

**GENERAL ENGINEERING
FOR
AUTOMOBILE AND ALLIED TRADES
(Fitter, Welder, Turner, Automobile, Diesel, Tool & Die Maker)**

ENGINEERING MATERIALS:

Ferrous, non-ferrous Materials, General material properties, Engineering uses of common ferrous and non-ferrous metals and their alloys.

FITTING:

Fitting tools, Holding tools, striking tools, cutting tools, Types of chisels, Hacksaw's Files, scrapers, Drilling tools, measuring marking and testing tools, Hammers, Vice-works, Surface plates, vices, spanners, double ended-ring, adjustable socket and box pipe Wrenches.

WELDING:

Types of welding, welding joints, welding positions, Arc welding and Gas welding- Principles- types of Gas and Arc welding-principles only, Electrode coating, Testing of welded joints, Brake welding, soldering and Brazing.

MEASURING INSTRUMENTS AND GAUGES:

Introduction, classification of measuring instruments, types of measuring instruments- principles and uses. Gauges- classification of Gauges- principles and uses.

PLASTICS:

Raw material for plastics, General properties, types of plastics-thermosetting and thermoplastics principles and uses.

MACHINE TOOLS:

Introduction, working principles of Lathe, Shaper, planer, Drilling, milling, operations performed in Lathe, shaper, planer, Drilling and milling, Machine specifications, work and tool holding devices, terms used in machining coolants and lubricants used for different materials with different operations. Coolants properties.

References:

1. A textbook of workshop Technology, R.S.Khurmi and J.K.Gupta, S. CHAND and Company Ltd, 1995
2. A textbook of production Technology, P.C.Sharma, S. Chand and company Ltd, 1996