



INDIAN INSTITUTE OF MATERIALS MANAGEMENT
Post Graduate Diploma in Materials Management

Dec 2014

Paper 18.b

DECISION SUPPORT SYSTEM

Date: 20.12.2014

Time: 2.00 p.m. to 5.00 p.m.

Max. Marks 100

Duration 3 hours

Instructions:

1. From part "A" answers all questions (compulsory). Each sub-question carries 1 mark.
2. From part "B" answers any three questions out of 5 questions. Each question carries 16 marks.
3. Part "C" is a case study (compulsory).

Total marks = 32.

Total marks =48.

Total marks = 20

PART A

(1 x32 = 32 marks)

Q.1. Expand the following

8 marks

- | | | | |
|--------|---------|---------|--------|
| 1) CRM | 2) DBMS | 3) VBA | 4) GUI |
| 5) WAN | 6) ETL | 7) OLAP | 8) WWW |

Q. 2 State true or false

8 marks

1. Excel programming offers a wide range of external data storage capabilities
2. Historical data of many months or years is generally stored in Data Warehouses to support historical analysis
3. A Model represent a way of looking at the world with a set of assumptions that enable us to understand or predict behavior ..
4. Management Information System represent a more useful higher level form of Management support using information rather than just data.
5. Strategic decisions are taken by top management based on available short term data
6. Normative decision making theory describes how decisions should be made in order to accommodate a set of axioms believed to be desirable.
7. Multiple equation Method of forecasting is concerned with a variable that changes with time and is generally dependent upon current time

8. Data smoothing technique in which data values are sorted by consulting neighborhood values is called Binning.

Q.3 Match the following

8 marks

SNo	A		B
1	Method of Data Compression	A	Management Information System
2	No Specific decision or suggestion	B	Scientific and Statistical data analysis and visualization
3	Sequence of recorded user actions	C	Principal Component Analysis
4	MATLAB	D	Time series forecasting
5	Moving average method	E	Top Managers & Executives
6	Basic level operators	F	Macroin Excel Programming
7	Middle Managers	G	Electronic Data Processing
8	Decision Support System	H	Passive DSS Models

Q.4 Fill in the blanks

8 marks

- _____ can aid human cognitive deficiencies by integrating various sources of information and providing intelligent access to relevant knowledge
- In _____. Data encoding or transformations are applied so as to obtain a reduced or compressed representation of the original data.
- A _____ is the main repository of an organization's historical data, its corporate memory.
- Developing new techniques for encryption is called _____.
- The output of the meeting depend on the _____ and _____ contributed by the participants .
- The benefits of _____ include better interaction more straight forward and effective communication..
- A _____ supports the availability of all critical business data in standard form for rapid enquiry, analysis, and reporting .
- _____ is an interactive computing environment that can be used for scientific and statistical data analysis and visualization

PART-B

48 Marks

(Attempt any three. Each question carry 16 marks)

- Q.5** a) How a Data Warehouse is different from a Database ? List down some of the main characteristics of Data Warehouse.
b) Explain the concept and the various components of EDI.
- Q.6** a) **Explain how** proper application of Decision Making tools increases productivity, efficiency & effectiveness and comparative advantages with suitable examples
b) Describe the Quantitative Techniques Decision Tree and Pay Back Period that help in improvement of overall quality of decision making .
- Q.7 Write short notes on**
a) Wavelet Transformation
b) Database models
c) Operating system
d) Meta Data
- Q.8** a) Explain the advantages and Limitations of Decision Support System
b) Explain various Network topologies with appropriate sketches
- Q.9** a) What do you understand by the term Data Mining ? Explain the importance and working of Data Mining with suitable illustrations.
b) Describe the role and importance of commercially available decision Support packages.

PART-C

20 marks

Q.10. Case Study (Compulsory)

M/s Hindustan Construction and Manufacturing Company New Delhi was established in 1905 . The company has got three manufacturing plants and 16 other operating locations all over India The company had an expanding international portfolio of affiliates, joint ventures and representative offices across the globe with joint ventures/subsidiaries in US,UK, Germany, France, Spain, Ireland, Netherlands, India, China, Brazil, South Africa, etc. While it aggressively pursued the industrialization of its business, the growth strategy equally focused on enhancing market share in India. The company had a strong brand marketing team and distribution network in India.

The company wants to investigate the requirement of Decision Support System in order to improve the working of the company and services provided to customers.

The company decided to hire a management consultant and you have been assigned to prepare a detailed report highlighting the following.

Questions:

1. step-by-step approach for implementing decision support system.
2. The expected improvement in services to customers, and difficulties in implementing Decision Support System.
