

**Institute of Science and Technology**  
**Bachelor of Science in Computer Science & Information Technology**  
**Model Question**

**Course Title:** Software Project Management  
**Full Marks:** 60  
**Course Code:** CSC415

**Time:** 3 hours  
**Pass Marks:** 24  
**Semester:** VII

**Group 'A'**

**Attempt any TWO Questions. (2 × 10 = 20)**

1. Perform Earned Value Analysis of the given project. (10)

Activity	Duration (days)	Precedence	Cost/day (Rs.)
A	3		500
B	3	A	100
C	4	B	400
D	2	B	500
E	3	D	500

The progress after the end of 8th day is as follows:

Activity	% completion	Incurred Cost
A	100	2000
B	100	500
C	25	500
D	50	500
E	0	0

Calculate SV, SPI, CV, and CPI respectively.

2. Why is planning necessary? Highlight on the steps of activity planning. (2+8)
3. List three main types of risk. Explain Boehm's risk engineering task break down structure. Briefly explain the categories of factors that needs to be considered while risk identification. (1+5+4)

**Group 'B'**

**Attempt any EIGHT Questions. (8 × 5 = 40)**

4. Differentiate between software project management and other types of project management. Briefly explain project management cycle.(1+4)
5. Calculate discounted Payback period for the given two projects and state which project is worthwhile and why? (4+1)

Year	Project 1 (cash flow Rs.)	Project 2 (cash flow Rs.)
0	-80,000	-70,000
1	30,000	60,000
2	40,000	20,000
4	60,000	40,000
5	40,000	40,000

6. Differentiate between work break down structure and product break down structure with an example.(5)
7. Explain the process of software configuration management. (5)
8. How can priorities be set in deciding the levels of monitoring. (5)
9. What is the significance of float? How can CPM play an important role in scheduling? (2+3)
10. Suppose you have purchased 500 pieces of pants for Rs. 800 per piece. You would then sell the pants to a store for Rs. 1000 per piece. Rs. 1500 is incurred as a transportation cost. Calculate ROI.(5)
11. What is the importance of software quality? Explain CMM.(2+3)
12. Write short notes on: ( $2 \times 2.5 = 5$ )
  - a. Uniform gradient cash flow
  - b. PERT chart