

Total No

Roll No .....

**IT-6002 (CBGS)**

**B.E. VI Semester**

Examination, November 2019

**Choice Based Grading System (CBGS)**  
**Software Engineering and Project Managements**

*Time : Three Hours*

*Maximum Marks : 70*

- Note: i) Attempt any five questions.  
ii) All questions carry equal marks.

1. a) What is the principal aim of the software engineering discipline? What does the discipline of software engineering discuss? 7  
b) Define Agile process. Give advantages and disadvantages in Agile development. 7
2. a) Describe the various phases of RAD model and list out the model's strengths and weaknesses. 7  
b) Explain throw-away prototyping and evolutionary prototyping. Discuss the differences between the two. 7
3. a) Describe the difference between process and product metrics. 7  
b) Software project planning entails what activities? What are the difficulties faced in measuring the Software Costs? 7
4. a) Explain the tasks involved in Requirements Engineering. 7  
b) What are the objectives of software design? How do we transform an informal design to a detailed design? 7

5. a) What are the testing principles the software engineer must apply while performing the software testing? 7  
b) Discuss the important issues that a SRS must address. 7
6. Explain the following: 14  
a) Verification and validation  
b) White-box and black-box testing  
c) Unit and integration testing  
d) Test-case design
7. a) Compute the function point value for a project with the following information domain characteristics.  
Number of external inputs: 32  
Number of external outputs: 60  
Number of external inquires: 24  
Number of external interface files: 2  
Number of internal logical files: 8  
Assume that all complexity adjustment values are average. 7  
b) Explain the framework suggested by CMM for managing software process. Discuss its impact on software development life cycle. 7
8. a) Explain the following: 7  
i) Component-based software engineering  
ii) Re-engineering  
b) What is the role of effort estimation in a project and why is it important to do this estimation early? 7

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