

DEC-2009

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

**PAPER 18.b
DECISION SUPPORT SYSTEMS**

Date: 15.12.2009
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] API | 2] GDSS | 3] JSP | 4] ERP |
| 5] ODSS | 6] MAN | 7] OLAP | 8] MIS |

Q.2 State true or false.

1. EIS stands for External information systems.
2. Web pages are developed using hypertext markup language.
3. Artificial intelligence is the science and engineering of making intelligent machines.
4. UNIX is application software.
5. Modem is a device used for modulation and demodulation.
6. Minsky proposed that knowledge be organized in small packets.
7. knowledge-driven DSS provides specialized problem-solving expertise stored as facts, rules, procedures, or in similar structures
8. Testing is a process used to identify correctness, completeness and quality of developed computer software.

Q. 3 Match the following.

| S. no | | S. No. | |
|-------|-------------------------------|--------|--|
| 1 | John McCarthy | 1 | Active Server Pages |
| 2 | Graphical user interface | 2 | LISP |
| 3 | Text mining | 3 | ERP enabling technology |
| 4 | ASP | 4 | Information retrieval |
| 5 | Public key encryption | 5 | Concept of client architecture |
| 6 | Transmission Control Protocol | 6 | Dependant upon types of users who are using systems. |
| 7 | EDI | 7 | Ensures integrity of transmission between sites |
| 8 | Web browsers | 8 | Cryptography |

Q.4 Fill in the blanks.

1. HCI stands for Human _____ Interaction.
2. A _____ is a collection of transmitters, receivers and transceivers that communicate with each other.
3. Two factor theory is proposed by _____.
4. A network configuration in which each computer or device is attached to a central cable is called a(n) _____ network.
5. _____ is the new computer language used to write animation and games for the World Wide Web
6. A private network within an organization is called a(n) _____ .
7. Expert systems, use _____ to solve problems that normally would require human intelligence.
8. _____ is technique used for fabrication of processor and other very large scale integration chips.

PART –B

- Q.5** (a) What are applications of DSS?
(b) Explain knowledge representation and inference in AI.
- Q.6** (a) What is the relationship between MIS and EDP?
(b) Explain steps to convert data into information?
- Q.7** (a) Discuss CODD's 12 rules for relational database.
(b) What are functions of operating system?
- Q. 8** List and explain components of DSS. Compare data-subsystem with model-subsystem?
- Q.9** Short notes on [16]
(a) Information Quality
(b) Explain Theory X and Theory Y.

PART – C

Case Study (Compulsory)

Q.10 Mr. X , a management consultant at IT firm of Rs. 900 crores turnover, wants to investigate requirements of decision supports system, in order to improve the services provided to customers. Explain how he should prepare a report highlighting step-by-step approach for implementing decision support system, expected improvements in services to customers, economics of systems. What are difficulties in implementing decision support system.