



# WALCHAND COLLEGE OF ENGINEERING

(Government Aided Autonomous Institute)

Vishrambag, Sangli - 416415

F.Y. B.Tech. Electrical, F.Y. BTech. Computer Science Engg.

MSE, ODD SEMESTER, AY 2023-24

Civil and Mechanical Engineering (7CM106)



MSE

PRN: \_\_\_\_\_

Day & Date: Wednesday, 25/10/2023

Time : 3.30 pm to 5.00 pm

Max Marks: **30**

**IMP:** Verify that you have received question papers with correct course code, branch etc.

**Instructions**

- All questions are compulsory.
- Writing question number on answer book is compulsory, otherwise answers may not be assessed.
- Assume suitable data wherever necessary.
- Figures to the right of question text indicate full marks.
- Mobile phones, smart gadgets and programmable calculators are strictly prohibited.
- Except PRN anything else writing on question paper is not allowed.
- Exchange/Sharing of stationery, calculator etc. not allowed.

Text on the right of marks indicates course outcomes (Only for faculty use)

		Marks	
Q1	A) State the factors affecting wind load on building. Mention relative IS Code	2	CO3
	B) Explain the load transfer mechanism for Load bearing structure & Framed structure.	3	CO3
	C) Enlist the principles of planning. Explain any two in detail	5	CO3
Q2	A) Discuss the properties and uses of concrete.	5	CO5
Q3	Summarize the suitable materials for the following. (Any five) 1. Integrated Circuits of CPUs, GPUs, and RAM 2. Hard Drive Discs 3. Capacitors 4. Printed Circuit Boards 5. Desktop cabinet 6. Heat sinks	5	CO1
Q4	Explain the steps in casting.	5	CO1
Q5	A) Explain the governing laws of heat transfer for conduction and radiation	3	CO1
	B) Calculate the heat energy gained when 5 kg of water 20°C is brought to its boiling point i.e. 100°C (Specific heat of water = 4.2 kJ/kg K). State governing law of heat transfer during the boiling of water.	2	CO2

.....End of question paper.....