Total No. of Questions: 12]	90	SEAT No.:	
P1685		[Total No. of Pages	: 3
	[5460] 502		

[5460]-502

	INFRASTRUCTURE ENGINEERING	\mathcal{R}_{r}			
	CONCEDITORION DECUMENTO	æ			
	CONSTRUCTION TECHNIQUE				
(2015 Pattern) (Semester - I)					
Time: 2½ H	Iours] [M	Max. Marks : 70			
Instructions	s to the candidates:	Co+			
1) A	Inswer any one from questions 1 or 2, 3 or 4, 5 or 6, 7 or 8,	9 or 10, 11 or 12.			
2) N	Neat diagrams must be drawn wherever necessary.				
3) F	Figures to the right side indicate full marks.				
4) A	Issume suitable data if necessary.				
~ /	What is need of mechanization in construction industry wnechanization?	with demerits of [6]			
b) E	Explain with neat sketch coning of wheel.	[5]			
	OR				
Q2) a) E	Explain in brief the role of transportation in infrastructure	engineering.[6]			
b) D	Define following terms: Turnout, Stock rails, Switch.	[5]			
	16.				
<i>Q3)</i> a) W	With an aid of a neat sketch, explain points and crossing	gs. [5]			
	Explain in brief the dredging systems and what is suc redging?	tion method of [6]			
	OR	8			
	0'.00	Y			
Q4) a) E	Explain with neat diagrams dewatering systems used in c	construction.[5]			
	Define permanent way and state its components & exp				
bi	orief.	[6]			

Q5)	a)	Beam Method with neat sketch.	[6]
	b)	Write a note on Micro Tunneling.	[6]
		OR	
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<i>Q6</i>)	a)	Give the names of types and methods of Tunnel Ventilation. Explain one in detail.	any [6]
	b)	Explain the Tunnel Boring Machine (TBM) Technique in detail.	[6]
Q7)	a)	With labeled sketch, Define the following terms.	[6]
		i) Shaft	
		ii) Addit	
		iii) Portal	
		iv) Pilot Tunnel	
	b)	List out the various components of Port. Explain any two in detail.	[6]
	0	OR	
Q8)	a)	Define the term Breakwater. Explain necessity in detail.	[6]
~ /	b)	Write a short note on Wet Dock.	[6]
	0)	White a short note on wet Dock.	[0]
Q9)	a)	Discuss the site selection criteria for harbors.	[6]
2 /	b)		
	0)		•. 🔾
		in detail. OR Define the following terms (any four) i) Fenders ii) Dolphins iii) Quay iv) Bulkhead v) Wharves vi) Jetty	
Q10)	a) .	Define the following terms (any four)	[6]
Q10)	a) (i) Fenders	լսյ
		ii) Dolphins	
		iii) Quay	
		iv) Bulkhead	
	•	v) Wharves	
•		vi) Jetty	
	b)	Explain the Preventive Maintenance of Equipment.	[6]
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Q11) a)	what is Depreciation? Explain any one method of Depreciation.	լսյ
b)	Write a short note on: Operating Cost of Equipment.	[6]
	OR	
Q12) a)	Discuss in brief various factors affecting selection of equipment project.	for a [6]
b)	Write a short note on :	[6]
	i) Economic life of Equipment.	
	ii) Dumpers.	

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