

III B. Tech II Semester Supplementary Examinations, November - 2017

SOFTWARE ENGINEERING

(Computer Science 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**
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PART -A

- 1 a) Explain dependency relation in the context of class diagram. [3M]
b) Describe the phases of SDLC. [3M]
c) Explain abstraction in the context of design concepts. [4M]
d) Why the documentation is given importance in software development? [4M]
e) List out various software metrics available for coding. [4M]
f) List out Software Quality Assurance activities. [4M]

PART -B

- 2 a) Explain agility in the context of software engineering. [4M]
b) Discuss Waterfall model with suitable diagram. Give its merits and demerits. [8M]
c) Give the advantage of using UML and relate UML with software process model. [4M]
- 3 a) Explain how to include packages in class diagrams. [4M]
b) How the activity diagrams are useful in eliciting the requirements of software system? [8M]
c) Give the measures to validate the requirements of software system. [4M]
- 4 a) Describe the process of Translating requirements into design model with a neat diagram. [8M]
b) Define design. Discuss the characteristics of good design. [8M]
- 5 a) Write the steps to calculate cyclometric complexity and illustrate with an example. [8M]
b) Explain the principles of testing software system. [8M]
- 6 a) How the improper project planning affects software system? [8M]
b) Explain software configuration management in detail. Give various roles and responsibilities in it. [8M]
- 7 a) Illustrate Capability Maturity Model with suitable diagram. Discuss its role in SQA [8M]
b) Write and explain the metrics for software maintenance. [8M]

