

(c) Briefly describe the following :

- (i) Time estimates used in PERT network
- (ii) Fulkerson's Rule
- (iii) PERT and CPM
- (iv) Updating the network.

5. Attempt any **two** of the following : (10×2=20)

(a) With the information given below, construct a network, establish critical path. If the number of men available is not to exceed 3, what is the project duration time and week to week allocation of the manpower ?

Activities	A	B	C	D	E	F	G
Immediate predecessor activities	-	-	-	A	B	C	D
Duration in Weeks	1	2	2	1	3	2	1
Men required	2	1	1	1	1	1	1

- (b) What do you mean by computerized project management system ? Explain the features of PRISM.
- (c) Write short notes on :
 - (i) Use of spread sheets for financial projections.
 - (ii) Role of computers in project management.

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 0482

Roll No.

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B. Tech.

(SEM. VIII) THEORY EXAMINATION 2010-11

PROJECT MANAGEMENT

Time : 3 Hours

Total Marks : 100

- Note :** (1) Attempt **all** questions.
(2) All questions carry equal marks.
(3) Be precise in your answer.

1. Attempt any **four** of the following : (5×4=20)

- (a) Describe various stages of a project cycle.
- (b) What is project formulation ? Discuss main elements of project formulation.
- (c) What do you mean by project identification ? Explain reviving a sick unit can be a good opportunity to launch a project.
- (d) Discuss the factors you would like to consider in selection of a food processing industry.
- (e) Project management is a conversion process. Discuss highlighting the various constraints and mechanisms.
- (f) Explain the importance of organizing human resources in a project.

2. Attempt any **four** of the following : (5×4=20)

- (a) Project organization structure shows the authority, responsibility and accountability of the various positions as well as relationships of the various departments. Briefly discuss.
- (b) Discuss functional organization giving their advantages and limitations.
- (c) Discuss pure matrix organization and show that its limitations can be overcome by modified matrix organization.
- (d) Discuss work breakdown structure with suitable example.
- (e) What do you mean by a tender ? What are contained in a tender document ?
- (f) Discuss the procedure of payments made to the contractor.

3. Attempt any **two** of the following : (10×2=20)

- (a) What do you mean by project risk ? List some important project risks. How Break even analysis technique helps in analyzing the project risk ?
- (b) What do you mean by SWOT analysis ? How it helps in project appraisal ?
- (c) Explain the objectives of social cost/benefit analysis. Explain the basic steps in the operation of social cost/benefit analysis.

4. Attempt any **two** of the following : (10×2=20)

- (a) Find the optimum cost schedule to the following problem, if indirect cost associated is Rs.450.00/day.

Activity	Immediate predecessor activities	Normal time	Crash time	Cost of crashing (Rs./day)
A	-	3	1	400
B	A	7	3	100
C	A	4	2	400
D	C	5	2	200
E	B, D	2	1	450

- (b) A project has these activities, precedence relationships and activity duration in days

Activity	Immediate predecessor activities	Duration
a	-	3
b	-	9
c	-	7
d	a	12
e	a, b	10
f	c	11
g	d	10
h	e, f	7
i	g, h	14
j	c	15
k	f, j	9

Construct a CPM Network for the project; find the critical path and compute total float, free float and independent float for each activity.