

**III B. Tech II Semester Supplementary Examinations, November-2018****SOFTWARE ENGINEERING**

(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 70

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- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answering the question in **Part-A** is compulsory  
3. Answer any **THREE** Questions from **Part-B**

**PART-A**

1.
  - a) Distinguish between software process and project. [4M]
  - b) What are the characteristics of good SRS document? [3M]
  - c) List the principles of a software design. [4M]
  - d) Will exhaustive testing guarantee that the program is 100% correct? Explain. [3M]
  - e) List a few process and project metrics. [4M]
  - f) Define maintenance. What are the types of software maintenance? [4M]

**PART-B**

2.
  - a) Explain why incremental development is the most effective approach for developing business software systems. Why is this model less appropriate for real-time systems engineering? [8M]
  - b) Explain briefly Software development lifecycle. [8M]
3.
  - a) What is the goal of requirements analysis phase? Give reasons why the requirements analysis phase is a difficult one. [8M]
  - b) Identify and briefly describe four types of requirement that may be defined for a computer based system. [8M]
4.
  - a) Explain about object oriented analysis and design principle. [8M]
  - b) What are the design principles? Explain in detail. [8M]
5.
  - a) Explain integration testing process with an example. [8M]
  - b) What are the benefits of involving users in release testing at an early stage in the testing process? Are there disadvantages in user involvement? [8M]
6.
  - a) Discuss about COCOMO II model for software estimation. [8M]
  - b) Discuss about the software metrics for small organizations. [8M]
7.
  - a) What is reengineering? Explain in detail. [8M]
  - b) Explain why design metrics are, by themselves, an inadequate method of predicting design quality. [8M]

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