

WORKSHOP PRACTICE

[As per Choice Based Credit System (CBCS) scheme]

(Effective from the academic year 2017 -2018)

SEMESTER - I/II

Subject Code	17WSL16/17WSL26	IA Marks	40
Labs / Tutorial Hours/Week	3 (1 hr Tut +2 hrs lab)	Exam Marks	60
Total Number of Lecture Hours	42	Exam Hours	03

CREDITS - 02

Course objectives:

- To impart knowledge and skill to use tools, machines, equipment, and measuring instruments.
- Educate students of Safe handling of machines and tools.

Module -1

Teaching Hours

1. Use of Hand Tools: V-block, Marking Gauge, Files, Hack Saw, Drills, Taps and Minimum 3 models involving Dove tail joint, Triangular joint and Semicircular joint.
2. Welding: Study of electric arc welding tools & equipments, Models: Butt Joint, Lap Joint, T joint & L-joint.
3. Sheet Metal & Soldering Work: Development & Soldering of the models: Tray, Frustum of cone, Prism(Hexagon & Pentagon), Truncated Square Pyramid, Funnel.
4. Study & Demonstration of power tools in Mechanical Engineering.

3 Hours

Course outcomes:

At the end of the course, the student will be able to:

1. Demonstrate and produce different types of fitting models.
2. Gain knowledge of development of sheet metal models with an understanding of their applications.
3. Perform soldering and welding of different sheet metal & welded joints.
4. Understand the Basics of Workshop practices.

Scheme of Examination

Fitting Model / Sheet Metal Work: (50% of the batch to be given Fitting and remaining 50% to be given Sheet metal work including Soldering)	50 Marks
Welding:	30 Marks
Viva voce:	20 Marks
Total:	100 Marks

Ref Books: Elements of Workshop Technology:Vol I:Manufacturing Processes, S K Hajra. Choudhury, A K. Hajra Choudhury,15th Edition Reprinted 2013,Media Promoters &Publishers Pvt Ltd., Mumbai.

Note: *No mini drafters and drawing boards required. Drawings (Developments) can be done on sketch sheets using scale , pencil and Geometrical Instruments*