

BCA / D-18
SOFTWARE ENGINEERING
Paper-BCA-234

Time allowed : 3 hours]

[Maximum marks : 80

Note : Question No. 1 is compulsory. Attempt any four other questions, selecting at least one question from each unit.

Compulsory Question

1. (a) State two advantages of spiral model. 8×2=16
(b) List the symbols used DFD.
(c) What is software metric ?
(d) Distinguish between Alpha and Beta testing.
(e) What types of faults are detected by integration testing ?
(f) Distinguish between implementation and maintenance.
(g) What is the importance of software project planning ?
(h) State any two factors of quality assurance.

Unit-I

2. Discuss different phases in SDLC model ? Explain with diagram Prototype and Spiral models in detail. 16
3. (a) What is Software Engineering ? Discuss different characteristics of software and hardware. 10
(b) What do you understand by software crisis ? Write a detailed note on the factors responsible for software crisis.

Unit-II

4. (a) Discuss different information gathering tools in detail. 10
(b) Write short note on the following : 6
(a) Feasibility Study
(b) SCM
5. (a) What is SRS ? What are its different components ? Discuss. 10
(b) What are central problems in producing SRS for a system ? Discuss briefly. 6

Unit-III

6. (a) Discuss different Structured Analysis tools in detail. 10
(b) What is Software Maintenance ? Briefly discuss characteristics of maintenance. 6
7. (a) What do you mean by cohesion ? Discuss various levels of cohesion. 10
(b) How cohesion is related to coupling ? Discuss briefly. 6

Unit-IV

8. What do you mean by cost estimation models ? What are uncertainties in cost estimation ? Discuss COCOMO model in detail. 16
9. Write short notes on the following : 16
(a) Risk Management
(b) Module Testing
(c) Team Structure
(d) Project Scheduling