Total No. of Questions : 4]

SEAT No. : ____

PB11

[Total No. of Pages : 2

[6268]-205
S.E. (Civil Engineering) (Insem)
PROJECT MANAGEMENT
(2019 Pattern) (Semester-IV) (201012)

Time : 1 Hour] ***[Max. Marks : 30***

Instructions to the candidates:

1) ***Answer Q.1 or Q.2 Q.3 or Q.4.***
2) ***Figures to the right indicate full marks.***
3) ***Neat figures must be drawn wherever necessary.***
4) ***Assume suitable data if required.***

Q1) a) Define authority. State its characteristics and types. **[5]**

b) Write a short note on Categories of project. **[5]**

c) Explain the following principles of management. **[5]**

i) Unity of command

ii) Division of work

OR

Q2) a) Explain with a neat sketch "Line organization structure" **[5]**

b) What do you mean by project life cycle curve? Explain with a neat sketch. **[5]**

c) Write a note on PMI and Certified project management professional. **[5]**

Q3) a) Listed below are the activities of a project along with duration. **[8]**

Activity	Duration (Weeks)
1-2	6
1-3	5
2-4	10
3-4	3
3-5	4
4-5	6
4-6	2
5-6	9

i) Draw a network and calculate project duration and highlight critical path.

ii) Calculate EST, EFT, LST, LFT and total float for the activities.

P.T.O.

b) What is PERT? Explain Its application. **[4]**

c) Define Work Breakdown structure with an example. **[3]**

OR

Q4) a) The following table gives the time estimates for various activities of project: **[8]**

Activity	Duration in days		
	Optimistic time (t_0)	Most like time (t_m)	Pessimistic time (t_p)
1-2	4	10	22
2-3	2	5	8
2-4	4	7	16
2-5	4	7	10
3-5	4	7	22
4-5	5	8	17
5-6	6	9	18

i) Draw the project network and find total project duration and highlight critical path.

ii) Calculate Variance of all the activities.

iii) What is the probability that project will be completed in 38 days.

b) What do you mean by dummy activity? What is the use of providing dummy activity in a network? **[4]**

c) Define critical sub-critical and super-critical activities. **[3]**

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