

Time allowed: 2.5 Hours

Max Marks: 50

Roll No: _____

Section A:

Max. Marks: 15

Short answers: Answer any 3 out of 5 questions below. Each question carries 5 marks.

A-1: Explain the risks associated with levelling resources, compressing or crashing projects, and imposed durations or “catch-up” as the project is being implemented.

A-2: What similarities and differences exist between a traditional project manager and a Scrum master?

A-3: How can outsourcing project work alleviate the three most common problems associated with multiproject resource scheduling?

A-4: Why is the traditional project management approach less effective when project scope and technology are not well known?

A-5: What are five common reasons for crashing a project?

Section B

Max. Marks: 20

Long answers: Answer any 2 out of 3 questions below. Each question carries 10 marks.

B-1: Draw a project network from the following information.

Activity	Predecessor	Duration
A	None	2
B	A	4
C	A	3
D	A	2
E	B	3
F	C	6
G	C, D	5
H	E, F	6
I	G	5
J	H, I	5

Activities B and H can be shortened to a minimum of 2 weeks. Which activity would you shorten to reduce the project duration by 2 weeks? Why? Is it possible to shorten the critical path and save money. Explain how.

50

B-2: You are in charge of organizing an Inter B-Schools In door sports competition. Your school does not have an appropriate place to conduct the event. You have to hire a facility of a school that can seat an audience of up to 300.

Q1. Develop a scope statement for this project that contains examples of all the elements. Assume that the event will occur in 4 weeks and provide your best guess estimate of the dates for milestones.

Q2. What would the priorities likely be for this project?

B-3: Why is it important for project managers to resist changes to the project baseline? Under what conditions would a project manager should make changes to a baseline? When should a project manager not allow changes to a baseline?

Activity	ES	EF	LS	LF
A	0	3	0	3
B	3	6	3	6
C	3	6	3	6
D	6	9	6	9
E	6	9	6	9
F	9	12	9	12
G	9	12	9	12
H	12	15	12	15
I	12	15	12	15

Section C: Case Study (Compulsory)

Max. Marks: 15

Introduction:

A project has a set of 8 activities, as per the following network and dependencies, and crash times/costs. Calculate the cost of the project at all time durations until you can no longer crash the project any further.

Cost in 'Lacs INR

Activity	Dependency	Normal Time	Normal Cost	Crash Time	Additional Crashing Cost	Cost Slope /day	Maximum Crash Time
A	-	8	800	6	900		
B	A	10	1200	6	2000		
C	B	15	3600	12	4800		
D	C	10	300	8	900		
E	A	7	1000	5	1400		
F	E	12	2400	10	5400		
G	F	8	700	6	1400		
H	D,G	8	800	8	800		

Questions:

- 1: Calculate the Total Project Cost as per normal times and normal costs. (3 Marks)
- 2: Work out the maximum crashed Project Time and Project Cost. (6 Marks)
- 3: If the management has put a limit to the project cost at a max of INR 14000 lacs, what will be the project duration. (6 Marks)