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Sahyadri Institute of Technology
Library, Mangalore

06IS846

Eighth Semester B.E. Degree Examination, June/July 2011
Decision Support System

Time: 3 hrs. Max. Marks:100

Note: ***Answer FIVE full questions selecting at least TWO questions from each part.***

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

PART – A

1 a. Give reasons for need for computerized decision support system. **(06 Marks)**

b. Briefly explain decision support frame works. **(08 Marks)**

c. Explain with block diagram, the decision making & modeling process. **(06 Marks)**

2 a. Briefly explain decision making design phase. **(08 Marks)**

b. HCM corporation makes PC's. A decision must be made:
How many PC's be produced next at Chennai plant?
i) Two types of PC's are BB_1 – requires 200 days labour Rs. 10,000 materials, BB_2 –requires 500 days labour & Rs. 15,000 materials.
ii) Profit contribution: B_1 is Rs. 8000 & BB_2 is Rs. 12,000.
iii) Plant has capacity of 2,00,000 working days Rs. 80 lacks in materials budget/month.
iv) Market requires 100 units of BB_1 & at least 200 units of BB_2 be produced each month.
For above problem give model to maximize the company's profit by determining how many units of BBI & BBL be produced each month. **(12 Marks)**

3 a. What is DSS? Give characteristics & capabilities of DSS. **(08 Marks)**

b. Distinguish DSS from management source & MIS. **(06 Marks)**

c. Briefly explain DSS classifications. **(06 Marks)**

4 a. Explain DSS development methodology using prototyping and give reasons why prototyping is used in DSS development. **(10 Marks)**

b. Briefly state & explain DSS development platform. **(06 Marks)**

c. List advantages & risks of user developed DSS. **(04 Marks)**

PART – B

5 a. Explain Time/Place frame work that support computer supported co-operative work. **(06 Marks)**

b. What is groupware? Briefly describe popular groupware system. **(06 Marks)**

c. Explain standard GSS process. **(08 Marks)**

6 a. Explain structure of Experts system with a block diagram. **(08 Marks)**

b. How expert system works. **(06 Marks)**

c. Give benefits & limitations of Expert system. **(06 Marks)**

7 a. Define knowledge engineering. What are steps involved in knowledge engineering process? **(08 Marks)**

b. Name & explain three techniques of automated knowledge acquisition method. **(06 Marks)**

c. What is machine learning? Briefly explain induction table. **(06 Marks)**

8 a. Explain process of case based reasoning with flow chart & give advantages of core based reasoning. **(08 Marks)**

b. Explain in detail ES development life cycle with a block diagram. **(12 Marks)**

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