

ANNA UNIVERSITY - 2006
B.E/B.TECH IV SEMESTER DEGREE EXAMINATION
SOFTWARE ENGINEERING
(INFORMATION TECHNOLOGY)

TIME-3HOUR
MARK-100

ANSWER ALL QUESTIONS

PART A (10 * 2 = 20)

1. Justify the term "Software is Engineered".
2. Distinguish between process, methods, tools.
3. Define software scope.
4. Define process maturity. Indicate different process maturity levels of CMM/SEI.
5. Give an example of a design fault that leads to failure.
6. Distinguish between alpha testing and beta testing.
7. What is Software Architecture?
8. Define Software re-engineering.
9. What is meant by software change?
10. Write short notes on estimation models.

PART B (5 * 16 = 80)

11. (i) Discuss in detail the FAST method of requirement gathering with an illustration.
(ii) Discuss in detail the Quality Function deployment.
12. (a) List several software process paradigms. Explain how both waterfall model and prototyping model can be accommodated in the spiral process model.
Or
(b) (i) Discuss in detail the data modeling activity.
(ii) Write briefly about the utility of state transition diagram in analysis modeling activity.
13. (a) (i) Describe the design process in software development.
(ii) What are the characteristics and criteria for design?
Or
(b) (i) What are different activities in user interface design process? Elaborate each of these activities.
(ii) Describe your approach to "user help" facilities which integrate with error messages.
14. (a) (i) Discuss the differences between black box and white box testing models. Discuss how these testing models may be used together to test a program module.
(ii) Discuss the importance of cyclomatic complexity with an illustration.
Or
(b) (i) Justify the statement "Software maintenance is costlier".

(ii) Discuss the concept of maintenance process with neat block diagram.

15. (a) Explain clearly the concepts of coupling and cohesion. Are there some systems that cannot be made functionally cohesive? Why or why not?

Or

(b) Write short notes on the following :

(i) System Software.

(ii) Functional decomposition.

(iii) Structured constructs.

(iv) CASE Tool.

Educationobserver.com