assignments.
ASSIGNMENT No-2

Que 1) Write short notes on:
   a) Herberg's Two-Factor theory
   b) Control Charts

Que 2) a) Describe Deming's fourteen points of quality improvement.

   b) Explain problem solving process.

Q.2. A small project consists of seven activities, the details of which are given below:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration (days)</th>
<th>Immediate Predecessor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Most likely</td>
<td>Optimistic</td>
</tr>
<tr>
<td>A</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>6</td>
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<td>F</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>G</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

a) Draw the network diagram, number the nodes, find the critical path and expected project completion time.

b) What project duration will have 95% confidence of completion?

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