

Roll No

MCA-302
M.C.A. III Semester
Examination, November 2019
Software Engineering Methodology

Time : Three Hours

Maximum Marks : 70

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

1. a) Define system. Write characteristics of a system. 7
b) What are the major phases in the waterfall model of software development? Which phase consumes maximum effort for developing a software product? 7
2. a) Write features of various information gathering tools in brief. 7
b) Describe spiral model of software development. Write its advantages. 7
3. a) What are the different categories of software development projects according to the Cocomo estimation model? Give example of each category. 7
b) What is cohesion? Describe classification of cohesiveness. Explain each type of cohesion. 7
4. a) What is layered software design technique? What are its advantages? Give suitable example. 7
b) What is risk analysis? What measures should be taken to reduce failure rate of a software? 7

5. a) Write and explain various steps of RAD model. Write its advantages and disadvantages. 7
b) What is data flow diagram? Describe the primitive symbols used and the purpose of various levels of DFD with the help of suitable example. 7
6. a) Briefly describe formal approaches to software quality assurance. http://www.rgpvonline.com 7
b) What is SRS? Describe characteristics of a good SRS document. 7
7. a) Explain black box testing. What are the various approaches available to design black box test cases. 7
b) Describe integration testing. Give an overview of some approaches to integration testing. 7
8. a) Compare MIS and DSS. Write in brief about different types of DSS. 7
b) Explain the following : 7
i) O O Software Engineering
ii) Case tools

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