Reg. No. :					

Question Paper Code: 53102

B.E./B.Tech. DEGREE EXAMINATION, NOV 2022

Third Semester

Civil Engineering

15UCE302 -ENGINEERING GEOLOGY AND CONSTRUCTION MATERIALS

(Regulation 2015)

Duration: Three hours

Answer ALL Questions

Maximum: 100 Marks

PART A - (10 x 1 = 10 Marks)

1.	Name the types of rocks which deposit and accumulate minerals in the strata's				
	(a) Igneous rocks	(b) Metamorphic rocks	(c) Sedimentary roc	ks (d) Soft r	ocks
2.	The study about me	ovement of Earth plate is		CO1- R	
	(a) Lithification	(b) Continental drift	(c) Plate tectonics	(d) Plate strati	fication
3.	Bedded structure exists in which of the following rocks CO2-				
	(a) Sedimentary ((b) Extensive igneous	(c) Metamorphic	(d) Intensive i	gneous
4.	Which of the following is Coarse grained Igneous rock CC				
	(a) Pegmatite	(b) Quartzite	(c) Shale	(d) State	
5.	A good quality stone must absorb water less than				
	(a) 2.5%	(b) 5%	(c) 10%	(d) 15%	
6.	The colour of the brick is due to				CO3- R
	(a) Iron oxide	(b) Silica	(c) Magnesia	(d) Alumina	
7.	Initial setting time of Cement is CO-				CO4- R
	(a) 10 minutes	(b) 30 minutes	(c) 50 minutes	(d) 40 minutes	
8.	Falkiness index test	t is done for			CO4- R
	(a) Sand	(b) Rocks	(c) Coarse aggregates	(d) Ceme	nt

Which of the following is an example of Soft Wood				CO5- R			
(a) S	(a) Sal (b) Oak (c) Deodar		(d) Mahogany				
What is the life time of a moderately durable Timber				CO5- R			
(a) 1	1-5 Years	(d) 5-10 Years					
		PART - B(5)	x 2= 10Marks)				
Hov	v will you distingu	iish Joint from Fault		CO1-	Ana		
Enu	merate any three t	ypes of rocks.		CO2- U			
List	any four character	ristics of a good brick	Χ.	CO3-	·U		
. Name any two test conducted in stone aggregates.					CO4- R		
5. List the various common defects found in Timber.			CO5- U				
		PART – C (5 x 16= 80Marks)				
(a)	Summarize the crocks	elassification of Igne	ous rocks and Metamorphic	CO1- U	(16)		
		Or					
(b)			ving minerals	CO1- U	(16)		
		•					
	(IV) Martine						
(a)	-		Earth and its composition	CO2- U	(16)		
		Or					
(b)	Describe the var	ious types of Faults v	vith neat sketches.	CO2- U	(16)		
(a)	What are the test	s conducted on stone Or	s. Explain any one in detail.	CO3- U	(16)		
(b)	Describe the m diagram.	ethod of manufactu	ring of bricks with neat	CO3- U	(16)		
	 (a) \$ What (a) \$ How Enue List Nam List (a) (b) (a) (b) (a) 	 (a) Sal What is the life time of (a) 1-5 Years How will you distingute in the intervention of the i	(a) Sal (b) Oak What is the life time of a moderately durab (a) 1-5 Years (b) 5-15 Years PART – B (5 \pm How will you distinguish Joint from Fault Enumerate any three types of rocks. List any four characteristics of a good briek Name any two test conducted in stone aggr List the various common defects found in \pm PART – C ((a) Summarize the classification of Ignerrocks Or (b) Write the physical properties of follow (i) Conglomerate (ii) Limestone (iii) Schist (iv) Marble (a) Explain the interior structure of the with neat sketches. Or (b) Describe the various types of Faults w (a) What are the tests conducted on stone Or (b) Describe the method of manufactu	(a) Sal(b) Oak(c) DeodarWhat is the life time of a moderately durable Timber(a) 1-5 Years(b) 5-15 Years(c) 10-15 YearsPART – B (5 x 2= 10Marks)How will you distinguish Joint from FaultEnumerate any three types of rocks.List any four characteristics of a good brick.Name any two test conducted in stone aggregates.List the various common defects found in Timber.PART – C (5 x 16= 80Marks)(a) Summarize the classification of Igneous rocks and Metamorphic rocksOr(b) Write the physical properties of following minerals (i) Conglomerate (ii) Limestone (iii) Schist (iv) Marble(a) Explain the interior structure of the Earth and its composition with neat sketches. OrOr(b) Describe the various types of Faults with neat sketches.(a) What are the tests conducted on stones. Explain any one in detail. OrOr(b) Describe the method of manufacturing of bricks with neat	(a) Sal(b) Oak(c) Deodar(d) MahoganWhat is the life time of a moderately durable TimberCC(a) 1-5 Years(b) 5-15 Years(c) 10- 15 Years(d) 5-10 YearPART - B (5 x 2= 10Marks)PART - B (5 x 2= 10Marks)CO1-How will you distinguish Joint from FaultCO1-Enumerate any three types of rocks.CO2-List any four characteristics of a good brick.CO3-Name any two test conducted in stone aggregates.CO4-List the various common defects found in Timber.CO5-PART - C (5 x 16= 80Marks)CO1-U(a) Summarize the classification of Igneous rocks and Metamorphic rocksCO1-U(b) Write the physical properties of following minerals (ii) Conglomerate (iii) Limestone (iii) Schist (iv) MarbleCO1-U(a) Explain the interior structure of the Earth and its composition with neat sketches.CO2-U(b) Describe the various types of Faults with neat sketches.CO2-U(a) What are the tests conducted on stones. Explain any one in detail.CO3-U(b) Describe the method of manufacturing of bricks with neatCO3-U		

19.	(a)	Discuss the manufacturing process of Cement with flow diagram and sketches	CO4- U	(16)
		Or		
	(b)	Write the procedure for following tests	CO4- U	(8)
		(i) Compressive strength of cement		
		(ii) Crushing strength of coarse aggregates.	CO4- U	(8)
20.	(a)	List the varieties of Industrial Timber available in market. Explain any one in detail.	CO5- U	(16)
		Or		
	(b)	Discuss the manufacturing process of Steel with flow diagram.	CO5- U	(16)