

(i) Printed Pages : 2 Roll No. ....

(ii) Questions : 9 Sub. Code : 

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Exam. Code : 

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PGDCA 2<sup>nd</sup> Semester  
(2055)

**SOFTWARE ENGINEERING**

**Paper : PGD-2103**

**Time Allowed : Three Hours] [Maximum Marks : 60**

**Note :—** Attempt one question from each Section and the compulsory question (Question 9).

**SECTION—A**

1. (a) What are the principles of Software Engineering ? 6  
(b) Explain Boehm's Spiral Life Cycle Model with the help of neat diagram. 6
2. (a) Write down the skills required by a software engineer. 6  
(b) Explain the steps of Win Win Spiral Model. 6

**SECTION—B**

3. Define and compare the features of PERT Chart, Gantt Chart and CPM model in detail. 12
4. What can be the possible software risks ? Explain various risk management activities such as risk assessment and risk control. 12

### SECTION—C

5. What are the stages of software design process ? Explain various types of possible design failures and remedies. 12
6. What is the structured analysis and structured design ? Explain steps, goals and benefits of the SA and SD. 12

### SECTION—D

7. What is the software testing ? Explain the features of software testing. Write note on Black box testing and White box testing. 12
8. What are the software quality attributes and the factors affecting the software quality ? Suggest some strategy to be followed for the software quality assurance. 12

### SECTION—E (Compulsory)

9. Attempt all parts :
  - (i) What is a feasibility study ? Any why is this important ?
  - (ii) What is role of a data flow diagram ?
  - (iii) What is SRS and why is it important ?
  - (iv) Why is modularization important in software engineering ?
  - (v) What is prototyping ?
  - (vi) What are major tasks related to the risk management process ?

2×6=12