



INDIAN INSTITUTE OF MATERIALS MANAGEMENT
Post Graduate Diploma in Materials Management

June 2013

Paper 18.B

DECISION SUPPORT SYSTEM

Date: 15.06.2013

Max. Marks 100

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

Duration 3 hours

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 5 questions. Each question carries 16 marks. | Total marks =48. |
| 3. Part "C" is a case study (compulsory). | Total marks = 20 |

PART A

(1 x32 = 32 marks)

Q1. Fill in the blanks

- a. Some amount of _____ is built in to all aspects of the world
- b. Decision _____ is one of the most systematic tools of decision-making theory and practice.
- c. Decision support system can aid human _____ deficiencies.
- d. Management Information System uses more information than _____
- e. Decision Support System improves the _____ of decision
- f. Most of the statistical packages provide facilities for data _____
- g. Decisions are irreversible and have far-reaching consequences for the rest of _____ life.
- h. A data warehouse architecture is a description of the elements and _____ of the warehouse

Q2. State True or False

- a. Management Support System consists of DSS, Expert System and Executive Information System
- b. Critical Success Factor (CSF) is a popular concept in DSS design
- c. DSS is a subject of computer based Information system
- d. As computer programming evolved over years, it got less complicated and more powerful
- e. Data warehousing system involves high cost
- f. Data clearing attempt to fill in missing values
- g. Data reduction technique is used to obtain reduced representation of the data set.
- h. Excel programming offers a wide range of external data storage capabilities

Q3. Match the following

A

- a. VBA Language
- b. Time series analysis
- c. Application Programming Interface
- d. MIS
- e. LAN/WAN
- f. Window Task bar
- g. Web-Pages
- h. Multi-Media data base

B

- a. DSS Tools
- b. activate Excel
- c. unstructured
- d. Stream data base
- e. Excel program
- f. past data
- g. Middle Manager
- h. Computer hardware

Q4. Expand the following

- a. DDE
- b. MSD
- c. CRM
- d. GDSS
- e. OOP
- f. DWA
- g. OLAP
- h. ETL

PART B

(16 x3 = 48 marks)

(Answer any three)

- Q5. Explain the six steps in decision making process
- Q6. How decision tree helps in decision making and practices
- Q7. Compare the advantages and disadvantages of EDP, MIS and DSS in terms of various parameters
- Q8. Explain the role of DSS and its application in today's business
- Q9. What are the concepts of DSS and show it by a flow diagram

Que. 10:

SECTION C (Case Study)

20 marks

A Marketing Decision Support System at Corn Rail

Corn Rail is a non profit corporation started in 1976 by the U.S. administration to revitalize is freight service of 6 bankrupt rail lines. The company operates in a competitive environment mainly against the truck transport and therefore marketing strategies are very important.

The success of Corn Rail depends on pricing Requests for adhoc information by the many decision makers at remote locations must be responded very fast.

A huge database of historical data (about 5 million records per year, each containing 100 fields of data) is used for information retrieval. To reply to users request means a search for data, sorting, summarization, consolidation, computation, data presentation and data transfer. Most users do not have computer experience and therefore it is necessary to have a user friendly Data Base Management System (DBMS)

In addition to internal data, the DBMS includes industry and other environmental information provided by external data banks and information about clients and competitors.

Questions

1. Draw a flow diagram on Corn Rails customer interactive computing software
2. What are the improvements you may suggest as a software vendor to increase its usage?
3. What type of training programme would you suggest for the users?
4. What are the likely savings to the company by interacting this system?
5. To develop easy person – machine dialogue, what is your suggestion?
