B.E. (Computer Science Engineering) Sixth Semester (C.B.S.)

Software Engineering & Project Management

P. Pages : 2 **NJR/KS/18/4547**

Time : Three Hours * 0 5 8 9 * Max. Marks : 80

Notes :
1. All questions carry marks as indicated.
2. Solve Question 1 OR Questions No. 2.
3. Solve Question 3 OR Questions No. 4.
4. Solve Question 5 OR Questions No. 6.
5. Solve Question 7 OR Questions No. 8.
6. Solve Question 9 OR Questions No. 10.
7. Solve Question 11 OR Questions No. 12.
8. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Define software engineering. Explain software characteristics in detail. **6**

b) What are the practioner myths? Explain. **4**

c) Comment on "Software engineering a layered technology". **4**

OR

2. a) Explain spiral model of software development. State its advantages & disadvantages. **7**

b) Explain the phases of unified process & modelling. **7**

3. a) Describe product engineering concept in detail. **7**

b) Describe in detail the construction practice & Deployment. Principles. **6**

OR

4. a) Explain the components of computer based system. **7**

b) List & explain the different resources required to accomplish the software development. **6**

5. a) Explain the concept of system analysis in depth. **7**

b) What are the different constructs in object oriented analysis? Describe. **7**

OR

6. a) Explain data flow diagram in detail. Give the extension suggested by ward & Mellor. **6**

b) What is the concept of modularity? **4**

c) What is the meaning of Information hiding? **4**

7. a) Differentiate between black box and white box testing. Explain Boundary value Analysis technique with example. **8**

b) What is debugging? Explain the process of debugging in detail. **5**

OR

8. a) Explain & differentiate between Alpha & Beta testing. **7**

b) What is software testing? What are the objective of performing testing? What is the basic difference between verification & validation? **6**

9. a) What is software Maturity index? Why it is used? How it is computed? **7**

b) What is software quality & state the different factors available to measure quality of software. **6**

OR

10. a) State and explain McCall's quality factors (any six). **7**

b) Define Metrics, Measures Indicators, & Software quality assurance. **6**

11. a) Define Risk? Explain different types of Risk. **7**

b) Describe software project estimation techniques. **6**

OR

12. Explain **any three.** **13**

a) Forward Engineering.

b) Quality Management.

c) Restructuring Reverse engineering.

d) Project Scheduling.

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