Code No. : 5244

FACULTY OF ENGINEERING
B.E. 3/4 (CSE) I Sem. (Main) Examination, December 2011
SOFTWARE ENGINEERING

Time: 3 Hours] [Max. Marks: 75

Note : *Answer **all** questions from Part **A**. Answer **any five** questions from Part **B**.*

PART – A **(25 Marks)**

1. Define "Software Engineering". What is its importance ? **3**
2. Specifically bring out the difference between Analysis and Design. **4**
3. How do module and sub-system relate to product design ? **3**
4. What are the different size metrics ? **3**
5. With example explain glass box testing. **3**
6. What is the importance of pattern and framework ? **4**
7. How are verification and validation important individually ? **2**
8. "Software maintenance is very essential". Justify. **3**

PART – B **(50 Marks)**

9. a) Briefly explain the software types and its application domains. **5**
   b) Explain capability maturity model. **5**
10. a) What are requirements engineering tasks ? Explain validating requirements. **5**
    b) What are analysis modeling approaches ? Explain flow-oriented modeling. **5**
11. a) Briefly discuss about design process and design quality. **5**
    b) What are the user interface design rules ? Discuss the techniques for evaluation of UI. **5**
12. Explain the process of mapping the data flow diagrams into software architecture. **10**
13. What is pattern based software design ? Describe any two patterns known to you in addition with a general pattern template. **10**
14. Explain the difference between cohesion and coupling. Discuss different types of coupling with examples. **10**
15. a) What is meant by structural complexity of a program ? Write a metric for measuring the structural complexity of a program. **5**
    b) Distinguish between software testing methods black box and white box testing with examples. **5**

Code No. 2353 / N

FACULTY OF ENGINEERING

B.E. 3/4 (CSE) I-Semester **(New)(Main) Examination, November / December 2012**

Subject : Software Engineering

Time : 3 Hours **Max. Marks: 75**

Note: Answer all questions of Part - A and answer any five questions from Part-B.

PART – A (25 Marks)

1. Give a representation for process framework. (3)
2. What is an agile process? (2)
3. List the various considerations in project personnel state of planning and managing the project. (3)
4. What is Quality Function Deployment (QFD)? (2)
5. List the elements of a class diagram. (3)
6. What do you understand by the term 'design quality'? (2)
7. What is software architecture? (2)
8. List the golden rules of user interface design. (3)
9. What is software testing? (3)
10. List the metrics for source code. (2)

PART – B (5x10=50 Marks)

11. (a) What are prescriptive process models? (2)
    (b) Discuss the traditional waterfall model in detail. (8)

12. List the tasks involved in Requirement Engineering. Explain about each task in short. (10)

13. Discuss the various analysis modeling approaches in detail. (10)

14. Explain the various software architectural styles in detail. (10)

15. Write short notes on :
    (a) Black Box Testing (5)
    (b) Write (Glass) Box Testing (5)

16. Explain the following: (10)
    (a) Capability Maturity Model (CMM)
    (b) Framework elements of product metrics

17. Write short notes on :
    (a) XP (Extreme Programming) Agile process model (4)
    (b) Elicitation (3)
    (c) Debugging (3)

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Code No. 6110

FACULTY OF ENGINEERING

B.E. 3/4 (CSE) I – Semester (Main) Examination, November 2013

Subject : Software Engineering

Time : 3 hours **Max. Marks : 75**

Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.

PART – A (25 Marks)

1. What are umbrella activities? Give an example. 3
2. Define personal software process. 2
3. Why do we use CPM (Critical Path Method)? 2
4. What does the requirements engineer do in the requirements elaboration phase? 3
5. List the goals of a good design. 3
6. What does a state diagram represent? 2
7. What is the purpose of a Data design? 3
8. List the Golden rules for interface design. 2
9. When is software said to be testable? 3
10. Define software quality. 2

PART – B (50 Marks)

11. "The S.E.I. (Software Engineering Institute) has developed a comprehensive model predicated on a set of software engineering capabilities that should be present as organizations reach different levels of process maturity". Explain the model in detail. 10

12. Explain in detail the COCOMO-II. 10

13. Explain in detail class-based modeling. 10

14. List and explain in short the steps in architectural design process. 10

15. Explain in detail incremental integration testing and its kinds. 10

16. Write short notes on the following :

    a) AM (Agile Modeling) 3
    b) Elements of Requirements Analysis Model 4
    c) Pattern based software design 3

17. Write short notes on the following :

    a) Call-and-Return Architectural style 4
    b) Fault Based Testing 3
    c) Metrics for Analysis model 3

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Code No. 6110 / S

FACULTY OF ENGINEERING

B.E. 3/4 (CSE) I – Semester (Supplementary) Examination, July 2014

Subject: Software Engineering

Time: 3 Hours **Max.Marks: 75**

Note: Answer all questions from Part A. Answer any five questions from Part B.

PART – A (25 Marks)

1	Define process patterns.	2
2	Define team software process.	2
3	List the objectives of planning and managing the software project.	3
4	What are the difficulties faced by a requirements – engineer during requirements elicitation?	3
5	What is quality's role in Design?	2
6	List an advantage and disadvantage of software reuse.	2
7	What is the importance of software architecture?	2
8	List the elements of user interface.	3
9	When is testing complete?	3
10	List few object-oriented test methods.	3

PART – B (50 Marks)

11	a)	Determine a model to relate process, process assessment, process improvement and capability determination.	6
	b)	List the various kinds of prescriptive process models with examples for each.	4
12		Explain in detail the COCOMO.	10
13		Explain in detail scenario-based modelling.	10
14		"Four different models come into play when a user interface is analyzed and designed". List and explain them in short.	10
15		Explain the debugging process with few debugging strategies.	10
16		Write short notes on the following:	
	a)	Concurrent Development Model	4
	b)	Project risk management	3
	c)	Purpose of design	3
17		Write short notes on the following:	
	a)	Independent component architectural style.	4
	b)	Black Box Testing	3
	c)	Elements of framework for product metrics.	3

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