



C.U.SHAH UNIVERSITY – Wadhwan City

FACULTY OF: -Technology and Engineering (Diploma Engineering)

DEPARTMENT OF: -Mechanical Engineering

SEMESTER: - I **CODE:** - 2TE01BWS1

NAME OF SUBJECT: – Basic Workshop

Teaching & Evaluation Scheme: -

Subject Code	Subject Name	Teaching Scheme (Hours)				Credits	Evaluation Scheme							
		Th	Tu	Pr	Total		Theory				Practical (Marks)			Total Marks
							Sessional Exam		University Exam		Internal		University	
							Marks	Hours	Marks	Hours	Pr	TW	Pr	
2TE01BWS1	Basic Workshop	0	0	2	2	1	00	00	00	00	50	50	-----	100

Objectives: -

- To get knowledge of material, tool and various processes
- To get knowledge of various types of joints
- To understand safety

Prerequisites:-Basic knowledge of science.

Course Outlines:-

Sr. No.	Course Contents	Numbers of Hours
1	Introduction to Workshop Use of Hand tools and Drawing preparation of Experiments to be performed.	2
2	Carpentry Exercise – I Preparation of job which Includes operations: Marking, Cutting and Planning.	4
3	Carpentry Exercise –II Preparation of job which Includes operations: Marking, Cutting, Tenoning, Mortising and Joining.	4
4	Fitting Exercise – I Preparation of job which Includes: Marking, Punching and Filing (Squaring).	4
5	Fitting Exercise – II Preparation of job which Includes operations: Marking, Punching, Cutting (Sawing) and Filing. (Fitting exercise will be performed into Two pieces).	4
6	Sheet Metal Exercise - I Preparation of job which Includes operations: Marking, Cutting, Bending and Seaming (Use Soldering process in seaming).	4
7	Welding Practice Exercise – I Preparation of job which Includes operations: Marking, Cutting, Edge preparation, Welding and Cleaning.	4
8	Turning Exercise – I (Demonstration) Preparation of job which Includes operations: Marking, Facing, Countersinking, Plain (Parallel) turning, Shoulder turning, Taper turning, Chamfering, Knurling and Threading. (This exercise may be demonstrated in a group of 10 students).	4

Learning outcomes:-

- Know about basic tools of work shop
- Know about soldering ,Brazing and Welding process
- Know about Lathe machine basic operation
- Know about planning and preparation for job

Book Recommended:-

- S.K.Hajrachaudhri “*Work shop Practice Volume-I, II*”, Media promoters and Publication.
- Swarna Singh “*Work shop Practice*” , S.K.Kataria & Sons.
- Dr R.K.Singal “*Workshop Manual*” S.K.Kataria & Sons.
- B.S.Rghuvanshi “*Work shop Practice Volume-I, II*” Dhanpat Rai and Sons.