

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-I	
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 (ie., 2D image/ 3D image / animation video/ Simulation etc.,) (6)	Whether Direct teaching or digital video for self learning (7)	Type of assessment Assessment (like Quiz, Identify, Fill in the blank, MCQ, etc.) (8)
1	1	Introduction and Definition of Welding	Invention of Welding	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Definition and different ways to weld	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Advantages of Welding over other methods of joining metals	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
2	1.5	Arc and Gas Welding Equipments, tools and accessories.	Necessity of an Arc Welding machine	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Different types of Arc Welding machine	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Arc Welding accessories	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Function of each accessory	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
3	1.5	Arc and Gas Welding Equipments, tools and accessories.	Features of oxygen and acetylene gas cylinders	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Features of oxygen and acetylene gas regulators	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Hose-connectors used in oxygen and acetylene regulators	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Function of hose-protectors	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment

			Functions of blowpipes and nozzles	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Hand tools used by a welder	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
4	1.5	Various Welding Processes and its applications	Classification of the electric welding processes	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Classification of the gas welding processes	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Classification of the other welding processes	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Applications of various welding processes - SMAW, GMAW, GTAW/TIG, Submerged Arc Welding	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
5	1.5	Arc and Gas Welding Terms & Definitions	Butt Weld, Fillet Weld	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Miter Line, Toe of Line, Toe of Weld	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Concave bead, Convex Bead, Miter Bead	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Gas Welding Torch, Gas Cutting Torch, Gas pressure regulator	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment
			Electrode Holder, Earth Clamp	Text & Images	PPT Slides	Direct teaching /Video	Quiz and Assignment