

For Electrician, Fitter, Diesel Mech., and Welder TP-25hrs & TT-7 hrs. per WEEK

For COPA TP- 30hrs. & TT-6 hrs. per WEEK

LESSON PLAN (FOR RELATED THEORY PART)

TRADE : Welder	SEM:	I	YEAR-1
LEARNING OUTCOME	2	EXERCISE NO	LESSON NO (REF TO PRACTICAL):

DAY (1)	Hrs (2)	Major topics/Lesson Title (Reference syllabus) (3)	Details of each day plan (Explanation) /Sub topics (Reference NIMI book) (4)	Text and media content to be displayed for viewing (5)	Media nature (i.e., 2D image/ 3D image / animation video/ Simulation etc.,) (6)	Whether Direct teaching or digital video for self learning (7)	Type of Assessment (like Quiz, Identify, Fill in the blank, MCQ, etc.) (8)
1		Arc welding power sources: Transformer	Introduction to arc welding transformer	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Types of basic power sources AC & DC	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Construction of AC transformer	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Construction of DC transformer	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Working principle to Ac transformer	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Working principle to DC transformer	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
2		Motor Generator set	DC welding Generator set	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Diesel welding Generator set	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Working principle of DC welding generator	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment

3		Rectifier Set	Introduction to rectifier set	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Types of Rectifier set -AC &DC	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Construction of AC Rectifier set	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Construction DC Rectifier set	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Working principle of AC & DC rectifier	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
4		Invertor type welding Machine and its care & maintenance	Introduction to Inverter set	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Construction of inverter type welding machine.	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Working principle of Inverter welding machine	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Care and maintenance of Inverter welding machine	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
5		Advantages and disadvantages of A.C. and D.C. welding machines	Advantages of AC Welding machine	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Disadvantages of AC Welding machine	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Advantages of DC Welding machine	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Disadvantages of Ac Welding machine	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment