Code No: 07A4EC12 **R07** **Set No. 2**

II B.Tech II Semester Examinations,December 2010
SOFTWARE ENGINEERING
Common to Information Technology, Computer Science And Engineering, Computer Science And Systems Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) Define Ethnography. What are the requirements that are associated with ethnography?
   (b) Is ethnography combined with prototyping? Discuss the statement. [8+8]
2. Discuss any four process models along with their advantages and disadvantages. [16]
3. Describe in detail about the art of debugging. [16]
4. (a) What is software architecture? Explain about structured chart with an example.
   (b) Justify how modular design is an effective design method? [8+8]
5. (a) Discuss about risk management.
   (b) Describe about RMMM. [8+8]
6. Explain statistical software quality assurance. [16]
7. (a) What are the design principles that allow user to maintain control?
   (b) How to reduce user's memory load & how to make user interface consistent? [8+8]
8. Discuss the statement, "PSP and TSP are rigorous approaches to software engineering that provides distinct and quantifiable benefits in productivity and quality". [16]

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Code No: 07A4EC12 **R07** **Set No. 4**

II B.Tech II Semester Examinations,December 2010
SOFTWARE ENGINEERING
Common to Information Technology, Computer Science And Engineering, Computer Science And Systems Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) What are different UI patterns? Explain them briefly.
   (b) What are the design issues involved in interface design? [6+10]
2. What is software process assessment? Describe its purpose. Explain why SPICE has been developed as a standard for software process assessment. [3+3+10]
3. Explain in detail how analysis model is transformed into a design model with a neat diagram. [16]
4. (a) What are the components of risks?
   (b) Develop a risk table & explain it. [8+8]
5. (a) List out the persons and entities involved in a requirements review?
   (b) Draw a process model showing how a requirements review will be organized. [8+8]
6. Explain how water-fall model is applicable for the development of the following systems:
   (a) A University Accounting System.
   (b) An interactive system that allows railway passengers to find time and other information from the terminals installed in the stations. [8+8]
7. Why do we need metrics for design model? Describe in detail the architectural design metrics. [16]
8. Discuss about Formal Technical Review. [16]

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Code No: 07A4EC12 **R07** **Set No. 1**

II B.Tech II Semester Examinations,December 2010
SOFTWARE ENGINEERING
Common to Information Technology, Computer Science And Engineering, Computer Science And Systems Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) Write few reasons for the software failures?
   (b) Give some points on how to over come software failures with examples. [8+8]
2. (a) Explain different types of cost of quality.
   (b) What are the points that software quality emphasis on [8+8]
3. What are domain requirements? Explain the domain requirements for the library system. [16]
4. Explain the viewpoint-oriented techniques to requirement discovery for a library system along with various types of viewpoint. [16]
5. What are the major elements of the design model? Explain the abstraction dimensions and process dimensions of the analysis model and design model. [16]
6. (a) What are the four steps for risk projection. What is the intention of these steps.
   (b) Explain about risk table.
   (c) Explain how to access risk impact. [5+5+6]
7. Describe in detail how the following can be performed in UI design
   (a) Task analysis & modeling
   (b) Work environment analysis [10+6]
8. (a) Explain how software quality is measured at maintenance level.
   (b) Discuss the automation of metric evaluation. [10+6]

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Code No: 07A4EC12 **R07** **Set No. 3**

II B.Tech II Semester Examinations,December 2010
SOFTWARE ENGINEERING
Common to Information Technology, Computer Science And Engineering, Computer Science And Systems Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Write a note on:
   (a) Regression testing
   (b) Security testing
   (c) Recovery testing
   (d) Smoke testing [4+4+4+4]
2. (a) List the application of software engineering.
   (b) Explain about capability Maturity Model Integration. [6+10]
3. (a) Define software reliability.
   (b) Explain the measures of software reliability & availability.
   (c) Explain software safety in terms of software quality assurance. [5+5+6]
4. What are the different static and dynamic models that UML provides to document the design? Discuss with suitable examples. [16]
5. (a) Define the metrics for specifying the non-functional requirements.
   (b) Give the reasons why quantitative requirements specification is difficult in practice.
   (c) Distinguish between functional and non-functional requirements. [6+4+6]
6. What is Architecture? Why is Architecture important? Explain how it differs for the design process of software? [16]
7. (a) Discuss in detail the data modeling activity.
   (b) Write briefly about the utility of state transition diagram in analysis modeling activity. [8+8]
8. (a) Explain 3p's in software metrics.
   (b) Explain about quality metrics. [8+8]

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