COMP 4 – 5 (RC)

S.E. (Computer) (Semester – IV) (RC) Examination, May/June 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) Explain the characteristics of a system with respect to a payroll information system. **6**
   b) Explain the different kinds of system models. **6**
   c) Explain the role of technical writer and a para professional in a SDLC project. **8**

2. a) Where do ideas for a proposed system originate ? To what does the analyst assist in this regard ? **6**
   b) What is an open system ? Explain its characteristics. **5**
   c) Differentiate between : **4**
      i) Project oriented and Pool oriented
      ii) Manager and Analyst.
   d) Explain prototyping with a neat diagram. **5**

MODULE – II

3. a) Why do uses have difficulty stating their requirements ? **4**
   b) What is a DFD ? What are the elements of a DFD ? State the rules to draw a DFD ? **6**
   c) What is decision table ? Explain the elements of a decision table. **4**
   d) State the different types of interviews and questionnaires. **6**

4. a) Write short notes on : **6**
      i) Break even analysis
      ii) Net present value.
   b) Differentiate between strategic and managerial planning. **5**
   c) Explain the different types of closed questions. **5**
   d) Draw a data flow diagram for a banking information system. **4**

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MODULE – III

5. a) Explain different elements used for structure chart. Also define coupling and Cohesion. 6

   b) What are the advantages of top down design ? Elaborate. 4

   c) What is a form ? Summarize the characteristics of different categories of form. 6

   d) Explain the role of Database Administrator. 4

6. a) Explain briefly three approaches of data entry : 6

   b) Distinguish between the following : 8

      i) Snap out and Fanfold forms

      ii) Rule and caption

      iii) Ballot box and check-off design

      iv) Sequential and Indexed sequential organization

   c) What is normalization ? Why is it required ? Explain the different normal forms. 6

MODULE – IV

7. a) Explain Gantt chart. How can you develop one ? 6

   b) Differentiate between the following : 8

      i) Event and Milestone

      ii) Task and activity

      iii) Precedence and successor relationship

      iv) Data security and data integrity.

   c) Briefly explain the different methods of data acquisition. State the advantages and disadvantages of each method. 6

8. a) Review the primary activities of maintenance procedure. 5

   b) Explain the major activities in conversion. Which activity is most important ? Why ? 4

   c) What design specifications are considered in preparing a test plan ? Explain. 5

   d) List and explain the three types of system failures and how to recover from them. 6