academic year: 2017-2018   **Subject :** software engineering

Course : B.Tech.   **Branch :** CSE –A& B   **Year:** II   **Semester :**II

QUESTION BANK

Unit I :Software and Software Engineering

1. a. What is an Software Engineering. Why it is important?   [5 Marks]
    b. Define Legacy software & explain in detail   [5 Marks]

2. a. Explain the nature of software in detail.   [10 Marks]

3. a . Explain about unified process model.   [6 Marks]
    b. List out the different applications of software .   [4 Marks]

4.   Discuss about different process models in detail .   [10 Marks]

5.   Explain about personal and team process models   [10 Marks]

6.   Describe about generic process model.   [10 Marks]

Unit II : requirement analysis and specifications

1. a. Explain about SRS document in detail.   [10 Marks]

2. a. Describe the classification of cohesiveness.   [5 Marks]
    b. Describe the classification of coupling.   [5 Marks]

3. Explain about functional and non-functional requirements.   [10 Marks]

4. Explain about different types of specifications.   [10 Marks]

5. Discuss about different approaches to software design   [10 Marks]

6. a. What is a design process? Explain the different design activities and methodologies.
          [5 Marks]
    b. How to characterise a good software design.   [5 Marks]

Unit III :Function – Oriented Software Design and User Interface Design

1.   Explain about structured analysis in detail.   [10 Marks]

2. What is a context diagram and explain adout level-1 DFD.   [10 Marks]

3.   a. Discuss about mode-based versus modeless interface.   [5 Marks]
    b. Discuss about GUI versus text based user interface   [5 Marks]

4. a. Different types of user interfaces in detail.   [6 Marks]
    b. explain about characteristics of good user interface.   [4 Marks]

5. Explain the following in detail..   [10 Marks]
    a)   Types of widgets   b)X architecture   c)window system

6. Describe about system design in detail   [10 Marks]

Unit IV : Coding and Testing

1. a. Define the coding standards and guidelines..   [5 Marks]
   b. What is testing? Explain the basic concepts and terminologies in testing.   [5Marks]

2. a. Explain about the debugging process.   [5 Marks]
   b. discuss about code review process.   [5Marks]

3. a. Explain in detail about black-box testing.   [7Marks]
   b. what is need of test cases.   [3Marks]

4. Explain about white box testing in detail.   [10 Marks]

5. Describe the following   .   [10 Marks]
   a) Grey-box testing of object –oriented programs
    b) Integration testing of object-oriented programs

6. a. Discuss about static analysis tools.   [5 Marks]
   b. Discuss about dynamic analysis tools.   [5 Marks]

Unit V: Software Reliability and Quality Management, Computer Aided Software

Engineering

1. a. Define software reliability. Explain about reliability metrics of software products.[7 Marks]
    b. What is a software quality? And explain.   [3 Marks]

2. a. Explain the following terms in detail.   [6 Marks]
    a) statistical testing   b)six sigma
    b) Explain about CMMI model   [4Marks]

3. How CASE support in software life cycle explain in detail.   [10 Marks]

4. a. Define case and explain its scope.   [5 Marks]
    b. explain the case environment and benefits of CASE..   [5 Marks]

5. a. What is ISO 9000 certification? How to get ISO 9000 certification?   [5 Marks]
    b. List Salient features ISO 9001 requirements. **www.FirstRanker.com**   [5 Marks]

6. Explain in detail about the following   [10 Marks]
   a) SPICE   b) PSP

Unit VI : Software Maintenance, Software Reuse

1. a. Explain the characteristics of software evolution.   [5 Marks]
   b. Discuss about software reverse engineering.   [5 Marks]

2. a. Explain about software maintenance process models.   [5 Marks]
   b. How to estimate maintenance cost.   [5 Marks]

3. a. Define software reuse. explain basic issues in reuse program.   [5 Marks]
   b. Explain about domain analysis..   [5 Marks]

4. Explain he following terms   [10 Marks]
   a) Component classification   c) Searching
   b) Repository maintenance   d) Reuse without modifications

5. a. Explain about reuse at organization level.   [5 Marks]
   b. Explain about the current state of Reuse.   [5 Marks]