

Instructions to the Students:

1. Solve **ANY FIVE** questions out of the following.
2. The level 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.
5. All sketches should be labeled, neat and proportionate

	(Level/CO)	Marks
Q. 1 Solve Any Two of the following.		
A) State the comparative merits and demerits of stone masonry and brick masonry?	(CO 1)	6
B) Draw neat sketches, showing plan of two consecutive courses of 1½ brick thick corner of wall in English bond?	(CO 1)	6
C) What are the general principles observed in brick masonry?	(CO 1)	6
Q.2 Solve Any Two of the following.		
A) What are the chief ingredients of plain cement concrete? Describe in detail the properties of each?	(CO 2)	6
B) Describe the properties of fresh and hardened concrete?	(CO 2)	6
C) Explain the role of admixtures in concrete?	(CO 2)	6
Q. 3 Solve Any One of the following.		
A) Sketch a semicircular arch showing all technical terms used in arch? Sketch the entire arrangement showing the details of centering work?	(CO 3)	12
B) Explain Brick lintel, reinforced concrete lintel and steel lintel with sketches?	(CO 3)	12
Q.4 Solve Any Two of the following.		
A) Draw a neat sketch of Frame and Panelled door? (plan , section & elevation)	(CO 3)	6
B) Draw a neat sketch of Louvered window?	(CO 3)	6
C) Draw a neat sketch of wooden stair showing all components?	(CO 3)	6
Q. 5 Solve Any One of the following.		
A) Explain king post truss and its joints with neat sketches?	(CO 3)	12
B) Explain Queen post truss and its joints with neat sketches?	(CO 3)	12
Q. 6 Solve Any two of the following.		
A) Explain merits and demerits of prefabrication?	(CO 4)	6
B) Describe various types of prefabrication? Explain the term ‘Tolerance ‘?	(CO 4)	6
C) Describe various guidelines for transportation and erection in prefabrication?	(CO 4)	6

***** End *****