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

Software Engineering & Project Management (SEPM)

P. Pages : 2 **NRT/KS/19/3492**

Time : Three Hours * 0 6 0 6 * 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. Assume suitable data whenever necessary.
9. Illustrate your answers whenever necessary with the help of neat sketches.
10. Use of non programmable calculator is permitted.

1. a) Define Software Engineering? Highlight the characteristics of softwares. **8**

b) Explain the erroneous beliefs about software and the process that is used to build it. **6**

OR

2. a) Which model will work better Prototype or Spiral? Justify with proper example. **8**

b) What is an agile process? Explain the principles of agility. **6**

3. a) Why it is vital to "move on" with respect to communication principles? **6**

b) Describe Business Process Engineering. **7**

OR

4. a) Explain the term product engineering what is trade - off criteria that gives the selection of a product configuration? **6**

b) What is requirement engineering? What does win-win mean in the context of negotiation during the requirement engineering. **7**

5. a) The requirement model is a bridge between the system description and the design model. Justify the statement. **6**

b) What are the rules of thumb that should be followed when creating the analysis model? **7**

OR

6. a) Write a short note on Cohesion and coupling. **6**

b) Explain the difference between structure analysis and object oriented strategies. **7**

7. a) Explain Hierarchy of software testing with neat diagram. **8**

b) Who should perform the validation test. The software developer or the software user? Justify your answer. **5**

OR

8. a) Explain the White Box testing techniques in details. **7**

b) Describe verification and validation in brief using suitable example. **6**

9. a) Explain CMMI and six sigma models. **8**

b) Considering each of the four aspects of the cost of quality, which do you think is the most expensive and why? **5**

OR

10. a) What is SQA? How FTR is conducted for SQA? **7**

b) Write a short note on W5HH. **6**

11. a) Explain the 4P for the project management. **8**

b) An application has **6**
10 Low External I/P
12 High External O/P
12 Average Different External Queries
20 Low Internal Logical files and
15 High Legacy system Interface.
Assume value of CAF is 1.1. Compute FP.

OR

12. a) What is Risk? Explain different types of Risk. Explain How Software risk is being protected and managed. **8**

b) A software has following LOC and driver values. **6**
LOC = 40 KLOC
Personal = 1.07
Project = 0.94
Product = 1.14
Computer = 0.95
Estimate Efforts and duration for all cocomo model.

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