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I Semester Diploma Examination, June/July-2023

MATERIALS OF CONSTRUCTION

[Max. Marks : 100 Time: 3 Hours] Answer one full question from each section. Instruction: (i) (ii) One full question carries 20 marks. SECTION - I Distinguish between granite and marble stone. $5 \times 1 = 5$ 1. (a) Write the uses of stones as an engineering material. $5 \times 1 = 5$ (b) Classify the Rocks Geologically and explain in detail. 3 + 7 = 10(c) OR $5 \times 1 = 5$ 2. (a) Discuss engineering aspects of timber. What are the advantages of artificial seasoning? $5 \times 1 = 5$ (b) 2+4+4=10Illustrate the method of seasoning of timber. (c) SECTION - II 3 + 2 = 5List the properties and uses of fly ash bricks. 3. (a) Explain the raw materials for manufacturing bricks. 5 (b) (c) Classify the bricks based on classes. 2 + 8 = 10OR List the engineering aspects of bricks. $5 \times 1 = 5$ 4. (a) 3 + 2 = 5Discuss the properties & uses of refractory bricks. (b) $10 \times 1 = 10$ What are the requirements of good brick? (c)



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SECTION - III

5.	(a)	List the engineering aspects of lime.	$5 \times 1 = 5$
	(b)	Define natural cement & artificial cement.	2.5 + 2.5 = 5
	(c)	Explain various types of lime.	3 + 7 = 10
		OR	
6.	(a)	Illustrate the functions of mortar.	$5 \times 1 = 5$
	(b)	Explain the ingredients of cement concrete.	2 + 8 = 10
	(c)	List the sources of fine and coarse aggregate.	2.5 + 2.5 = 5
		SECTION – IV	
7.	(a)	List the properties of mild steel.	5 × 1 = 5
	(b)	Write the properties of copper.	5 × 1 = 5
	(c)	Explain the types of cast iron.	2 + 8 = 10
		OR	
8.	(a)	What are the properties & uses of aluminium alloys?	3+2=5
	(b)	Name the market forms of copper, zinc and tin.	2.5 + 2.5 = 5
	(c)	Explain the properties and uses of Zinc and Tin.	3+2+3+2=10
		SECTION - V	
9.	(a)	List the objects of varnish.	5 × 1 = 5
	(b)	Discuss the ingredients of paints.	4 + 6 = 10
	(c)	What are the characteristics of varnish?	$5 \times 1 = 5$
		OR	INC.
10.	(a)	Explain the properties & uses of UPVC.	3+2=5
	(b)	Explain briefly (any five) types of glass.	$5 \times 2 = 10$
	(c)	Define and list the uses of acrylic flooring.	2 + 3 = 5