ST.ANN'S COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Subject: SOFTWARE ENGINEERING **Academic Year: 2017-18**

Year/Semester: III-II **Sec: A/B/C**

FREQUENTLY ASKED QUESTIONS

UNIT I

1. Explain about Software development lifecycle
2. Explain about Evaluation of software engineering methodologies
3. Explain applicability and advantages of software processes
4. What are the challenges of software engineering
5. Explain about Software development process models and its use .
6. Define software engineering. What are the challenges of software engineering?
7. Explain about evaluation of Software Engineering Methodologies.
8. Explain agility in the context of Software Engineering.
9. Discuss Waterfall model with suitable diagram.Give its merits and demerits.
10. Give the advantage of using UML and relate UML with Software process model.
11. Elaborate on evolution of software. Give the comparison of software and software system product.
12. Define software engineering and Give a generic view of Software Engineering.
13. Compare the incremental model and the spiral model.
14. Define software.List and Explain about the elements of software process.
15. With suitable illustration explain SPIRAL model.

UNIT II

1. Explain Prototyping Analysis
2. Write a note on requirement engineering process.
3. Write a note on Structured Analysis
4. Explain about Requirements Validation
5. What are Software Requirements? How to analysis the requirements?
6. Explain about requirements management.
7. Write a note on Data Oriented Analysis.
8. Explain how to include packages in class diagrams.
9. How the activity diagrams are useful in eliciting the requirements of software system?
10. Give the measures to validate the requirements of software system.
11. Explain software requirement analysis and modeling.
12. Narrate the importance of software specification of requirements.
13. Explain the ways and means for collecting the software requirements and how are they organized and represented?
14. Describe various prototyping techniques and object oriented analysis and modeling principles.
15. Explain about requirements elicitation.

UNIT III

1. Briefly Explain Software Design Process
2. Write a short note on Structured Design Methodology
3. What are Design Principles? Explain in detail.
4. Explain the concept of Transform Vs Transaction Analysis.
5. What are the Design Methodologies?
6. Explain about Object oriented Analysis and Design Principles
7. Describe the process of translating requirements in to design model with a neat diagram.
8. Define design. Discuss the characteristics of good design.
9. What is transform mapping? Explain the process with an illustration .Describe its strength and weaknesses.
10. What are the characteristics of good design? Describe different types of coupling and cohesion. How design evaluation is performed?
11. Explain the importance of User Interface Design in sale of software.
12. What is Structured design? Explain the concept of Structure chart vs Flow chart.
13. Explain about Detailed design?
14. Write short notes on Software Architecture.
15. Explin about the Design strategies.

UNIT IV

1. Explain Code verification
2. Write a short note on regression testing
3. Explain about White Box Testing.
4. What are the principles of coding?
5. Explain code documentation.
6. Explain about Usability Testing.
7. What are the difference between black box and white box testing?
8. What are the levels of testing? Explain in detail.
9. Write the steps to calculate cyclometric complexity and illustrate with an example.
10. Explain the principles of testing software system.
11. Discuss how the testing models may be used together to test a program schedule.
12. What is black box testing? Is it necessary to perform this? Explain various test activities.
13. Explain black box testing methods and its advantages and disadvantages.
14. What are the various testing strategies to software testing? Discuss them briefly.
15. Explain Coding process.
16. Explain about the software testing process with neat diagram.
17. Explain in detail about test planning.
18. Discuss briefly about debugging approaches.

UNIT V

1. Explain Software Configuration Management.
2. Explain about project size estimation.
3. What are effort estimation techniques?
4. Explain about Project management in detail
5. What are essentials in Project management?
6. What are Software metrics and measurements?
7. How the improper project planning effects the software system?
8. Explain Software Configuration Management in detail.Give various roles and responsibilities in it.
9. Explain the need for software measures and describe various metrics.
10. Explain in detail about COCOMO model.
11. Explain about project planning activities in detail.
12. How can we estimate the project size using LOC and FP analysis.
13. Explain the project scheduling using PERT-CPM method.
14. With neat sketch explain briefly about WorkBreakdownStructure.
15. Describe about staffing and personnel planning.

UNIT VI

1. What are Software Quality Factors?
2. What is Software maintenance? Explain in detail.
3. Write a short note on Capability Maturity Model.
4. Briefly explain software reuse.
5. Explain the Software Quality Assurance.
6. What is reengineering? Explain in detail.
7. What are the maintenance process models?
8. Illustrate Capability Maturity Model with suitable diagram. Discuss its role in SQA.
9. Describe software maintenance activities and explain the reengineering.
10. What is the necessity of quality assurance in software development?
11. What is meant by Software Quality Assurance? Discuss in detail about SQA activities.
12. What is Software maintenance? How to control maintenance cost?
13. What is meant by software quality? Give an overview of Software Quality Factors.
14. Analyze the difference between verification and validation.
15. What is software reuse and what are its types ?Explain.