

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 1058

Roll No.

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B. Tech.**(SEM. VII) EXAMINATION, 2007-08****SOFTWARE ENGINEERING***Time : 3 Hours]**[Total Marks : 100**Note : Attempt all the questions.***1 Attempt any four parts of the following : $5 \times 4 = 20$**

- (a) How does the principles of software engineering help reducing the software crisis?
- (b) What are the general skills required for a software engineer?
- (c) What are the various component of a software? Explain briefly.
- (d) Explain five current application ideas of software.
- (e) What is software maintenance? List various types of software maintenance.
- (f) What is the importance of software analysis in software development?

2 Attempt any four parts of the following : $5 \times 4 = 20$

- (a) What is iterative enhancement model?
- (b) Differentiate between validation and verification.

- (c) How does software metrics help maintaining the quality of software ?
- (d) What is abstraction? How does it help in design?
- (e) What do you understand by cohesion? How does it relate to software design?
- (f) Write short note on OOA for software development?

3 Attempt any **two** parts of the following : 10×2=20

- (a) Explain in brief any five important software metrics.
- (b) What is functional testing? Explain any two ways of performing functional testing.
- (c) What are bottom-up and top-down approach for integration testing? Explain the condition when bottom-up approach is preferred over top-down approach.

4 Attempt any **two** parts of the following : 10×2=20

- (a) Explain the concept of project scheduling and staffing in detail.
- (b) Discuss the four distinct activities performed during risk analysis.
- (c) What are object model, dynamic model and functional model of OMT? Explain in detail.

5 Attempt any **two** parts of the following :

10×2=20

- (a) What do you understand by software reliability?
Explain two reliability metrics.
 - (b) What is SEI-CMM?
 - (c) What is computer aided software engineering?
What are different CASE tools available in the market?
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