Community College

M. Voc. (Production Technology)

S.No.	Topic	Content / Description	Weightage
1.	Production / Hydraulic & Pneumatic / CNC / forming operation / Machine Tools	Carpentry & pattern making, molding, smithy, forging, fitting, lathe, shaper, planner and slotter, milling machine, drilling machines, foundry, capstan and turret lathes, sheet metal forming, extrusion, powder metallurgy, installation and testing of machines, super finishing, Milling machine, Milling cutters, Work holding devices, Grinding Machines, Grinding Wheels, Wheel balancing, Wheel Dressing, Calculation of Feed & Speed in Grinding, Sheet metal forming operations, CNC Machines etc. Introduction to Fluid Properties, Pressure measuring devices, Fluid Kinematics and types of flow, Flow through pipes etc. Hydraulic and Pneumatic devices.	50%
2.	Machine Drawing & Design / Jig & Fixture / Press Tool / Theory of Machine	Machine drawing, engineering drawing, jigs & fixture, locating devices, clamping devices, different types of jigs, power press machines, Press tools, various parts of dies & press tools, designing of shearing tools, compound dies, inverted dies, progressive dies and secondary operations, Simple stresses and strains, Shear force & bending moment, Moment of Inertia, theory of machines, Bending Stress etc.	15%
3.	Thermal Engg. / Heat Treatment / Forging / Welding Casting	Welding technology, different types of welding processes, features of fusion welding, die casting machines, die casting dies, design of die casting, inspection of die casting, forging, Thermodynamics, Heat transfer, Non-conventional energy sources etc.	15%
4.	Metrology / Industrial Engg.	Industrial engineering & management, industrial ownership, financial management, labour and industrial laws, human resource management, metrology & inspection, gauge design, types of uses, Limit & Fits etc.	10%
5.	Material Science / Plastic Technology	Polymer science, plastic materials, plastic processing techniques, testing of plastics, Engineering materials, solidification of metals, iron carbon diagram, heat treatment, ferrous & Non-ferrous metals and alloys, ceramics, insulating materials etc.	10%