

## 17209

## 11718

**Instructions**: (1) **All** questions are **compulsory**.

- (2) Answer each next main question on a new page.
- (3) Illustrate your answers with neat sketches wherever necessary.
- (4) Figures to the **right** indicate **full** marks.
- (5) Mobile Phone, Pager and any other Electronic Communication devices are **not** permissible in Examination Hall.

		Marks
1. At	tempt <b>any ten</b> :	20
1)	Give any 2 applications of Irrigation Engineering.	2
2)	State different types of materials.	2
3)	Explain dressing of stone in short.	2
4)	Define line with chemical reaction.	2
5)	What are the sources of silt?	2
6)	State the classification of burnt clay bricks.	2
7)	Name the chemical ingredients of cement.	2
8)	State the two properties of artificial sand.	2
9)	Enumerate different types of heat insulating materials (any four).	2
10)	Define fibre.	2
11)	Write down the uses of adhesive.	2
12)	State different types of construction waste.	2
2. At	tempt any four:	16
1)	Explain role of Environmental Engineering in Civil Engg.	4
2)	State the requirement of Ideal Construction Materials.	4
3) Draw a neat sketch of following defects in Timber.		4
,	a) Heart Shake b) Ring Shake	
	c) Cup d) Bow.	

	4) Write classification of Asphalt.	Marks 4
	5) Give applications of soil as a construction material.	4
	<ul><li>6) State the various methods of quarrying, explain in short.</li></ul>	4
3.	Attempt any four:	16
	<ol> <li>State the advantages of seasoning of Timber.</li> </ol>	4
	2) Explain Field Slaking of lime.	4
	3) Explain various forms of bitumen.	4
	4) State the field test carried out on brick.	4
	5) List out the properties of glass.	4
	6) State the properties of solid concrete blocks.	4
4.	Attempt any four:	16
	1) Explain various methods of moulding of bricks.	4
	2) Write two properties of particle board and veneers.	4
	3) Draw the flow diagram of manufacturing process of cement.	4
	4) Explain different types of tiles with their suitability.	4
	5) What are the uses of plywood?	4
	6) State the requirement of cement as a construction material.	4
5.	Attempt any four:	16
	1) Enlist any four types of fibres with their application.	4
	2) What are the uses of epoxy?	4
	3) Explain the types of termites.	4
	4) What are the causes of dampness in building?	4
	5) Give the suitability of different sound insulating materials.	4
	6) What are the uses of ceramic materials?	4
6.	Attempt any four:	16
	1) Explain the constituent of paint in short.	4
	2) Give two properties and two uses of 'Acoustic Plaster'.	4
	3) List the four properties of 'POP' in building construction.	4
	4) State uses of bagasse in construction.	4
	5) What are the objectives of using Fly-ash in cement or concrete.	4
	6) State the uses of polymers.	4