

University of Mumbai			
Class : F.E. (All Branches of Engineering)		Semester – I	
SUBJECT : WORKSHOP PRACTISE I			
Periods per Week (Each of 60 min.)	Lecture	--	
	Practical	04	
	Tutorial	-	
		Hours	Marks
Evaluation System	Theory Examination	--	--
	practical	--	--
	Oral Examination	--	--
	Term Work	--	50
	Total	--	50

University of Mumbai			
Class : F.E. (All Branches of Engineering)		Semester – I I	
SUBJECT : WORKSHOP PRACTISE II			
Periods per Week (Each of 60 min.)	Lecture	--	
	Practical	04	
	Tutorial	-	
		Hours	Marks
Evaluation System	Theory Examination	--	--
	practical	--	--
	Oral Examination	--	--
	Term Work	--	50
	Total	--	50

Detail of the Syllabus

Sr. No	Details	Hrs.
NOTE:	The syllabus and the Term work to be done during semester I and semester II are given together individual instructor for the course is to design the jobs for practice and demonstration and spread then work over entire two semesters. The objective is to impart training to help the students develop skill sets for creating entities from primitive engineering materials and establishing connections through wires and cables. This exercise including respect for physical work and hard labor in addition to some amount of value addition by getting exposed to interdisciplinary engineering domains. The two compulsory trades (Sr. No 1 and	

	<p>2) shall be offered in separate semesters.</p> <p>Select any four trade topics (two per semester) out of the topic at Sr. no. 3 to 10. Demonstrations and hands on allotted for the same. Report on the demonstration including suitable sketches is also to be included In the term-work.</p>	
01	<p>Fitting (Compulsory)</p> <p>. Use and setting of fitting of setting of fitting of fitting tools for chipping, cutting , filling, marking, center punching , tapping drilling</p> <p>. Term work to include one job involving following operations : Filling to size one simple male- female joint, drilling and tapping</p>	24
02	<p>Carpentry (Compulsory)</p> <p>. Use ad setting of hand tools like hacksaws, jack planes, chisels and gauges for constructions of various joints. Wood turning and modern wood turning methods.</p> <p>. Term work to include one carpentry job involving a joint and a report on demonstration of a job involving wood turning</p>	24
03	<p>Forging (Smithy)</p> <p>. At least one workshop practice job/Lifting hook and handle) is to be demonstrated.</p>	12
04	<p>Welding</p> <p>.Edge preparation for welding jobs. Arc welding for different job like Lap welding of two plates , butt welding of plates with simple cover. Arc welding to join plates at right angles</p>	12
05	<p>Machine Shop</p> <p>.At least one turning job is to be demonstrated.</p>	12
06	<p>Electrical board wiring</p> <p>. House wiring, staircase wiring for fluorescent tube light, go-down wiring and three phase wiring for electrical motors.</p>	12
07	<p>PCB Laboratory Exercises</p> <p>Layout drawing, Positive and negative film making , PCB etching and drilling , tinning and soldering techniques</p>	12
08	<p>Sheet metal working and Brazing</p> <p>. Use of sheet metal, working hand tools , cutting bending , spot welding</p>	12

09	<p>Plumbing</p> <p>. Use of plumbing tools, spanners, wrenches, threading dies, demonstrations of preparations of a domestic plumbing line involving fixing of a water tap and using coupling , elbow, tee, and union etc.</p>	12
10	<p>Masonry</p> <p>Use of masons tools like trowels, hammers, sprit level , square, plumb , line, and pins etc.Demonstrations of mortar making single and one and half brick masonry , English and Flemish bonds , block masonry . Pointing and plastering.</p>	12

Term work:

Term work shall consist of respective reports and jobs of the trades. Selected

The distribution of marks for term work shall be as follows, (per semester)

Laboratory work (Job Journal) : 40 marks

Attendance (practical and theory) : 10marks

The final certification and acceptance of term work ensures the satisfactory performance of laboratory work and minimum passing in the term work.