	Paper / Sul	bject Code:	58902 / M	Ianage i	ment	and I	Projec	t Plai	ning	in Co	nstru	ètion.	Karana.
Civil	/I/						-		-			03/1	2/20
			(3 Hours)					[Total Marks : 80]					
Note	es:										77.00		
1.		ot any FOUR											
2.		ME any addition							9/0/1				
3. 4.		FIGURES who E proper quest											
4.	WKIII	E proper ques	HOII / SUD C	question	пинн	Dets off	ine ie	ri maiş	giti am	suea 11	i ausw	ei sneet.	
							396						
1. a	update the	table shows the	sing the fo	llowing	condi	itions	t the e						
	the project	duration? What Activity	nat is rema	1-2	2-3	1 of pro 2-4	3-5	4-5	5-6	5-7	6-7	1	
				1-2	2-3	Δ-4	3-2	4-5	3-6	3-7	0-7		
		Duration (Da	ays)	4	6	ુ 5ઁ ⊹ુ	2	T	4	-6-	6		
	At the end	of 10 days rev	view was t	aken wh	ich ir	dicate	q	7.400		W.C.	9 + 9		
		ny five principi hat you unders	les of scien				for its	compl	etion.				_
	e) Explain what Following	y five princip hat you unders data is for sm	les of scien stand by a	ntific ma	mage	ment				te expe	ected n	nean time f	[
•	Explain what Expla	y five princip hat you unders data is for sm ity.	les of scien stand by a	ntific ma	mage	ment Draw	a netw	ork, C	alcula		ected n	nean time f	[
•	Explain what Expla	y five princip hat you unders data is for sm	les of scier stand by a all constru	ntific ma DPR	mage	ment Draw	a netw	ork, C	alcula in da				
•	Explain what is a property of the control of the co	ny five princip hat you unders data is for sm ity.	les of scier stand by a all constru	ntific ma DPR. Iction Pr	mage	ment Draw	a netw ated d	ork C uration	alcula in da		Pessi	mistic	[
•	Explain what is a property of the control of the co	ny five principhat you unders data is for smity. ctivity	les of scier stand by a all constru	ntific ma DPR Letion Pr primistic 5	mage	ment Draw	a netw ated d	ork. Curation	alcula in da		Pessi 2	mistic	Ī
•	Explain what is a property of the control of the co	ny five princip hat you unders data is for sm ity.	les of scier stand by a all constru	ntific ma DPR. Iction Pr	mage	ment Draw	a netw ated d	ork C uration	alcula in da		Pessi 2	mistic 22 8	Ī
•	Explain what is a property of the control of the co	ny five principhat you unders data is for smity. ctivity 1-2 2-3	les of scier stand by a all constru	ntific ma DPR. Cetton Pr primistic 5 2	mage	ment Draw	a netw ated d	ork, C uration likely 10	alcula in da		Pessi 2	mistic	
•	Explain what is a property of the control of the co	ny five principhat you unders data is for smity. ctivity 1-2 2-3	les of scier stand by a all constru	ntific ma DPR. Cetton Pr primistic 5 2	mage	ment Draw	a netw ated d	ork, Curation talkely 10.55	alcula in da		Pessi 2	mistic 22 8	Ī
•	Explain what is a property of the control of the co	data is for smity. ctivity 1-2 2-3 2-4 2-5	les of scier stand by a all constru	ntific ma DPR. Cetton Pr primistic 5 2	mage	ment Draw	a netw ated d	work, Curation tikely 10 5 7 7	alcula in da		Pessi	mistic 22 8 15	Ī
•	Explain what is a property of the property of	data is for smity. ctivity 1-2 2-3 2-4 2-5 3-5	les of scier stand by a all constru	ntific ma DPR. Cetton Pr primistic 5 2	mage	ment Draw	a netw ated d	ork. Curation t likely 10 5 7 7 7	alcula		Pessi 2 1 1 1 1 1 1 1	mistic 22 8 15	Ī
•	Explain what is a property of the control of the co	data is for smity. ctivity 1-2 2-3 2-4 2-5 3-5	les of scier stand by a all constru	ptimistic 5 4 4 5 6	mage oject.	Draw Estim	a netw ated di Mos	work. Curation tikely 10 5 7 7 8 9	alcula	ys	Pessi 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	mistic 22 8 15 10 14 11	
•	Explain what is a property of the control of the co	data is for smity. ctivity 1-2 2-3 2-4 2-5 3-5 4-5 5-6	les of scier stand by a all constru Or of comple	ntific made by the primitic states of the pri	oject.	Draw Estim	a netward di Mosson	uration t likely 10 5 7 7 8 9 . Also,	alcula in da	ys	Pessi 2 1 1 1 1 duratio	mistic 22 8 15 10 4 11 15 on	renouse
