

18/12/14

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COMP 4 – 5 (RC)

S.E. (Computer) (Semester – IV) (RC) Examination, Nov./Dec. 2014 SYSTEM ANALYSIS AND DESIGN

Duration : 3 Hours

Total Marks : 100

Instructions : 1) Answer **any five** questions, **at least one** from **each** Module.
2) Make suitable assumptions **if necessary**.

MODULE – I

1. a) Write a note on analyst/user differences. 5
b) Discuss the different factors which influence project selection. 4
c) Differentiate between the initial investigation and feasibility study. 5
d) Explain the different elements of a system with the help of an example. 6
2. a) Discuss the reasons for project termination and software failure. 6
b) What is system design ? Explain the various steps undertaken during system design. 5
c) What is an open system ? Explain its characteristics. 5
d) Differentiate between : 4
 - a) Team approach and pool approach
 - b) Manager and analyst.

MODULE – II

3. a) Draw a data flow diagram for a email service : 4
 - i) A member must register to use the email service
 - ii) After registering the user must login using the user name and password to send or view emails received.
- b) Briefly explain the steps of feasibility analysis. 8
c) Explain the different information gathering methods. 8
4. a) Explain the basis of planning in system analysis. 3
b) Briefly explain the different tools of structured analysis with an example. 7
c) Write short notes on : 6
 - i) Technical feasibility
 - ii) Behavioural feasibility
 - iii) Economic feasibility.

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COMP 4 – 5 (RC)



- d) A major brokerage firm wishes to have : 4
- i) List of customers who have sold less than 100 shares
 - ii) List of customers who sold 100 or more shares which contain two types of customers individual stock holders and stocks held by a financial institution.
- Draw a decision tree to represent this information.

MODULE – III

5. a) Explain different types of databases, structures and the types of relationships possible in each structure. 10
- b) What is the goal of designing input data ? List and explain all the input media and devices used for inputting source data. 8
- c) Illustrate how a 5 inch paper can be divided into 13 writing lines. 2
6. a) Discuss importance of normalization. Explain the steps involved in it. 8
- b) Explain briefly three approaches of data entry. 6
- c) Write short note on : 6
- i) HIPO and IPO chart
 - ii) Data classification and zoning
 - iii) Paper selection and spacing requirement.

MODULE – IV

7. a) What is implementation ? How does it differ from conversion ? Elaborate. 6
- b) Explain the major activities in conversion. Which activity is most important ? Why ? 6
- c) Explain the activity network for system planning. 8
8. a) What are the elements of user training ? Explain in detail. 6
- b) List and explain the three types of system failures and how to recover from them. 6
- c) What design specifications are considered in preparing a test plan ? Explain. 6
- d) Write short note on attributes of software. 2