

Sem-IV M Repeat 18/12/13

comp Rept



COMP 4 – 5 (RC)

S.E. (Comp.) (Semester – IV) (RC) Examination, Nov./Dec. 2013 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** state clearly assumptions made.

MODULE – I

1. a) With a neat diagram explain the management and information levels in a typical organization. Explain the characteristics of information required at different management levels. 8
- b) Consider an automobile and a hospital as two systems identify the elements of each system. 6
- c) Distinguish between initial investigation and feasibility study. Explain how they are related ? 6
2. a) Differentiate between interpersonal skills and technical skills of system analyst. 8
- b) Explain and illustrate situations how the different roles of a system analyst are best applied in the system development life cycle ? 7
- c) State and explain the primary attributes of a project leader. 5

MODULE – II

3. a) Draw DFD for a soft drink manufacturing plant information system. 10
- OR
- Draw DFD for a multinational bank information system. 10
- b) Explain the following with examples : 10
 - i) Decision tree
 - ii) Decision table
 - iii) Structured English.

P.T.O.



4. a) Discuss the following cost evaluation methods with an example of each :
- i) Net benefit analysis
 - ii) Break even analysis
 - iii) Cash-flow analysis.
- b) Give the logical data description hierarchy in a data dictionary. Explain the description of each component in the hierarchy.

9

11

MODULE – III

5. a) What is Structured Design ? How is it related to DFDs ?
- b) Relate HIPO charts to structured design and discuss its objectives.
- c) How are forms classified ? Give characteristics of each class.
6. a) Discuss the following form layout considerations :
- i) Form title and number
 - ii) Data classification
 - iii) Data zoning
 - iv) Rules and captions.
- b) Explain the following terms w.r.t. data bases :
- i) Controlled redundancy
 - ii) Data independence
 - iii) Data accuracy
 - iv) Data integrity
 - v) Data privacy.

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MODULE – IV

7. a) With a neat block diagram explain the components of risk analysis. 8
b) Illustrate the grandfather-father-son approach to backup of data. 6
c) Discuss the ethics codes and standards of behaviour for computer professionals. 6
8. a) What are the major threats to system security ? Which is the most serious threat ? Why ? 8
b) Discuss the following planning tools. Give examples of to illustrate the use of each tool.
i) Gantt chart
ii) PERT. 12