Code No: R22051 **R10** SET - 1

II B. Tech II Semester Regular Examinations April/May – 2013
SOFTWARE ENGINEERING
(Computer Science and Engineering)

Time: 3 hours Max. Marks: 75

Answer any **FIVE** Questions
All Questions carry **Equal** Marks
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1. Briefly explain:
   a) Software myths.
   b) Use cases.
   c) Object identification.
   d) Unit testing.
   e) Technical risks. (3M×5=15M)

2. a) What are the phases of the unified process?
   b) What are the functional and non-functional requirements of a Software Systems? (8M+7M)

3. a) Briefly explain requirements engineering tasks.
   b) Explain in detail the behavioral models of a software system. (8M+7M)

4. a) Explain in detail the design classes involved in software design.
   b) What is an architectural pattern? Discuss various issues associated with it. (8M+7M)

5. a) Explain in detail Thoe Mandels golden rules on interface design.
   b) Explain in detail the user analysis for a solid foundation of interface design. (8M+7M)

6. a) What is the art of debugging?
   b) What are the metrics for analysis model? (8M+7M)

7. a) Explain in detail about risk identification.
   b) Describe the RMMM plan. (9M+6M)

8. a) What is software quality control and what are the components of the cost of quality?
   b) Explain the steps involved to perform statistical software quality assurance. (6M+9M)
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Code No: R22051 **R10** SET - 2

II B. Tech II Semester Regular Examinations April/May – 2013
SOFTWARE ENGINEERING
(Computer Science and Engineering)

Time: 3 hours Max. Marks: 75

Answer any **FIVE** Questions
All Questions carry **Equal** Marks
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1. Briefly explain:
   a) Personal software process.
   b) Quality attributes of software design
   c) Object interface specification.
   d) Regression testing.
   e) Known risks. (3M×5=15M)

2. a) Explain in detail the spiral model.
   b) Explain in detail the software requirements specification. (8M+7M)

3. a) Briefly explain requirements validation.
   b) How to produce models for an existing system. (8M+7M)

4. a) Explain Abstraction, Architecture, Patterns and Modularity in terms of software design.
   b) Explain in detail the software architecture. (8M+7M)

5. a) Explain in detail the design evaluation.
   b) How do we apply interface design steps? Explain with an example. (8M+7M)

6. a) What is system testing?
   b) Discuss about Mc Call's Quality factors. (8M+7M)

7. a) What is Risk Mitigation, Monitoring and Management.
   b) What is risk projection? Explain how to develop a risk table. (9M+6M)

8. a) Explain in detail about software reviews.
   b) Explain ISO 9000 Quality Standards. (9M+6M)
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Code No: R22051 **R10** SET - 3

II B. Tech II Semester Regular Examinations April/May – 2013
SOFTWARE ENGINEERING
(Computer Science and Engineering)

Time: 3 hours Max. Marks: 75

Answer any **FIVE** Questions
All Questions carry **Equal** Marks
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1. Briefly explain:
   a) CMMI.
   b) Software engineering.
   c) Architectural design.
   d) Black-box and white-box testing.
   e) Project risks. (3M×5=15M)

2. a) Explain in detail the incremental process models.
   b) Explain in detail the user requirements. (8M+7M)

3. a) What is viewpoint? Discuss various viewpoint oriented approaches to requirements engineering.
   b) Describe various data models for the software system. (8M+7M)

4. a) Explain information hiding, functional independence and refinement concepts of software design.
   b) Briefly explain the software architecture. (8M+7M)

5. a) Explain in detail the objects and object classes.
   b) Explain in detail about user interface analysis and design. (8M+7M)

6. a) Describe validation criteria.
   b) Explain how integration testing method is applied for conventional software. (8M+7M)

7. a) Write about the metrics for software quality?
   b) How to assess the consequences of a risk. (9M+6M)

8. a) What is a formal technical review? Explain when do we conduct formal technical review
   b) What are the core steps of the six sigma methodology. (9M+6M)
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Code No: R22051 **R10** SET - 4

II B. Tech II Semester Regular Examinations April/May – 2013
SOFTWARE ENGINEERING
(Computer Science and Engineering)

Time: 3 hours Max. Marks: 75

Answer any **FIVE** Questions
All Questions carry **Equal** Marks
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1. Briefly explain:
   a) Process assessment.
   b) Characteristics of a good design
   c) Design evolution.
   d) Smoke testing.
   e) Business risks. (3M×5=15M)

2. a) Explain in detail the prototyping process model with merits and demerits.
   b) Explain in detail the structured language specification. (8M+7M)

3. a) Explain in detail the requirements management for software systems.
   b) Briefly explain the context models associated with the system. (8M+7M)

4. a) Explain the pattern based software design.
   b) What is architectural style? Discuss various categories of it. (8M+7M)

5. a) Write about task analysis and modeling techniques.?
   b) What are the design issues of a user interface? (8M+7M)

6. a) Explain metrics for the design model.
   b) Explain metrics for object oriented testing. (10M+5M)

7. a) Explain in detail about software measurement.
   b) What is risk refinement? Explain. (10M+5M)

8. a) How do we define software quality?
   b) Briefly explain software reliability. (8M+7M)
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