

MCS–014

BACHELOR OF COMPUTER APPLICATIONS (BCAOL)

SYSTEMS ANALYSIS AND DESIGN

Time: Three Hours

Maximum Marks: 100

Note: There are three Sections in this paper. Attempt all the sections.

Section–A ($5 \times 4 = 20$)

Note: There are seven questions in this section. Answer any five questions. Each question carries 4 marks.

1. Explain Spiral Model.
2. Define the term “Modularity.” Write any two goods of good design.
3. Write a short note on Joint Application Design.
4. Why do Businesses need systems analysts ? Explain.
5. Explain any two standards for Documentation.
6. Define the term “Audit.” What are its objectives? What are the responsibilities of a System Auditor?
7. What is a Real Time System? Explain any two types of real time systems.

Section–B ($5 \times 10 = 50$)

Note: There are seven questions in this section. Answer any five questions. Each question carries 10 marks.

8. Draw DFDs till second level for a “Library Information System.” Make necessary assumptions.
9. Draw E-R diagram for “Library Information System.” Make necessary assumptions.
10. What are Reports? Explain the process of Report Design.
11. What are the advantages of Structured design? Draw structure chart for “Library Information System.” Make necessary assumptions.
12. What is coupling? Explain any two types of coupling.
13. What do you mean by Logical Design and Physical Design? Explain various steps of physical design.
14. What do you mean by System Testing? Explain any four types of it.

Section–C (2×15=30)

Note: There are three questions in this section. Answer any two questions. Each question carries 15 marks.

15. Explain the need for Concurrent Audit Techniques. Explain any two Concurrent Audit Techniques.
16. What are Transaction Processing Systems? Explain various components of it.
17. Explain the components of a CASE tool with the help of a diagram.