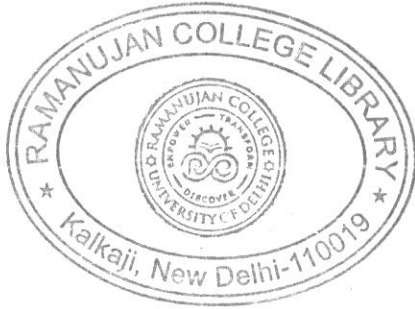3504   4

(i)   Draw the network for the given information.

(ii) Identify the critical path.

(iii) Calculate the Earliest Start (ES), Latest Finish (LF), and Flaot for each process.

[This question paper contains 4 printed pages.]

Your Roll No...............

Sr. No. of Question Paper : 3504   **J**

Unique Paper Code   : 6202452401

Name of the Paper   : Software Modelling

Name of the Course   : **Software Development**

Semester   : IV

Duration : 3 Hours   Maximum Marks : 90

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.

2. The paper has two sections. Section A is compulsory. Each question is 5 marks.

3. Attempt any four questions from **Section B**. Each question is of 15 marks.

Section A

1. (a) What is software engineering? Explain its key objectives.   (5)

    (b) Write the purpose of RMMM plan.   (5)

(c) Explain the concepts of quality assurance and quality review in software engineering.   (5)

(d) Define software architecture with approriate example.   (5)

(e) Explain any two strategies for software testing.   (5)

(f) What is project scheduling in software engineering?   (5)

Section B

2.   (a) Explain various process models used in software development.   (7)

   (b) What is requirement analysis in software development? Explain its importance and key activities involved in the process.   (8)

3.   (a) Difference between cohesion and coupling in software design.   (7)

   (b) Explain project scheduling and also describe the steps involved in it.   (8)

4.   (a) Described different types of software reviews and their importance.   (7)

   (b) Describe the user interface model with example and its applications.   (8)

5.   (a) Explain the layered software architectural design with example.   (7)

   (b) Explain the process of data design at both architectural and component levels.   (8)

6.   (a) Explain the fundamentals of software testing and its significance.   (7)

   (b) Compare and contrast validation testing and verification testing with examples.   (8)

7.   (a) Consider the following set of processes with their given predecessor and time duration (in days):

     (5×3=15)

Process	Predecessor	Duration Days
1	-	2
2	1	3
3	1	4
4	2	2
5	3, 4	5