

B. Tech 4th Semester Examination

Software Engineering (NS)

IT-224

Time : 3 Hours

Max. Marks : 100

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt five question in all, selecting one question from Sections A, B, C and D. Section E is compulsory.

SECTION - A

1. What is prototyping? Distinguish between various types of prototyping. (20)
2. What is meant by 'Software Crisis'? Discuss the reasons for its occurrence. (20)

SECTION - B

3. What is 'Data Dictionary'? How does it help in Requirements Analysis? Discuss. (20)
4. Which one is a better measure of Size-LOC or Heilstead's Software Science? Discuss. (20)

SECTION - C

5. What is meant by Coupling? What are the various levels of coupling? How does it contribute towards the complexity of software? Discuss. (20)

6. What are Test ORACLES? How do they help in effective testing? Discuss. (20)

SECTION - D

7. Why is Software Maintenance more expensive than actual development? Give reasons. (20)
8. Define 'Software Metrics'. What is the role of Software Metrics in Software Quality Assurance? Discuss. (20)

SECTION - E

9. (i) What is software crisis?
(ii) Differentiate between process and product metrics.
(iii) What is an SRS?
(iv) What is UML?
(v) What is a Process Model?
(vi) What is a DFD?
(vii) What are E-R Diagrams?
(viii) What is Debugging?
(ix) What is SCM?
(x) What is TQM? (2×10=20)