



Uva Wellassa University, Sri Lanka
End Semester Examination – June/July 2010
IIT 203-2 System Analysis and Design



Time: Two (02) hours

Index No:

Total 04 Questions. Answer all questions in part A and part B
Part A- Answer in the question paper

Part B - Answer all 03 Questions

2)

ABC is a theatre, which stages dramas as well as concerts. All of their contacts with customers are conducted over the telephone, with customers ringing up to request tickets for a wide variety of performances. Concert or Drama producers provide ABC with a constant stream of information on forthcoming events, which is then used by ABC's manager to compile an events list, which is then sent to the sales staff to be used by the Sales staff in responding to Customer calls. When customers ring the sales team, they fill out a ticket request form and put it in an "out" desk tray for collection by the post clerk, who will then place an order for tickets with the appropriate producer. The post clerk sends out each order with its payment attached. Once tickets are received the post clerk files them in the tickets file.

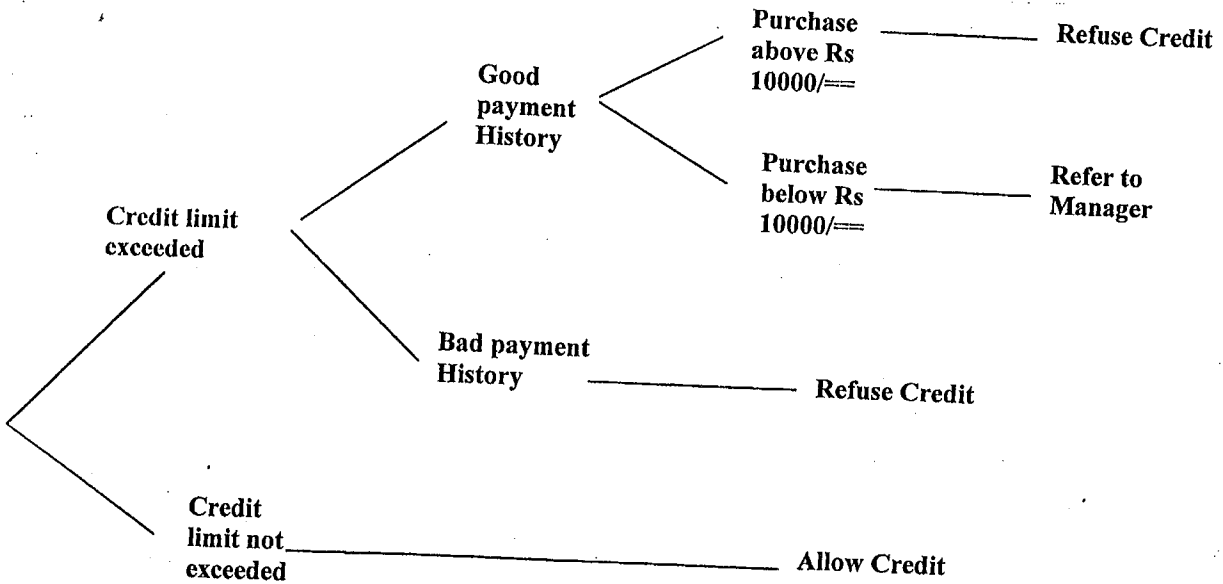
Details of the customer and details of tickets are passed to the payments section for invoicing. The payments section will then send an invoice to the customer, and await payment if the customer is paying by post or accepts payment immediately for credit card holders. A copy of the invoice is placed in the invoice file for matching with payments, and once paid, a further copy is placed in a tray labelled "Dispatch List" for collection by the post clerk.

The post clerk collects paid invoice copies three times a day, and retrieves the appropriate tickets from the ticket file for dispatch to customers.

- I. Identify the processes described in the above system. (04 marks)
- II. Draw the document flow diagram. (07 marks)
- III. Identify the data stores. (05 marks)
- IV. Draw the Top Level Data Flow Diagram (09 marks)



3)
I. Consider the following Decision Tree.

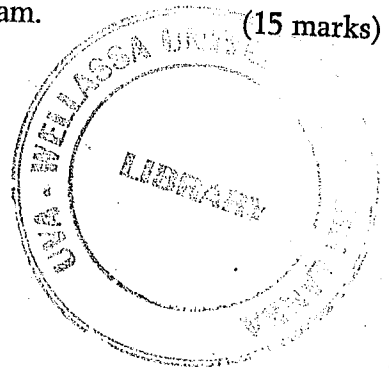


Represent above Decision Tree using a Decision Table. (10 marks)

II. Adwel is a small advertising company. The company wishes to develop a software system to provide facilities such as on-line access to customers to place their advertising requests and the company to manage the advertising process. The administrative staff of the company is responsible for the management of advertising campaigns. An advertising campaign required by a customer may compose of several advertisements. An advertisement may be a TV advertisement, news paper advertisement or a web-site advertisement.

The administrative staff create a campaign and allocate technical staff according to their expertise using the system. The technical staff can use the system to update campaigns according to the progress. The administrative staff monitor the progress of campaigns. Once the campaign is completed the administrative staff performs the billing operation to charge the customer.

Identify the classes in this system and draw a class diagram. (15 marks)



- 4) The ABC bank would like to develop an information system for handling accounts. The following is a summary of interviews with employees and customers of bank.

The bank has many different types of accounts. The basic type of account is called a saving account. Saving account customers do not get a monthly account statement. Instead, they have a passbook, which gets updated when they come in. The bank already has the pass book printers and printing software in place.

Customers are able to open and close accounts. They can withdraw and deposit money, or get the current balance. The current balance is displayed on an account update screen; which will be part of the teller's information system. This screen displays the account number, the customer's name, and the current balance of the account. An account is associated with specific branch. Although we now support multi branch banking, every account is still assumed to have a 'home' branch.

A checking account is just like a saving account, except customers can also write cheques and it can be a joint account.

These are the requirements that they gave at the Interview. Considering those requirements answer the following questions.

- I. What are the other types of fact gathering methods? (05 marks)
- II. What is the best software development model which can be used to develop this Information system? Describe how it applies for this. (04 marks)
- III. As a System Analyst what are the task you are going to perform for develop this system? (06 marks)
- IV. As a System Analyst what are the types of documents you are going to come up with for this system? (02 marks)
- V. Identify actors in this system and draw the use case diagram (08 marks)
(State assumptions if any)

