

NTK/KW/15 – 7490

**Sixth Semester B. E. (C. T.) (C.B.S.)
Examination**

**SOFTWARE ENGINEERING AND PROJECT
MANAGEMENT**

Time : Three Hours]

[Max. Marks : 80

- N. B. : (1) All questions carry marks as indicated.
(2) Solve Question 1 OR Question No. 2.
(3) Solve Question 3 OR Question No. 4.
(4) Solve Question 5 OR Question No. 6.
(5) Solve Question 7 OR Question No. 8.
(6) Solve Question 9 OR Question No. 10.
(7) Solve Question 11 OR Question No. 12.
(8) Illustrate the answers with necessary figures/
drawings wherever necessary.
(9) Assume suitable data wherever necessary.

1. (a) What are the different characteristics of software and hardware ? Explain it with diagram. 6
(b) Comment on "Software engineering a layered Technology". 4
(c) Define Software engineering. 3

OR

2. (a) Explain spiral model as combination of life cycle model and prototype model. 7
(b) Write note on (any two) :—
(i) RAD model.
(ii) Prototyping model.

- (iii) Extreme programming. 6
(iv) Adaptive software development. 6

3. (a) What do you mean by SRS ? Explain it in brief. 7
(b) What are the elements of system modeling? 6

OR

4. (a) What is System engineering? Explain with help of diagram. 7
(b) What is FAST ? Explain it in detail. 6
5. (a) What are the different constructs in Analysis modeling ? 6
(b) Explain the following terms :
(i) Abstraction.
(ii) Information hiding.
(iii) Refactoring.
(iv) Pattern modularity. 8

OR

6. (a) Explain Data flow diagram in detail. Give the extension suggested by ward and mellor. 8
(b) Explain behaviour model in detail. 6
7. (a) Explain White-box testing in detail. 7
(b) Explain Black-box testing in detail. 7

OR

8. (a) What are the different types of system testing?
Explain in brief. 7
- (b) What do you mean by Software debugging ?
Explain in brief. 7
9. (a) What is SQA ? Explain briefly. 7
- (b) Explain Metrics for source code measurement. 6
10. (a) Why LOC is not accepted universally as a standard
metric for software development ? 6
- (b) Explain function point metric state opponents and
proponents comment on it. 7
11. Write note on :—
- (i) Project scheduling.
- (ii) RMMM plan.
- (iii) SCM. 4+4+5

OR

12. (a) What is Software Reengineering ? Explain it with
diagram. 6
- (b) What do you mean by Risk ? What are different
types of Risk ? 7