BCA (C-304): SYSTEM ANALYSIS AND DESIGN

Q1. Define system & list its various characteristics.
Q2. Write in brief about various elements of a system
Q3. Discuss the primary characteristics of open systems. In what way is a system entropic?
Q4. Distinguish between:
- Interaction & interdependence
- Physical & Abstract Systems
- Open & Closed systems
- Schematic & static systems models

Q5. How important is the informal information system in system analysis?
Q6. Explain the various categories of information relevant to decision making in business?
Q7. Discuss the concepts of MIS & DSS.How are they related? How do they differ?
Q8. Describe the role and tasks of system analyst.
Q9. What is system development life cycle .How does it relate to system analysis?
Q10. List all the phases of system development life cycle in order & explain them in detail.
Q11. Distinguish between initial investigation & feasibility study. In what way are they related?
Q12. A number of activities are carried out under implementation.Elaborate.
Q13. What are the considerations in deciding on a candidate system and why are they important?
Q14. Explain briefly the levels of structuring work units in system development.
Q15. Discuss top-down approach to system planning.
Q16. What do you mean by Strategic and operational planning?
Q17. What fact-finding techniques would use for investigating the information requirement of a large organization?
Q18. Discuss the utility of Decision table & Structure chart.
Q19. Where are brain storming & Delphi methods used? Discuss.
Q20. What important information does the user's request form provide? Why is it so important in the initial investigation? Explain in detail.
Q21. What do you mean by prototyping?
Q22. What are the data flow diagrams? How are they different from structure charts?
Q23. A question may be open or closed-ended. Illustrate the difference.
Q24. Describe the process of design. Also discuss Logical & physical design.
Q25. Describe the various goals considered for input & output design?
Q26. Describe the concept and procedure used in constructing DFDs. Give an example.
Q27. Discuss the behavioral issues involved in understanding the analyst/user interface.
Q28. List four situations that make use of questionnaire appropriate.
Q29. Elaborate on the pros and cons of data analysis & decision analysis method.

Q30. Discuss the procedure for constructing a questionnaire.
Q31. Under what circumstances would the analyst depend more heavily on external than internal information? Why?
Q32. Distinguish between validity & reliability. How are they related?
Q33. What traditional information gathering tools are available for the analyst?
Q34. For what purpose would one use an interview rather than the data collection methods? Explain.
Q35. What points should be considered in constructing a data dictionary?
Q36. What basic rules are relevant to construct a DFD?
Q37. What do you mean by leveling in DFDs? Explain with the help of an example.
Q38. "A data dictionary is a structured repository of data about data". Discuss.
Q39. Discuss the advantages being offered by data dictionary in the documentation area.
Q40. In what way is a decision tree and DFD related? What about a decision tree and structured English?
Q41. List and illustrate the primary uses and elements of a decision table.
Q42. Who are the important users that must be interviewed? Describe the various steps to be taken to carry out an interview.
Q43. What is meant by structured walk through? Why and how are they conducted?
Q44. What makes up a system performance definition? Explain the steps to prepare the definition.
Q45. What considerations are involved in feasibility analysis? Which consideration do you think is the most crucial? Why?
Q46. How important is a project team in a feasibility analysis? Is it mandatory in every study? Where are the exceptions?
Q47. What makes up a feasibility report? How would you change it?
Q48. What cost elements are considered in cost/benefit analysis? Which element do you think is the most difficult to estimate.
Q49. Discuss various cost estimation techniques.
Q50. Define and explain then procedure for cost/benefit determination.
Q51. How do NPV and present value analyses differ? Illustrate.
Q52. What are the pros and cons of Payback method, cash-flow analysis and break-even analysis?
Q53. Why do we test systems? How important is testing? Discuss.
Q54. Discuss the various types of testing in detail.
Q55. Outline the various activities that represent a test plan.
Q56. What design specifications are considered in preparing a test plan?
Q57. There are two ways of debugging program software: bottom-up and top-down. How do they differ?
Q58. What is syntax error? How does it differ from a logic error? Give an example.
Q59. Elaborate on the steps taken in system testing that lead to the user's acceptance of the system.
Q60. Explain the differences between White-box and Black-box testing.
Q61. How is stress testing different from volume testing?
Q62. What types of test data are used in system testing?
Q63. Define the term Quality Assurance. Discuss its importance in system design.

Q64. List and briefly describe the factors that affect the quality of a system.
Q65. What levels of quality assurance must a system meet. Explain.
Q66. Discuss the role of the Data Processing Auditor in system testing.
Q67. What is implementation? How does it differ from conversion? Elaborate.
Q68. Explain the various activities in conversion. Which activity is the most important? Why?
Q69. What is involved in converting files? Explain briefly.
Q70. Distinguish between System maintenance and enhancement.
Q71. What is the role of audit control trial in conversion? Who performs it? Explain.
Q72. How System modification is different from software system audit.
Q73. Review the primary activities of a maintenance procedure.
Q74. Discuss the various training aids used for training users on a new system.
Q75. Briefly explain the procedure and makeup of the post-implementation review. Can one perform maintenance on a system without a post implementation review? Why?