T.y. civil

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Mid Semester Examination – Sept./Oct. 2019

Course: B. Tech in Civil Engineering **Sem: I**

Subject Name: Design of steel structure. **Subject Code: BTCVC501 A**

Max Marks: 20 **Date: -28-09-2019** **Duration: - 1 Hr.**

Instructions to the Students:

1. Illustrate your answers with neat sketches, diagrams etc. where ever necessary.
7. Necessary data is given in the respective questions. If such data is not given, it means that the knowledge of that data is a part of the examination.
8. Use IS 800-1984, Steel table is permitted.

		(Level/CO)	Marks
Q. 1			**6**
	1. Draw schematic production of structural steel in integrated steel plants.	**C1/CO1**	
	2. What are the types of structural steel?	**C1/CO1**	
	3. Distinguish between analysis and design.	**C1/CO2**	
	4. What is DL, LL, and WL? Relevant IS codes used.	**C1/CO2**	
	5. Why minimum pitch values are specified in IS code?	**C1/CO1**	
	6. Why are fillet welds often used at site?	**C1/CO1**	
Q.2	**Solve Any Two of the following.**		**3 X 2**
(A)	**List out Advantages of Steel structure over RCC structure?**	**C2/CO2**	
(B)	**Explain Slenderness ratio? What are the Codal provisions for it**	**C2/CO2**	
(C)	**Explain rivet Value?**	**C2/CO1**	
Q. 3	**Solve Any One of the following.**		**8**
(A)	**A Tie member in a bracing system consists of two angles ISA 75 x 75 x 6 bolted to 10 mm thick gusset plate. One on each side using a single row of bolt. Determine the tensile capacity of the member of bolts required?**	**C3/CO3**	
(B)	**Compute Compressive capacity of 2 ISA 200 x 200 x 10. Used as Continuous strut member of truss for 3meter length & what is welded length required, Draw in details.**	**C3/CO3**	

***** End *****