System Analysis & Design
BCA-III Year (302)
Question Bank
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UNIT – 1

1. Define system,s ubsystem and components of a system with suitable diagram.
2. What are the characteristics of a good information system?
3. What are the elements of a system? Can you have a visible system without feedback? Explain.
4. What are the various types of systems exists in environment. Briefly describe them.
5. What are the various problem in system development? Explain it.
6. How do you model the system architecture? Explain completely with diagrams.
7. When does on analyst terminate a project? How does it tie in with post implementation? Explain.
8. What is the role & responsibilities of system analyst? Explain.
9. Write short note on Physical and abstract system.
10. Distinguish between open and closed systems.

UNIT – 2

1. What is System Development Life Cycle(SDLC). Explain its Phases.
2. Explain Water fall Model. What are the problems that are sometimes encountered when the waterfall model is applied?
3. What is a prototype model? Under what circumstances is it beneficial to construct a prototype model?
4. Describe the Spiral Model of software development with strength, weakness. also give the reason for using Spiral Model.
5. Explain the Evolutionary Model. What are the Advantages and Disadvantages?
6. Explain the Incremental Model. What are the Advantages and Disadvantages?
7. What are the various activities in WINWIN Spiral Model? Explain.
8. Explain the feasibility studies. What are the outcomes? Does it have either implicit or explicit effects on software requirement collection?
9. Draw a translating diagram for analysis model into a software design. Briefabout each translations.
10. Explain post implementation and maintenance phase of SDLC model.

UNIT – 3

1. Why requirement analysis is important in development of a software? Describe analysis principles in details.
2. Define Requirement Analysis. Write Requirement Analysis principles. Also Explain FAST & DFD Techniques of Requirement Analysis.
3. Differentiate functional and non functional requirements and explain.
4. Describe the primary difference between structured analysis and object oriented analysis.

5. Draw the Data flow diagram for library/banking management system. Clearly describe the working of the system.
6. What is the use of context diagram? Draw a Level-1 DFD and STD for photocopier software.
7. What is Data dictionary? And explain data modeling.
8. Write short note on Decision table.
9. What is decision tree explain with example.
10. Discuss in detail the basic structure of analysis model.

UNIT – 4

1. Explain the fundamental software design concepts in detail.
2. Draw a translating diagram for analysis model into a software design. Brief about each translations.

3. Define Cohesion and Coupling in the context of design. Also explain different type of Cohesion and Coupling used in modular design.
4. What is the difference between Function-Oriented Design and Object-Oriented Design ?
5. Explain about the various design concepts considered during design?
6. Write short notes on user interface design process?
7. Explain data architectural and procedural design for a software.
8. Draw an ER diagram for university information System.
9. Explain all type of file structure with suitable diagram.
10. Write short notes on importance of file structure and organization.

UNIT – 5

1. What is forms design. Explain all type of forms design method.
2. Explain user interface design in detail.
3. What do you mean by Software Testing? Why it's required? Also explain different type of testing techniques.
4. Explain Unit Testing & Integration Testing with suitable diagram.
5. Explain the testing objectives and its principles.
6. What are the attributes of the good test? Explain the test case design.
7. What is system testing. Why we need system testing explain.
8. Explain all types of system testing with example.
9. Write short notes on System Maintenance.
10. Write short notes on role of education & training in system design.