

Roll No .....

## MCTA - 204

### M.E./M.Tech. II Semester

Examination, June 2016

### Software Engineering and Project Management

Time : Three Hours

Maximum Marks : 70

- Note :** i) Total number of questions eight.  
ii) Attempt any five questions.

1. a) Compare and contrast various software development model in tabular form. State the advantages and disadvantages of each model.  
b) What do you mean by software requirement specification? Explain in detail.
2. a) Describe clearly how a design is influenced by the following:  
i) Cohesion and coupling  
ii) Horizontal and vertical partitioning  
b) Consider an online banking registration system. Draw its use case diagram.
3. a) What is the role of use case in object oriented requirement analysis?  
b) Write a short note on user interface design.
4. a) How can project scheduling after integration testing?  
b) Distinguish between:  
i) Black box and white box testing  
ii) Alpha and Beta testing

5. a) What is the relationship between OOA, software requirement and OOD? Explain using suitable examples.  
b) Consider the following code  
for (i = 1; i<10; i++)  
for (j = 1; j<10; j++)  
{  
sum = i+j;  
prod = i\*j;  
}  
Identify test cases to perform loop testing.
6. a) Suppose that you are developing a software product in organic mode. You have estimated size of product to be about 1,00,000 LOC. Compute nominal effort and development time.  
b) Explain Risk analysis in detail. What is decision tree analysis in context to Risk Management?
7. a) What is the difference between direct and indirect measurement?  
b) What are different types of maintenance? Explain briefly.
8. Write short note on any four:  
a) Re-engineering software products  
b) PERT  
c) CASE Tool  
d) Software Quality Assurance  
e) Client-server Software development

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