

**Subject : System Analysis & Design**

Day : Friday  
Date : 03/06/2016



Time : 02.00 PM TO 05.00 PM  
Max Marks : 80 Total Pages : 2

**N.B.;**

- 1) Attempt any **FIVE** questions from section – **I** and any **TWO** questions from Section – **II**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Both the sections should be written in **SAME** answer books.

**SECTION – I**

- Q.1** Differentiate between: **(10)**
- a) Open and closed systems.
  - b) Physical and abstract system.
- Q.2** Explain spiral model of software development in detail. **(10)**
- Q.3** What is feasibility study? Describe with its types. **(10)**
- Q.4** Explain concept of functional decomposition diagram with the help of suitable example. **(10)**
- Q.5** What is Graphical User Interface (GUI)? Explain features of modern GUI. **(10)**
- Q.6** Discuss the role of 4GT in software development. **(10)**
- Q.7** Write short note on any **TWO** of the following **(10)**
- a) Screen Management
  - b) Decision Support System
  - c) Elements of systems

**SECTION – II**

- Q.8** What is Entity Relationship Diagram (ERD)? Discuss symbols used in ERD. **(15)**  
Draw the ERD for payroll system.
- Q.9** Raj Tours and Travels offers six different types of package tours. For package tours one has to book 15 days in advance. For last minute booking 5% extra amount is charged. Payments for the booking are accepted both in cash / cheque mode. 5% discount is given for cash payment more than 10,000/-, also, 10% discount is given for any payment (cash / cheque) more than Rs. 20,000/-. Customer can cancel booking 7 days in advance before the actual tour. In such case of cancellation 10% amount is deducted and remaining amount is refunded. For last minute cancellation 40% amount is deducted and remaining amount is refunded. **(15)**  
Draw Decision Tree and Decision Table.

**P.T.O.**

- Q.10** 'MAXELL' is a trading company which sells various company consumable (15)  
to its dealers, such as floppy boxes of 1.2 m.b. and 1.44 m.b. printer ribbon,  
cartridge tapes, etc. On receiving inquiry from the dealer, the company sends  
quotation to dealer. The dealer afterwards sends order to the company. If the  
stock is available (which is taken from the Item Master provided by  
Inventory system) then the order acceptance is sent to the dealer and  
subsequently invoice-cum-delivery challan is sent to the dealer. The dealer  
after verification returns items if they are of bad quality. If the stock is not  
available then purchase requisition is sent to purchase department of the  
company for purchase of items. Some MIS reports such as item wise sales,  
dealer wise sales are sent to the management.

Study the above case and draw context level and first level DFDs.

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