



INDIAN INSTITUTE OF MATERIALS MANAGEMENT
Post Graduate Diploma in Materials Management

June 2012

Paper 18.B

DECISION SUPPORT SYSTEM

Date: 16.12.2012

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)

Q 1. Expand the following.

1. CSF
2. DDE
3. GIS
4. MSD
5. SFA
6. ES
7. DBMS
8. GDSS

Q 2. Fill in the blanks.

1. Electronic Data processing is the first of several links of _____to information chain.
2. The aim of DSS is to improve the _____of decision made.
3. The frame work for DSS was provided by _____.
4. A DSS generator is a package of selected _____ and_____.
5. Forecasting is the estimation of the value of a _____at some future point of time.
6. _____ tests its equipment on a regular basis using DSS.
7. _____are irreversible and have far reaching consequences for the rest of an organisation life.
8. According to _____ DSS have 5 components.

Q3. Match the following.

	Column A		Column B
a	Visual interface	1	Statistical software
b	PEST analysis	2	Wide variety of Data
c	Regression	3	Loss less & Lossy
d	MINITAB	4	Multinational Software Company
e	SPSS	5	Filling missing value
f	Data warehousing	6	Graphics
g	Data cleaning	7	Assess market potential
h	Data compression	8	$Y=a+bx$

Q 4. Find True or False of the following.

1. Decision making is identifying and choosing alternatives by the sub-ordinates of the decision maker.
2. Simulation is an activity which attempts to imitate an existing system.
3. Choosing the first opportunity seems satisfactory rather than seek the best solution
4. A model is a shared set of assumptions that enable us to understand or predict behaviour.
5. While we spend time and money to reduce risk, we can never eliminate it.
6. DSS are powerful tools integrating scientific method for supporting complex decisions.
7. DSS work the best where the business processes are well defined and followed systematically.
8. A DBMS serves as a data bank for the DSS.

PART B (answer any three)

(16 x3 = 48 marks)

Q 5. Describe the various steps involved in the decision making process.

Q 6. What are the differences among MIS, DSS and EDP?

Q 7. What are the benefits of having Data Warehouse Architecture? How to develop a data warehouse?

Q 8. Write Short note on any of the following two: (8+8) marks

- a. Data Reduction
- b. Data Aggregation
- c. Data Compression
- d. Data Integration

Q9. Explain the different types of Data bases?

PART C

(20 marks)

Q10. Case Study :In a company 10 salesmen employed were given a month's training. At the end of the training a test was conducted and they were ranked as per the performance in the test. They were then posted to their respective areas. At the end of six months, they were rated in terms of their sales performance. The Data are given below.

sales men	Rank obtained during Training Test (X)	Rank obtained in sales performance(Y)	Difference(D)	Difference Square(D ²)
1	4	5	-1	1
2	6	8	-2	4
3	1	3	-2	4
4	3	1	+2	4
5	9	7	+2	4
6	7	6	+1	1
7	10	9	+1	1
8	2	2	0	0
9	8	10	-2	4
10	5	4	+1	1
Ed ²				24

Question : What type of correlation exist between performance in training and performance in sales of the 10 Salesmen.