QUESTION BANK

Paper Code-BCA-302

System Design Concept

Very Short Type Questions:

1. What is requirement of system design?
2. Write any 3-system design technique.
3. Define COCOMO model.
4. Describe the data modelling.
5. What is maintenance problem with the linear life cycle?
6. What is testing fundamentals?
7. What is the difference between white box and black box testing?
8. Write any four characteristics of good management information system?
9. What is the use of computer application in business?
10. What is system approach?
11. List various components of a system.
12. What is system design?
13. How testing is different from debugging?
14. What is design documentation?
15. What are the different methods of information gathering?
16. What is the drawback of DFD?
17. Differentiate between static and dynamic system models?
18. Describe the various level of management.
19. What is meant by user interface?
20. What is management information system?
21. What do mean by the term "System"?
22. What is prototyping?
23. What do you mean by entity relationship diagram?
24. What is the need of system testing?
25. Why we do documentation for a system?
26. Explain any three objectives of S/W project planning.
27. Explain any three S/W design principles.
28. What do you mean by information system?
29. What is the analysis?
30. What is design?
31. What is batch processing?
32. What is E-R model?
33. What is object-oriented model?

34. What is weak entity set?
35. What are the entities set?
36. What is a batch job?
37. What do you mean by data flow diagram?
38. Write the steps of drawing the DFD.
39. What is the flow of data?
40. What is an entity and its types?
41. What is an attribute?
42. What is the abstract system?
43. What is the physical system?
44. What is the entropy?
45. What is the technical feasibility?
46. What is the economic feasibility?
47. What is the organizational feasibility?
48. What is feasibility study of a project?
49. Why feasibility study is done?
50. How do you do a feasibility study?
51. What is feasibility study in system analysis and design?
52. What is financial feasibility?
53. What is the objective of data modelling?

Short Type Questions:

1. What is a system design and explain various techniques of it in brief?
2. What is DFD? Explain DFD notation.
3. What do understand by prototyping? Write benefits of it?
4. What are the methods of waterfall cycle? Explain with example.
5. What type of decision support system do we have?
6. Explain the various system development life cycle.
7. Explain the object-oriented and data-oriented approaches in detail.
8. What is SDLC? Explain various phases of SDLC.
9. Differentiate between unit and the system testing.
10. Discuss top-down approach to system planning?
11. How important is the information system in system analyses?
12. What is prototyping?
13. What do you mean by system development approach? Explain in brief.
14. Explain data flow diagram.
15. Differentiate between verification and validation.
16. Define COCOMO model.

17. Explain major components of MIS.
18. What is batch processing?
19. What are the advantages of prototyping?
20. What are the disadvantages of prototyping?
21. Write the characteristics of a system.
22. What is the element of system?
23. What is the physical and abstract system?
24. What is the physical design of SAD?
25. What is the decision support system?
26. What is system prototyping?
27. What is rapid application development?
28. What are the steps of project planning?
29. What is data modelling?
30. What is system performance?
31. What is software testing hierarchy?
32. What are the different types of testing, explain.
33. What is smoke testing?
34. What is regression testing?
35. What are the regression testing techniques?
36. What are the differences between alpha and beta testing?
37. Write the differences between white box and black box testing?
38. What is the project planning and why do we need it?
39. What is the project planning process?
40. What is the basic model in COCOMO model?
41. What is COCOMO II model?
42. What are the advantages of spiral model?

Long Type Questions:

1. What are the different types of decisions write in detail.
2. How will we convert data flow diagram to structure charts?
3. What is testing? How many types of test cases are there? Differentiate between black box and white box testing?
4. Write short notes on the following:
   - System Implementation
   - Verification
   - Validation
5. What is software project planning? Explain problem-based estimation and process-based estimation in detail.

6. What do you mean by planning? Differentiate between architectural design and procedural design.
7. How will you implement management information system in computer application? Explain in detail.
8. Write short note on the following:
    - Analysis
    - Evaluation
    - Development
    - Implementation
9. Describe the various interface design tools. Discuss the process modelling.
10. What is the use of decision tree in the system? Explain entity relationship diagram with the help of an example?
11. Illustrate the following testing strategies:
    - Unit Testing
    - Integration Testing
    - System Testing
12. Describe various steps involved in system implementation and software maintenance.
13. Discuss the design methodologies used in system design.
14. Explain various steps of the project review process.
15. What are the major types of decision made using a management information system?
16. What is MIS? What are the different components of MIS? Explain different categories of information required to serve the need of different levels of management in an organization.
17. What are DFD notations?
18. Explain some of the interfaces and tools.
19. Explain white box and black box testing?
20. Explain:
    - System Maintenance
    - Testing Principles
21. What do you mean by:
    - Decomposition Techniques
    - Data Design
22. What is
    - Procedural Design
    - Object-oriented concepts
23. Explain Simon's model of decision making.

24. Explain:
    - Structured V/S Unstructured decision
    - Formal V/S Informal system
25. Explain the feasibility study.
26. Explain the project planning.
27. What is COCOMO? Explain COCOMO model in detail.
28. What is COCOMO II model? Explain.
29. Explain the spiral model. Give advantages and disadvantages.
30. What are software testing levels?
31. Explain the waterfall model.