•	Explain what is a second of the contraction of the	data is for smity. ctivity 1-2 2-3 2-4 2-5 3-5 4-5 5-6 he probability ling to 80% ch	les of scier stand by a all constrution of completances of constrution of completances of constrution of completances of construction of completances of construction of completances of construction of const	oting the completic	project.	Draw Estim	a netward di Mosson	work, Couration to likely 10 5 7 7 7 8 9 . Also, ollowin	alcula in da	ys	Pessi 2 1 1 1 1 duratio	mistic 22 8 15 10 4 11 15 on	[
2. 4	Compute the correspond	data is for smity. ctivity 1-2 2-3 2-4 2-5 3-5 4-5 5-6 he probability ling to 80% cl	les of scier stand by a all construction of completances of construction of co	ptimistic 5 4 4 5 6 etting the completic 1 0.1587	project.	Estim Cet in 3 consider 0	a netw ated di Mos 0 days r the fo	work. Couration to likely 10 5 7 7 8 9 . Also, ollowin 8 0.9	find cong Z-ta	ys	Pessi 1 1 1 duration comp	mistic 22 8 15 10 4 11 15 on	[
2. 4	Compute to correspond Probability Explain where the correspond Explain roles are the correspond roles are the correspond roles are the correspond roles are the correspond ro	data is for smity. ctivity 1-2 2-3 2-4 2-5 3-5 4-5 5-6 he probability ling to 80% character of Project	les of scier stand by a all construction of complemances of co	ottion Properties of the completic of th	project. project. on. C	Estim Estim onside: 0 1.5 ts and	a netw ated di Mos 0 days r the fo 1 0.8413 Project	vork. Couration to likely 10 10 10 10 10 10 10 10 10 10 10 10 10	find cong Z-ta 2 772	ys but the able for 0.998	Pessi 1 1 1 duration comp	mistic 22 8 15 10 14 11 15 on putations.	For [
2. 4	Compute the correspond Explain role What is Pro	data is for smity. ctivity 1-2 2-3 2-4 2-5 3-5 4-5 5-6 he probability ling to 80% cl	les of scier stand by a all construction of comple nances	otimistic 5 2 4 4 5 6 bting the completi -1 0.1587 ent Conse the adv	project. project. on. C	Estim Estim onside: 0 1.5 ts and	a netw ated di Mos 0 days r the fo 1 0.8413 Project	vork. Couration t likely 10 5 7 7 8 9 . Also, ollowin 3 0.9 t Mana	find cong Z-ta 2 772	ys but the able for 0.998	Pessi 1 1 1 duration comp	mistic 22 8 15 10 14 11 15 on putations.	
2. 4	Compute the correspond Explain role What is Prophases - in	data is for smity. ctivity 1-2 2-3 2-4 2-5 3-5 4-5 5-6 he probability ling to 80% cl 3 ity 0.0013 les of Project oject Pre-plantyolved in Project	of completances of completance	ptimistic ptimistic 2 4 4 5 6 etting the completic 10.1587 ent Conse the advanning	project. project. project. on. C	Estim Estim cet in 3 onside: 0 0.5 ts and ges of p	a netward dated do Mos 0 days or the for 1 0.8413 Project project project or oject	vork. Couration to likely 10 5 7 7 8 9 . Also, ollowin	find ong Z-ta 2 772 ger lanning	out the able for 3 0.998	Pessi 1 1 1 1 duration comp 37	mistic 22 8 15 10 14 11 15 on putations.	for [
2.	Compute to correspond Probability Explain when the correspond Explain rol What is Prophases - in Differential	data is for smity. ctivity 1-2 2-3 2-4 2-5 3-5 4-5 5-6 he probability ling to 80% character of Project oject Pre-plan	les of scier stand by a all construction of complemances of co	otting the completic of the advanting veling an	project. project. oject. oject. oject. oject.	Estim Estim Onside: O I.5 Its and I ges of p	a netw ated di Mos 0 days r the fo 1 0.8413 Project project	vork. Couration to likely 10 5 7 7 8 9 . Also, ollowin	find ong Z-ta 2 772 ger lanning	out the able for 3 0.998	Pessi 1 1 1 1 duration comp 37	mistic 22 8 15 10 14 11 15 on putations.	
2.	Compute the correspond Explain roll Explain	data is for smity. ctivity 1-2 2-3 2-4 2-5 3-5 4-5 5-6 he probability ling to 80% change to 80% ch	of completances of completance	otting the completion of the advancing and Ma	project. project. project. project. project.	Estim Estim cet in 3 consider 05 ts and 1 ges of p	a netward ated do Mosson of the formula of the form	vork. Couration tilkely 10 5 7 7 7 8 9 . Also, obliowir 3 0.9 til Mana Pre-pl	find cong Z-ta 2 772 lanning	out the able for 3 0.998	Pessi 1 1 1 1 duration comp 37	mistic 22 8 15 10 14 11 15 on putations.	[[[[

