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Total No of Questions: [12]**SEAT NO. :****[Total No. of Pages : 2]****S.E. 2008 (BUILDING MATERIALS AND CONSTRUCTION)****(Semester - II)****Time: 3 Hours****Max. Marks : 100****Instructions to the candidates:**

- 1) Answers to the two sections should be written in separate answer books.
- 2) Answer any three questions from each section.
- 3) Neat diagrams must be drawn wherever necessary.
- 4) Figures to the right side indicate full marks.
- 5) Use of Calculator is allowed.
- 6) Assume Suitable data if necessary

SECTION I

Q1)	a)	Discuss in brief the importance of 'National Building Code' of India.	[6]
	b)	Explain in detail the merits of Raft foundation?	[6]
	c)	Explain with neat sketch the repairing of basement construction.	[4]
Q2)	a)	Write a short note on fly ash bricks.	[4]
	b)	Explain in detail any one lab test on bricks.	[6]
	c)	Explain with neat sketch the construction procedure of 'Ashlar fine masonry'.	[6]
Q3)	a)	Draw a neat sketch of form work for 'RCC slab'.	[6]
	b)	Explain with neat sketch, the block masonry construction.	[6]
	c)	Draw neat sketches of any two precast concrete members.	[4]
Q.4)	a)	Write the comparison of hollow & solid block masonry.	[6]
	b)	Explain the construction procedure of composite masonry.	[6]
	c)	Write a short note on 'Joints in concrete work'	[4]
Q5)	a)	What are the IS specifications of flooring materials?	[6]
	b)	Explain with neat sketch the 'Timber flooring'?	[6]
	c)	Explain with neat sketch the fixing of 'Mangalore tiles'	[6]
Q6)	a)	Write a short note on i) Asphalt Flooring ii) Terrazzo Flooring	[6]
	b)	Explain with neat sketch, the detailed procedure of installation of steel trusses?	[6]
	c)	What is the purpose of providing 'North Light Trusses' in Industrial buildings?	[6]
SECTION II			
Q7)	a)	Explain with sketch. i. Frame ii. Hold Fast iii) Horn	[6]
	b)	Describe in detail stability of arches.	[6]
	c)	Define Plastering, Explain step by step procedure of cement plastering.	[6]
Q8)	a)	Enlist the types of windows and explain Dormer window.	[6]

	b)	Distinguish between lintels and arches	[6]
	c)	What is wall Cladding?. State objectives of painting.	[6]
Q9)	a)	Define vertical circulation. Enlist the different means of vertical circulation. Explain any one in detail.	[6]
	b)	Compare escalators and stairs.	[4]
	c)	You are the site-in-charge, what safety precautions you will take on site.	[6]
Q10)	a)	Design a R.C.C. dog-legged staircase and draw a detailed plan. A staircase room available is 3.4 m X 5 m with the outer wall thickness of 0.23 m. Height of the ceiling is 3.2 m. The thickness of R.C.C. slab is 0.10 m.	[6]
	b)	Describe escalators in detail.	[4]
	c)	Describe storage of material on site?	[6]
Q11)	a)	Define seasoning of timber. Explain defects in timber.	[6]
	b)	Write short notes on- i) Eco-friendly material ii) Ferro-crete	[6]
	c)	Write down engineering properties of- i) Glass ii) Ceramic products	[4]
Q12)	a)	Define seasoning of timber. Explain any one method in detail.	[6]
	b)	Write short notes on- i) Ceramic products ii) Gypsum	[6]
	c)	Write down engineering properties of- i) Plastic ii) Aluminium	[4]