



- Notes :
1. All questions carry equal marks.
 2. Assume suitable data wherever necessary.
 3. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Explain software process and also explain framework activities and umbrella activities. **8**
b) Explain spiral model and V – model of software lifecycle **8**

OR

2. a) Explain waterfall model in detail. State drawbacks of this model. **8**
b) Define the term software, explain software characteristics. **8**
3. a) Explain LOC based estimation with example. Also explain what is the difference between LOC based and FP based estimation. **8**
b) From the given data, calculate FP values for a project. **8**
Number of user I/P - 30,
Number of user O/P - 60,
Number of user inquiries - 22,
Number of files – 6,
Number of external interfaces - 3,
Assume that all the complexity adjustment values are average.
Assume that 14 Algorithm have been counted. Compute the function point.

OR

4. a) Write a note on. **10**
i) W5HH principle.
ii) Risk management.
b) Discuss software Reengineering in detail. **6**
5. a) Explain computer based software engineering. **6**
b) Write a note on. **10**
i) BPR
ii) Product engineering.

OR

6. a) Explain coding principles and concepts. **8**
b) Write a number of key principles to deliver a software increment. **8**

7. a) What is scenario and use case? Draw use case diagram for safe Home Security function. **8**
b) Explain elicitation and validation in requirement engineering. **8**

OR

8. a) Explain all Design Concepts. **10**
b) Write selection characteristics for potential classes suggested by Coad and Yourdon. **6**
9. a) What is software testing? Explain a strategic approach and testing strategies to software testing. **10**
b) Explain unit testing and Integration testing. **6**

OR

10. Write short notes on **any four**. **16**
- i) Path testing
 - ii) Reverse engineering
 - iii) Integration testing
 - iv) Re-engineering.
 - v) Alpha and Beta Testing.
