DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

	Supplementary Examination – Summer 2022							
	Course :.TY B-Tech	Branch : Civil Engg.	Semester : VI					
	Subject Code & Name : BTCVC603 Concrete Technology							
	Max Marks : 60	Date : / /	Duration: 3.45 Hr.					
	 Instructions to the Students: 1. All the questions are compulsory. 2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question. 3. Use of non-programmable scientific calculators is allowed. 4. Assume suitable data wherever necessary and mention it clearly. 							
			(Level/CO)	Marks				
Q.1	Solve Any Two of the Follow	ring						
A)	Explain dry process of manufa	acturing of portland cement. Also	o draw a CO1	06				
	flow chart of this method.							
B)	Enlist types of Cement. Explai	in any one.	CO1	06				
C)	Explain Initial & find setting ti	ime test carried out on cement.	CO1	06				
Q.2	Solve Any Two of the Follow	ring						
A)	Write short notes on classificat	tion of Aggregate.	CO1	06				
B)	Explain factors affecting work	ability.	CO2	06				
C)	Enlist types of curing. Explain	membrane curing.	CO2	06				
Q.3	Solve Any Two of the Follow	ring						
A)	Explain High strength concrete	e in detail.	CO2	06				
B)	Explain effect of W/C ratio on	strength of concrete.	CO2	06				
C)	Explain types of admixtures an	nd their purposes.	CO2	06				
Q.4	Solve Any two of the Followi	ng						
A)	Explain creep and shrinkage of	f concrete.	CO2	06				
B)	Explain Alkali aggregate react	ion	CO2	06				
C)	Explain factors contributing to	cracks in concrete.	CO2	06				
Q.5	Solve Any Two of the Follow	ring						
A)	Explain Non destructive testing	g of concrete.	CO2	06				
B)	Explain quality measurement i	in concrete construction.	CO3	06				
C)	Explain Segregation and bleed	ling of concrete.	CO1	06				

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	Supplementary Examination – Summer 2022					
	Course: B. Tech.Branch : Civil EngineeringSemester : VI					
	Subject Code & Name: BTCVE605E Advanced Soil Mechanics					
	Max Marks: 60 Date: Duration: 3 Hr.					
	Instructions to the Students:					
	 All the questions are compulsory. The level of question/expected answer as per OBE or the Course Outcome (CO) on 					
	which the question is based is mentioned in () in front of the question.					
	3. Use of non-programmable scientific calculators is allowed. 4 Assume suitable data wherever necessary and mention it clearly					
		(Level/	Marlas			
		CO)	Marks			
Q. 1	Solve Any Two of the following.					
A)	What is the meant by 'Primary valence bond' and 'Secondary valence bond'?	COL	(06)			
A)	ich is more important in soil engineering?					
B)	Write short note on electric charges on clay minerals.	CO1	(06)			
C)	Discuss the characteristic and construction of Kaolinite mineral and	CO1				
0)	Montmorillonite mineral with neat sketch.		(00)			
Q.2	Solve Any Two of the following.					
A)	Derive an expression for vertical stress at a point due to a concentrated load	COL				
А)	using Boussinesq's theory.		(06)			
	A single concentrated load 1000 kN acts at the ground surface. Construct an					
B)	isobar for a vertical pressure of intensity of 40 kN/sqm. Use Boussinesq's	CO2	(06)			
	formula					
C)	Write the advantages and disadvantages of Newmark's influence chart.	CO2	(06)			
Q. 3	Solve Any One of the following.					
A)	Enlist equipment used for compaction and explain any one of them in detail with	CO2				
A)	neat sketch.		(06)			
B)	Describe the pre compression techniques of cohesive soil in detail.	CO3	(06)			
C)	Explain the additives in soil technique of ground improvement.	CO3	(06)			
Q.4	Solve Any Two of the following.					
A)	Explain the procedure of soil reinforcement to slopes of embankment with neat	CO4				
A)	sketch		(06)			
B)	Explain in detail geotextile and its uses.	CO4	(06)			

C)	Enlist the method used for ground improvement of cohesion less soil and explain any one of them with neat sketch.		(06)
Q. 5	Solve Any One of the following.		
A)	Explain in detail the types of grouts in grouting technique of soil.	CO5	(06)
B)	Write the application of displacement compaction grouting technique of soil with neat sketch	CO5	(06)
C)	Write factors affecting selection of construction equipment.	CO5	(06)
	*** End ***		