Reg. No.											
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Manipal Institute of Technology, Manipal



(A Constituent Institute of Manipal University)

SEMESTER M.TECH (CONSTRUSTION ENGG AND MANAGEMENT) END SEMESTER EXAMINATIONS, NOV/DEC 2015

SUBJECT: ENGINEERING PROJECT MANAGEMENT [CIE501]

REVISED CREDIT SYSTEM

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- Answer **ANY FIVE FULL** the questions.
- Missing data may be suitable assumed.

Draw A-O-A and A-O-N network. From A-O-N network, determine Total float and locate the critical path.

	Activity	Predecessor	Duration	Activity	Predecessor	Duration	
		activity	(Days)		activity	(Days)	
4.4	A	-	4		F,G,J	6	
1A.	В	-	4	J	Н	4	08
	С	A	5	K	G,J	8	
	E	A	6	L		4	
	F	B,C,E	7	М	Н	5	
	G	B,E	3	N	Н	4	
	H	B,E	2	0	L,K,M,N	7	

1B. Explain the terms. i) Direct Cost. ii) Indirect Cost.

Draw a neat network diagram and number the event by using Fulkerson's rule.

	Activity	Predecessor	Activity	Predecessor	Activity	Predecessor				
2A.	A	В	F	B,C,D	K	I	08			
	В	-	G	A,F	L	K				
	С	-	Н	A,F,E,I	М	G,H,J,L				
	D	-	I	-	N	K				
	E	D	J	I	0	M,N,A,F				
2B.	B. Distinguish between line organization and functional organization.									

02

3A.	Define the terms. i) Free float. ii) Independent Float. iii) Interfering float. iv) Total Float										02	
3B.	Determine more than Activity 1-2 1-3 2-4 3-4 3-5	the Slack the sched Duration (Days) 4 3 4 6 7	if th uled on A	e earlies date of c ctivity 3-7 4-5 4-6 5-6 5-8	st e com (expected upletion or uration Days) 5 8 9 3 3 2	time f the Ac 5 6 7 7 8	of the project. tivity 5-7 5-8 5-9 7-8 3-9	projec Dura (Da 1 7 4 6 3	t is tw ation ys) 	o days	08
4	Determine Activ 1-2 1-3 2-4 2-4 2-5 3-6 4-6	the Direct vity	: cost Nc dur (we	and dur ormal ration eeks) 6 8 7 3 4 4 4 4 4 5 4		on at the e Crash duratio (weeks 4 3 5 1 2 2 2 2 1 1 1	end o	f 3 rd sta Norr cost (2,0 3,0 2,0 1,5 3,0 4,0 5,0 3,0 2,0	age of mal (Rs.) 00 00 00 00 00 00 00 00 00 00 00	crashi Cr Cost 3,0 3,1 4,0 2,0 2,0 4,8 7,2 5,7 4,4	ng. ash (Rs.) 000 500 000 000 000 000 000 000 000 200 700 400	10
5A.	Write a bri	Vrite a brief note on Precedence n				work.		2,0	00	-+,-	+00	02
5B.	Allocate th allocate th Activity 1-2 1-3 1-4 2-5 3-5	e resource e resource / Lab	e. If thes. Dr	ne start t aw histo (Days) 2 6 5 4 4	ime ogra	e of activit im. Activity <u>3-4</u> <u>4-6</u> <u>5-7</u> <u>6-7</u>	y 2-5	is dela Labo	ayed by our 2 3 3	y 3 day Du (D	ys, re- uration ays) 4 3 1 2	08
6	Explain the i) ii)	e following Characteri Role of Pro	: stic o oject	f a proje Manage	ect r							10