

PRACTICE SET
End Semester Examination, Spring- 2026

Program: B.Tech (MiE)
Semester II
Subject: Workshop Practice
Subject Code: 8ECS104

Course Outcomes	Description
CO1	Understand the concepts of various manufacturing methods such as casting, forming machining.
CO2	Understand the additive manufacturing with its implication in manufacturing.
CO3	Ability to Produce Fitting jobs as per specified dimensions with the use of various fitting tools.
CO4	Understand the basic concepts of electrical & electronics and understand the working principle of motors.
CO5	Ability to understand the recyclable plastics & non-recyclable plastics and various manufacturing process & also understand the various additives & fillers used in plastics & its implications.
CO6	Understand the various the types of welding such as Arc welding, TIG, MIG & various advanced welding & its practical implications in industrial arena.

UNIT I

Section II (10 marks)

1. Describe the steps in Casting Process.CO 1 (Understand)
2. Describe forming process. Write advantages and disadvantages of forming CO 1 (Understand)
3. Describe casting process briefly. Write advantages and disadvantages of casting. CO 1(Understand)
4. What is Machining process? CO 1(Remember)
5. What is Joining process? CO 1(Remember)

Section III (20 marks)

6. Machining process is important part of workshop. Explain it. Write advantages and disadvantages CO 1(Apply)

7. Elaborate in details about Pattern used in workshop. Enlist various types of patterns with the pattern making material.CO 1 (Apply)

UNIT II

Section II (10 marks)

8. What is additive manufacturing? Write its functional principle and advantages. CO2(Analyze)
9. Elucidate the types of CNC machines. Write its advantages and disadvantages. CO2 (Evaluate)

UNIT III

Section II (10 marks)

10. What do you understand by power tools? List some hazardous conditions while using power tools. CO3(Understand)
11. Explain various types of tools used in fitting shops with their usage. CO 3 (Understand)

UNIT IV

Section II (10 marks)

12. State the various tools used in Electrical Workshop. CO 4 (Remember)
13. Suppose you have to do a connection of a ceiling fan, then what are the precautionary measure should you take while doing the wire connection with the main switch board. Elaborate in details. CO 4 (Apply)
14. List the advantages and limitation of power tools. CO 4 (Remember)

UNIT-V

Section II (10 marks)

15. What is carpentry? Which measuring and marking tools are used in carpentry shop? CO 4 (Understand)
16. Explain different types of holding and supporting tools used in carpentry shop. CO 4 (Understand)

Section III (20 marks)

17. Write the various cutting tools used in carpentry shop for the purpose of cutting wood. Explain the two saws with neat sketch. CO 4 (Evaluate)

UNIT-VI

Section II (10 marks)

18. What is injection molding? Write the main components of injection molding machine. CO5(Remember)
19. Illustrate about the mold. Explain mold design consideration and molding defects. CO5(Analyze)

UNIT-VII

Section II (10 marks)

20. What is pattern allowance? Why pattern allowance is necessary for pattern? CO5 (Understand)
21. What are the properties of molding sand? CO5 (Remember)

Section III (20 marks)

22. Can you discuss the terms associated with casting with proper diagram? Explain all types of casting defects. CO5(Apply)
23. (i) Categorize all the different types of molding sand used in casting? CO5 (Apply)
(ii)Pattern allowance is important in workshop. Elaborate pattern allowance. Explain all types of pattern allowances used in casting. CO5(Apply)

UNIT-VIII

Section II (10 marks)

24. Paraphrase welding process? Write its advantages and disadvantages. CO 6 (Remember)
25. Explain the types of flame used in gas cutting? CO 6 (Understand)
26. Enlist the classification of welding. Explain the processes of brazing with a neat sketch.CO 6 (Analyze)

Section III (20 marks)

27. Illustrate the working of gas welding with diagram. Describe in brief the equipment required for Gas welding with a neat sketch. CO 6 (Apply)
28. Sketch the diagram of arc welding & write it's working. Explain all types of welding defects. CO 6 (Apply)

Summary Sheet:

CO Wise

CO	Q. No	Marks
CO1	1,2,3,4,5,6,7,23,24,25,26	150
CO2	8,9	20
CO3	10,11,17,18,19	60
CO4	12,13,14,15,16	70
CO5	20,21,22,23	40
CO6	24,25,26, 27,28	80
Total		420

Unit Wise

Unit	Q. No	Marks
Unit 1	1,2,3,4,5,6,7	90
Unit 2	8,9	20
Unit 3	10,11,12	40
Unit 4	13,14,15,16	50
Unit 5	17,18	40
Unit 6	19,20,21,22,23	40
Unit 7	24,25,26	60
Unit 8	25,26,27,28	80

Total	420
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Blooms Taxonomy Level (BTL) Wise

BTL	Q. No	Marks
LOT	1,2,3,4,5,8,9,10,11,13,14,15,17,18,20,21,23,24,27,28	200
HOT	6,7,12,16,19,22,25,26,29	220
Total		420

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Disclaimer: - This is a practice set. The Question in End term examination will differ from the practice set. This practice set is meant for practice only.