

Roll No rgpvonline.com

MCTA - 204**M.E./M.Tech., II Semester**

Examination, June 2014

Software Engineering and Project Management**Time : Three Hours****Maximum Marks : 70****Note :** Attempt any five questions. All questions carry equal marks.

1. a) What is a function point metric? How is it used to assess the size and cost of a software project? 7
b) Explain how the requirements process converts the client needs to validated software requirement specification. 7
2. a) Using suitable examples, explain the different types of requirements problems that should be identified and resolved during the requirement analysis activity. 7
b) What does Halstead's volume metric represent conceptually? How according to halstead is the effort dependent on program volume? 7
3. a) With the help of an example illustrate the object oriented design methodology using UML. 7
b) What do you understand by a metaphor in a user interface design? Why is a metaphor based user interface design advantageous? List a few metaphor which can be used for user interface design. 7
4. a) How can you specify different constraints on the modeling elements in UML? For ex-how can you specify that all books are kept alphabetically sorted in a library? 7

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PTO

- b) What is the significance of design reviews? Make a list of items that can be used as a checklist for carrying out design reviews. 7
5. a) Distinguish between software verification and software validation. When during the software life cycle, are verification and validation performed? Can one be used in place of other? 7
b) Do you agree with the following statement "System testing can be considered as a pure black test". Justify your answer. 7
6. a) What does the quality parameter fitness of purpose mean in the context of software products? Why is this not a satisfactory criterion for determining the quality of software products. 7
b) What are the important types of risks test a project might suffer from? How would you identify the risks that a project may be susceptible to during the project planning stage? 7
7. a) What is meant by software configuration management? How can you manage the software configuration? Why is software configuration management crucial to the success of large software product development projects? 7
b) Discuss the process models for software maintenance and indicate how you would select an appropriate maintenance model for a maintenance project at hand. 7
8. Write short notes on: 14
i) PERT ii) CPM
iii) Unified Design Process iv) Cohesion and Coupling

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