"PVC" NSSK G.P Bilaspur at Kalol	Department: -MECHANICAL ENGG. (5th Sem) Subject- MT-III				
	Course -DIPLOMA		Duration -3 Years		
SYLLABUS COVERAGE	Total Periods-42		Theory -42		
Sr No	Period No's	Topic	Details	Instruction Reference	Additional Study Recommended	Rema
1	1-12	**Milling**	Introduction to milling, Types of milling machines, Constructional features of Knee and Column type milling machine, Specifications of milling machine, Milling operations- plain, angular, form, straddle and gang milling, Milling cutters - Geometry and types, Cutting speed and feeds, Indexing-simple, compound, differential and angular, Job holding devices, Introduction to machining centre.	Production technology by R.K Jain & Elements of workshop technology by SK Chaudhary and Hajra,		
2	13-18	**Presses and Press Tools**	Types of Presses, their applications, Types of dies, Types of die sets, Punches, Pads, Die clearance, Stripper plates, Stops Pilots, Stock Layout	----do---		
3	19-24	**Broaching**	Introduction, Types of broaching machines, Types of broaches and their use	----do---		
4	25-28	**Metal Coating Processes**	Metal spraying, Galvanizing, Electroplating, Anodizing	----do---		
5	29-35	**Gear Generating and Finishing Processes**	Gear tooth elements, Gear milling, Introduction to gear shaping, Working principle of gear shaping machine, Working principle of gear hobbing machine, Introduction to gear finishing operations	----do---		

6	36-42	**Advanced Welding Techniques**	Working principle, process details, equipment details, advantages, limitations and applications of: Thermit Welding, MIG Welding, TIG Welding, Atomic hydrogen Welding, Electron beam welding Laser beam welding, Introduction to friction welding.	----do---		

Approved	HOD Sign.
Date 30-08-2022	