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Roll No .....

**CS - 603****B.E. VI Semester**

Examination, June 2013

**Software Engineering & Project Management****Time : Three Hours****Maximum Marks : 100****Minimum Pass Marks :35****Note:** Attempt all questions. All questions carry equal marks.

1. a) Explain how do the use of software engineering principles help to develop software products cost effectively and timely. Elaborate your answer by using suitable example. 10

- b) What do you mean by a software process? What is the difference between a methodology and a process? Explain using suitable examples. 10

**OR**

2. Consider the assertion : The classical waterfall model is an idealistic model.

- i) Justify why the above assertion is true.  
ii) Even if the classical waterfall model is an idealistic model, is there any practical use of this model at all? Explain your answer. 20

3. a) What do you mean by system specification, requirement specification, software specification? Explain in brief. 10

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- b) Differentiate between the following :

- i) Structural analysis and object oriented analysis.  
ii) Data flow model and control flow model. 10

**OR**

4. a) List five desirable characteristics of a good software requirement specification (SRS) document. 10  
b) Explain analysis modelling? What are its elements? Also explain functional modelling. 10

5. a) Differentiate between structured analysis and structured design in the context of function oriented design. 10  
b) Enumerate the different types of coupling that might exist between the two modules. Give examples of each. 10

**OR**

6. a) What do you understand by the term top down decomposition in the context of function oriented design? Explain your answer with suitable example. 10  
b) What do you understand by design review. What kinds of mistakes are normally pointed out by the reviewers? 10

7. a) How can you compute the cyclomatic complexity of a program? How is it useful in program testing? 10  
b) What is meant by code walkthrough? What are some of the important types of errors checked during code walkthrough. 10

**OR**

8. a) Differentiate between blackbox testing and while box testing? 10

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- b) Distinguish between the static and dynamic analysis of a program. Explain at least one metric test a static analysis tool reports and at least one metric that a dynamic analysis reports. How are these metrics useful? 10
9. a) Define the term reverse engineering? Explain the different activities undertaken during reverse engineering? 10
- b) Discuss the salient features of the organizational reporting structure of the SQA group as recommended by. SEI cmm and ISO 9001. 10

**OR**

10. Write short notes : 20
- i) Software configuration management (SCM)
  - ii) Re-Engineering
  - iii) Project Plan
  - iv) Project scheduling.

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