

BCA / D-12
SOFTWARE ENGINEERING
Paper-BCA-353

Time allowed: 3 hours

Maximum marks: 90

Note: Question No. **1** is compulsory. Attempt any **four** more questions from Question Nos. 2 to 9 selecting at least **one** question from each unit.

(Compulsory question)

1. (a) State three drawbacks of waterfall model.
(b) State various types of coupling.
(c) State three software life cycle models.
(d) Distinguish between maintenance and implementation.
(e) Distinguish between Alpha and Beta testing.
(f) What is the importance of software project planning? 3x6=18

Unit-I

2. (a) What do you mean by software myths? State various such myths on customer's and practitioner's parts. 8
(b) Discuss spiral model. 10
3. What do you mean by cost estimation models? What are uncertainties in cost estimation? Discuss CoCoMo model in detail. 18

Unit-II

4. (a) What do you mean by Software Requirement Specification (SRS)? What are the characteristics of good SRS? 9
(b) What do you mean by DFD? State symbols, advantages and disadvantages of DFD. 9
5. (a) What do you mean by cohesion? Discuss various levels of cohesion. 12
(b) How cohesion is related to coupling? Discuss briefly. 6

Unit-III

6. (a) What do you mean by software testing? Why we need it? What makes testing so expansive? 10
(b) Briefly discuss boundary value testing. 8
7. (a) Distinguish between functional and structural testing. Discuss. 9
(b) What do you mean by equivalence class partitioning? How cause-effect Graphing overcomes the weakness of equivalence class partitioning? 9

Unit-IV

8. What are the different levels of testing? Discuss the goals and testing approaches for each level of testing. 18
9. (a) Distinguish between Alpha and Beta testing. 8
(b) What do you mean by maintenance? Briefly discuss three types of maintenance giving major features of each type. 10