UG Even Semester (CBCS) Exam., May—2017

COMPUTER SCIENCE

(6th Semester)

Course No. : MCS–601 (C)

(System Analysis and Design)

Full Marks : 75
Pass Marks : 30

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer **five** questions, selecting **one** from each Unit

UNIT—I

1. *(a)* What is a system? How do you classify systems that include software? 2+5=7

(b) What is requirement definition? Explain the types of requirement that the system requirement definition phase should concentrate on. 2+6=8

2. *(a)* Explain what is meant by prototyping. 3

(b) Discuss the role of the system analyst with respect to the following : 9

(i) Change agent

(ii) Architect

(iii) Motivator

(iv) Sales-person

(c) What is conflict resolution? 3

UNIT—II

3. *(a)* Discuss requirements elicitation and analysis. 6

(b) What is interviewing? Explain requirement validation and the checks that need to be carried out in this phase. 3+6=9

4. What is structured analysis? Explain the following along with their advantages and disadvantages : 5+(5×2)=15

(a) Dataflow diagram

(b) Data dictionary

UNIT—III

5. Discuss various methods of file organizing. 15

6. *(a)* What do you mean by file structure? Explain. 4

(b) Discuss the objectives of database design. 4

(c) What do you mean by DDL and DML? Give comparison between DDL and DML. 3

(d) Explain the roles of the database administration. 4

UNIT—IV

7. *(a)* Why is the system testing needed? Discuss various types of system test. 2+4=6

(b) What do you mean by quality assurance? Discuss various quality factors which are needed to determine the quality. 2+5=7

(c) What are the differences between top-bottom and bottom-top programming approaches? 2

8. *(a)* Explain the activity network for system testing in detail. 10

(b) Discuss the procedures and documents for conversion. 5

UNIT—V

9. *(a)* Discuss the vendor selection phase of software/hardware selection. 4

(b) Discuss the following : 4×2=8

(i) The evaluation process

(ii) Evaluation of proposals

(c) Why do systems fail? Give your view. 3

10. *(a)* How to design a framework for project management? Discuss. 5

(b) Discuss the Gantt chart with an example. 10

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