Laissez - faire.



Paper / Subject Code: 58902 / Management and Project Planning in Construction.

4. a) The following data refers to time motion study of a RMC-transit mixer filling operation for earth moving activity:

Obs. no.	Time reqd.	Time reqd.	Time reqd.	Time reqd.	Time reqd.
	for transit	for adjust-	to pour	to ensure	for transit
	mixer to	ment of	concrete in	transit	mixer to
	enter	transit	transit	mixer is	move out
	marked	mixer	mixer	ready to	of the
	area of	below the	(sec.)	move out	marked
	RMC yard	RMC	18 19 18 18 18 18 18 18 18 18 18 18 18 18 18	of yard	area of
	(sec.)	funnel	74,02,62.62	without	RMC yard
		(sec.)	FOX303	concrete	(sec.)
		25		spillage	36.8 30 50 50
				(sec.)	
1	45	111	210	CO 1910 5.	42
2	55	156	285	145	46
3	35	∴1 <u>40</u> > \	S (2183 C)	S 3185 C	₹ 35
4	52	189	्रे ो३१ ्	136	54
5	58 A	33 V	\$\$\d\$55\\	145	92

Based on statistical analysis, determine which sub-activity is most efficiently performed and which is least consistently performed. Comment on what may be the possible reasons for the poor performance of the sub-activity

b) Discuss Site mobilization and demobilization aspects involved in a highway project.

[06] [06]

c) State the application of MIS in construction.

FO 41

a) What are Work Study applications in Civil engineering.

[04]

b) From Followings Construction Activities, Draw PDM Network and Find ES, EF LS, LF & Critical Path

Activity	Start	A	B	· C	D	E	⟨°F⟩	G^{\setminus}	H	I	J	K	End
Predecessor	\$ - {\$	Start	Start	A(SS+3)	Start	В	A^{\times}	A,D	C	F,	E(E	I,J,K
50,50,00			18 EE				(FS-	a, *		H(FF-	FS+2),		
	100		(0,0				1)			2)	G(FF+3)		
Duration	0	7	5	11	ે10	9	ें 5	8	8	4	12	3	0

c) Explain method study. Describe various techniques used for method study

[06]

[10]

6. a) Give the factors included in computing indirect cost of accidents.

[04]

b) Explain project clearance procedure and necessary documentation for mega Structures.

[05]

c) State and explain various software used in construction project scheduling.

[04]

[07]

d) Design a short training programme for site engineers on tunnel site.

-

Page 2 of 2

5.