

**MCTA-204**

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**M. E./M. Tech. (Second Semester)**

**EXAMINATION, June, 2012**

**(Grading/Non-Grading)**

**SOFTWARE ENGG. AND PROJECT MANAGEMENT**

**(MCTA-204)**

*Time : Three Hours*

*Maximum Marks :  $\begin{cases} GS : 70 \\ NGS : 100 \end{cases}$*

**Note :** Attempt any *five* questions. All questions carry equal marks.

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1. What are the main software development models ? What are the pros and cons of each of the software development models ? How do we select suitable life cycle model for a project ?
2. (i) What is the difference between a design requirement and software requirement ?  
(ii) Enumerate the different types of coupling that might exist between two modules. Give examples of each.
3. (i) Define UML. Explain primary and secondary actor in use-case diagram using suitable example.

4. (i) What is Regression Testing ? When is regression testing carried out ? Why is regression testing necessary ?  
(ii) How can you determine the number of latent defects in a software product during the testing phase ?
5. (i) Define the term software reliability and software quality. How can these be measured ?  
(ii) Draw the flowchart of risk management activity and explain various software risks.
6. (i) What are the different types of maintenance that a software product might need ? Why are these maintenance required ?  
(ii) Explain Object Request Broker (ORB). What are the advantages of client-server software development ?
7. (i) What are the problems faced during maintenance ?  
(ii) Explain the types of COCOMO models and give phase-wise distribution of efforts.
8. Write short notes on the following :
  - (i) Aggregation and composition
  - (ii) Use-case model
  - (iii) CORBA
  - (iv) Testing