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Roll No .....

**MCA-302****M.C.A. III Semester**

Examination, November 2018

**Software Engineering Methodology***Time : Three Hours**Maximum Marks : 70*

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

1. a) Explain spiral model and describe its advantages over waterfall model.  
b) What do you mean by feasibility study? Explain feasibility study of collage management system.
2. a) Outline the software development life cycle. Briefly describe each of the stages its relation to other stages and its overall importance.  
b) How do we define Software Quality and Software Reliability? Describe briefly the terms:
  - i) Quality of design
  - ii) Quality of conformance
  - iii) MTBF
3. a) Explain cost estimation COCOMO model with example.  
b) What is Design? Discuss the objectives of software design?

4. a) Give a brief note on software measurement.  
b) What do you mean by cohesion and coupling? Explain different types of cohesion and coupling.
5. a) What are the fundamental principle of user interface design? Explain and enumerate the end user requirement in user interface design.  
b) What risks are involved in designing a software? How can we overcome them?
6. a) Define Software Quality Assurance (SQA) and explain SQA activities.  
b) What is testing? What is debugging? Draw the spiral diagram showing testing strategies with phase of software development.
7. a) Compare object oriented analysis of software with that of structural software engineering approach.  
b) What is Decision Support System? Explain types of DSS.
8. a) What does CASE stands for? Explain all the CASE components.  
b) Write short notes:
  - i) Re-Engineering
  - ii) Formal technical review

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