

JUN-2010

**INDIAN INSTITUTE OF MATERIALS MANAGEMENT
Post Graduate Diploma in Materials Management**

**PAPER 18.b
DECISION SUPPORT SYSTEMS**

Date: 19.6.2010
Time: 2.00pm to 5.00pm

Max. Marks: 100
Duration: 3 Hrs

Instructions:

1. From part "A" answers all questions (compulsory). Each sub-question carries 1 mark. **Total Marks =32**
 2. From part "B" answers any three questions out of five questions. Each question carries 16 marks. **Total marks=48**
 3. Part "C" is a case study (Compulsory). **Total marks=20**
-

PART - A

Q.1 Expand the following

- | | | | |
|--------|---------|---------|--------|
| 1] CRM | 2] GUI | 3] HTTP | 4] EDI |
| 5] VBA | 6] OLTP | 7] ETL | 8] DWT |

Q.2 State True or False.

1. An estimation of the value of a set of variables at some future point of time is called forecasting
- 2.
3. A DBMS serves as a data bank for Decision Support System.
4. The DSSs are subclass of GDSSs which provide support in decision making.
5. Sampling can be used as data reduction technique.
6. The principle of sorting through large amount of data and picking out relevant information is called operating system .
7. Data and information are used interchangeably meaning the same
8. Prescriptive Decision Theory of decision analysis is aimed at finding tools, methodologies and software to help people make better decision.
9. MATLAB is an interactive computing environment used for both scientific and statistical data analysis and visualization.

Q. 3 Match the following.

S. no		S. No.	
1	Binning	1	Data Smoothing Technique
2	Expert systems	2	Replace human intelligence

3	Discrete Fourier Transform	3	Signal Processing Technique
4	PEST Analysis	4	Assess the potential and suitability of a market
5	Simon' s Model	5	Intelligence Phase , Design phase and Choice phase
6	Knowledge based systems	6	Formalize domain knowledge amenable to mechanized reasoning
7	Time series method / analysis	7	Variables that change with time
8	CRM software	8	Manage Customer Information

Q.4 Fill in the blanks.

- 1.. Broad term indicating any type of activity that attempt to imitate existing system or situation in a simplified manner -----
2. A _____ is a sequence of user actions that is recorded and can be played back later to duplicate the original actions.
3. The advantages of Object Oriented Programming are----- and _____.
- 4.----- routines attempt to fill in missing values , smooth out noise and correct inconsistencies in the data.
- 5.----- is repository containing unimaginable amount of information scattered all over the world.
6. In -----data encoding or transformations are applied so as to obtain a reduced or compressed representation of the original data.
- 7, ----- is a systematic tool of decision making theory for complex multi stage decision problem T
8. Quantitative methods of forecasting are generally used for -----
----- forecasting where relevant past data is not available.

PART –B

- Q.5** (a) Describe the role of user – interface in a of Decision Support System?
(b) What is spread sheet programming and explain its characteristics ?
- Q.6** (a) Define the term Data Warehousing and list down some of the advantages of data warehouse.
(b) “Proper application of decision making tools increase productivity, efficiency and effectiveness leading to competitive advantage. “ Justify.
- Q.7** (a) List down the various method to store data in a data warehouse.
(b) What are the benefits of Group Decision Support Systems ?

Q. 8 What do you mean by data integration ? List down various data integration requirements ?

Q.9 Short notes on
(a) Artificial Intelligence

(b) Active Decision Support System models.

PART – C
Case Study (Compulsory)

Q.10 Ms Priya Mazumdar owner of three departmental stores situated in different locations has employed you as management consultant for computerization. The turnover of the stores are very high and she is expecting a substantial benefit out of the implementation of Information technology.

Based on your domain knowledge of Supply chain Management and Information technology, prepare a report for Management approval and implementation with following details.

1. Step-by-step approach for implementing decision support system.
2. Expected improvements in services to customers
3. Cost economics of the systems
4. Difficulties in implementing decision support system.