

# M.K. Institute of Computer Studies, Bharuch

## Software Engineering-II

### System Documentation and Maintenance

1. Write characteristics of a good documentation.
2. What is documentation? Why we need it?
3. Explain various documentation methods.
4. To prepare User manuals user require which two general types of information?
5. User manual supply which information?
6. Write note on developer and user manuals.
7. User manuals used by whom and how?
8. System users require proper documentation. Discuss.
9. Give documentation types.
10. Write note on review and monitoring of execution.

**OR**

Review and monitoring of execution plan covers which areas?

11. Need of documentation in system analysis and design. Discuss
12. What is system maintenance? Write importance of maintenance.
13. What is difference between adaptive and corrective maintenance?
14. Discuss different types of maintenance.
15. What is change management?
16. Write objectives of change management.
17. Write mission of change management.
18. Write change management guidelines.
19. Mention what exactly the following should contain:
  - a. system documentation and
  - b. programming documentation
20. What is implementation?

### Application change over:

1. Discuss the different methods of conversion from old system to new system.

**OR**

Write types of changeover.

**OR**

Write note on conversion.

2. Explain data creation and conversion.
3. Distinguish parallel processing and system testing.
4. Explain in detail the important types of changeover.
5. Prepare List out tasks for conversion
6. Explain conversion activity.
7. Explain conversion and operational plans.

8. training of personnel involve with system: ans:(i) system operators training (ii) user training
9. “User training is a waste of time”. Justify. **OR** Do you agree? Explain with reasons.  
**OR**  
Explain in detail the important of user training.
10. Write steps of training programs.

### **Testing:**

1. Specify the purpose of system testing. What performance criteria are used for system testing? Discuss.
2. Define error, fault, error, failure, and bug with example.
3. Give difference between fault and failure.
4. “Testing is an activity which needs more understanding and diligence than coding”. Comment.
5. Explain several by-products of software testing. (180)

**OR**

Explain software testing pieces.

6. Explain test data preparation.
7. Explain “Quality assurance activity”. (181)
8. State the principles of testing
9. State difference between black-box and white-box testing.
10. Explain Glass-box or white-box or structural testing with suitable example.
11. Explain black-box testing or functional testing with suitable example.
12. Explain statement coverage criterion.(2:384)
13. Explain branch coverage criterion.(2:385)
14. Explain path coverage criterion.(2:388)
15. Explain box-approach in testing process. (182-184)

**OR**

Explain Defect Testing.

16. Which are the defect testing categories? Explain in brief. (ans: white-box, blackbox and interface testing)
17. What are different testing levels? (185)
18. Explain unit testing.
19. Write testing fundamentals.
20. Explain Integrated testing. (186)
21. Explain top-down and bottom-up integration.(186-188).
22. Explain system testing.(188-189)
23. What is test case?
24. Explain various black-box testing techniques. (2:389)
  - a. Explain Equivalence partitioning
  - b. Explain boundary value analysis (BVA)
  - c. Explain cause effect graphing
  - d. Explain special case in test case.
25. Explain various White-box testing techniques.
26. Justify: A successful test is one that uncovers an as-yet undiscovered error.
27. Software testing is destructive rather than being constructive.

28. Black box testing is not an alternative to white box techniques. Justify.
29. What is stub and driver? How will you make overhead low?
30. Write difference between unit testing and module testing.

### **Business Blue Print**

1. Explain: Freezing Business Blue Print.
2. System analysis and design is combination of which tools?
3. Which point should be considered in Contact between user and vendor?  
Flow diagram of application.

### **Output design**

1. What is output?
2. Explain output design.
3. Write design principles of output.
4. Write output objective.
5. Write notes on output media
6. write note on output considerations.(2:189)
7. Different types of outputs required by most system
8. What are various forms of output having available with computer system?
9. For a large library having hundreds of research journals and magazines. What type of output media you would advice?
10. Design the layout of marksheet for any bca examination.

### **Input design**

1. What is input?
2. Write note on input design.
3. Write basic steps in data capture.
4. data capture objective
- 5.
6. Data validation.
7. Check digit method modulus-11
8. Explain following term:
  - a. Field check
  - b. Transaction check
  - c. Batch total
  - d. Hash total

### **Code design**

1. Principle of code design
2. Advantage and disadvantage of alphabetic code.
- 3.
4. Explain with an example
  - a. Chronological code,
  - b. hierarchical code,

- c. mnemonic code
  - d. Significant code
  - e. Non-significant code
  - f. Collating code
  - g. Alphabetic code
  - h. Logical code
  - i. Classification code
  - j. Acronyms code
5. Significant codes are expandable. comment
  6. Wherever sorting of items are needed, alphabetic codes are useful. Comment.
  7. “hierarchical codes provide a top down interpretation for an item”, comment
  8. Does coding help or hinder criminals? How? Give examples.
  9. What types of problems can arise from poorly designed coding structure or from miscoding.
  10. Design group classification code to code
    - a. motor vehicle
    - b. books
    - c. wrist watch
    - d. all type of fan(ceiling, table etc)
  11. Find equivalent modulus-11 code for
    - a. 45678
    - b. 34652
    - c. 46782
  12. Design code for E-mail. Construct a viable code and give explanation for the same. Make suitable assumption.

11.

System implementation: Ans: training, conversion and documentation

System design include: output design, input design, code design, file design, form design, database design