Tribhuvan University
Institute of Science and Technology
2080
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Bachelor Level / Fourth Year/ Seventh Semester/ Science   Full Marks: 60
Computer Science and Information Technology (CSC415)   Pass Marks: 24
(Software Project Management)   Time: 3 hours.
(NEW COURSE)

Candidates are required to give their answers in their own words as for as practicable.
The figures in the margin indicate full marks.

Section 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	6		100
B	6	A	100
C	8	B	200
D	4	B	300

The progress after the end of 16th day is as follows:

Activity	% completion	Incurred Cost
A	100	800
B	100	400
C	25	500
D	50	400

Calculate SV, SPI, CV, and CPI respectively.

2. Elaborate on the issues and questions to be considered during strategic assessment. List the categories of direct cost and benefits and provide two examples of each.   (5+5)

3. Explain about different categories of resources? Highlight on the process of resource histogram equalization. Why do you think it is a crucial activity?   (2+6+2)

Section B

Attempt any EIGHT questions.   (8 × 5 = 40)

4. Calculate discounted payback period for the following project.(5)

Year	Project
0	-200,000
1	100,000
2	50,000
3	50,000
4	100,000
5	50,000

5. What are the objectives that activity planning aims to achieve? (5)

6. Explain SPM framework. (5)

7. Highlight on different types of contracts. (5)

8. Draw precedence network diagram for the following and identify the critical path. (5)

Activity	Duration (weeks)	Precedence
A	2	
B	2	
C	4	A
D	2	B
E	4	B,D

9. Explain capability process model. (5)

10. How can Software Configuration Management aid in change control and version control? (5)

11. What are the practical implications of Risk Exposure? (5)

12. Write short notes on: $(2 \times 2.5 = 5)$
   a. Future worth
   b. Bubble chart