ENGINEERING WORKSHOP

Objective: To familiarize with the basic manufacturing processes and to study the various tools and equipment used, Hands on training is given in different sections. Essentially student should know the labor involved, machinery or equipment necessary, time required to fabricate and also should be able to estimate the cost of the product or job work.

Sections Handled: I YEAR II SEM A,B

Major Equipment Details:

S.NO	Name Of The Equipment/Make/Model No	Qty	Unit Price	Total Cost
1	Tenon saw	5	80.00	400.00
2	Nylon chisel handles	50	19	950
3	Carpentry vises	6	3250	22750
4	Pincer	1	150	150
5	Impellers(black smithy furnace fans)	6	145	870
6	Vices for stack holdings	10	4900	49000
7	Straight snips	6	120	720
8	Curved snips	6	140	840
9	Nose pliers	10	140	1400
10	Nylon mallets	7	120	840
11	Testers	10	36	360
12	Flat files	2	153	306
13	Half round files 300mm	9	442	3978
14	Triangular files 250mm	9	271	2439
15	Dot punches	11	28	308
16	Surface plates	3	3250	9750
17	Hack saw blade packets	5	375	1875
18	Bench grinder	1	5500	5500
19	Grinding stone	2	530	1060
20	Shearing machine	1	2280	2280
21	Fire extinguisher	2	1150	2230
22	Hack saw from 12*1/2	10	85	850
23	12*1/2 LA blades	2	350	700
24	Number set 5/32	1	450	450
25	Letter set 5/32	1	150	150
26	Wood rasp file	7	420	2940
27	Tin cutter shaper(big)	5	188	958
28	Tin cutter shaper(small)	4	99	336
29	Tongs	10	72	720
30	Steel rule(set)	1	400	400
31	Try square	1	205	205
32	Wire brush	4	15	60
33	Bevel square	2	75	150

34	Flat files 12R	5	180	960
35	Flat files 12S	4	450	1800
36	Closed handles	7	22	1540
37	Smooth planes	4	185	740
38	Straight pin hammer	5	80	400
39	Oil stone 6	1	110	110
40	Oil stone	1	138	138
41	Grinding goggles	2	20	40
42	Welding goggles	12	20	240
43	3/4 firm chisel	10	32	320
44	Drilling machine	1	1800	1800
45	Weld rod	5	130	650
46	CCMS rods	1	90	90
47	Inside calipers	1	640	640
48	H.S.Drill	10	33	330
49	Manual drill	1	160	160
50	Metal planar	18	615	11070
51	Marking gauge	18	470	8460
52	Cutting snips	9	115	1035
53	Carpenter bench wise 8"	14	1440	20160
54	Carpenter bench wise 6"	2	2170	4340
55	Welding machine 415V 3 phase Al	1	20500	20500
56	Welding holder 500 Amps	1	125	125
57	Welding hand screen	18	60	1080
58	Welding hand doom	1	125	125
59	Leather hand gloves	8 pairs	30	240
60	Earthing clamp	1	85	85
61	Welding cable lugs copper	6	85	210
62	Welding cable lugs copper with holder	1	1650	1650
63	Leather apron	6	150	900
64	Chipping hammer	6	45	270
65	Rough flat file 10"	3	80	240
66	Oil can 1/2	1	125	125
67	10*11 spanner	2	17	34
68	10*11 ring spanner	2	42	84
69	Steel rule	25	40	1000
70	500 gms ball pin hammer	8	12	960
71	Try square 6"	24	205	4920
72	Adjustable spanner 10"	2	167	334
73	Cutting plier	3	100	300
74	Screw driver	1	220	220
75	Bench wise 6	20	2170	43400
76	Gas welding torch	1	425	425
77	Hose pin Red & Blue	28	20	560
78	Oxygen regulator	1	700	700
79	Acetelene regulator	1	800	800
80	Scriber 200mm	18	51	918
81	Divider 6'	18	97	1746
82	Nylon mallet	9	150	1350
83	Ball pin hammer	9	118	1062
84	Nose plier	18	125	2250

85	Wire gauge round	1	145	145
86	Carpentry bench vice	4	1440	5760
87	Hand saw	18	90	1620
88	Firmer chisel	18	54	972
89	Mortise chisel	18	32	576
90	Try square 6"	15	50	750
91	Wooden mallet	18	45	810
92	Ball pin hammer	3	118	354
93	Claw hammer	3	198	594
94	Tape	2	45	90
95	Pincer 8"	1	211	211
96	Screw driver 18"	3	125	375
97	Divider 6"	3	55	165
98	Nylon mallet	9	150	1350
99	Try square	11	205	2255
100	STEEL RULE	11	40	440
TOTAL COST OF THE EQUPIMENT				**Rs 273588.00/-**

Lab In charge with qualification : - K.Sasinag M.Tech
Lab Technical name with qualification: Nazimulla -SSC

Experiment list as per curriculum:

1. Preparation of Cross Lap Joint
2. Preparation of Mortise and Tenon Joint
3. Preparation of Vee Fit
4. Preparation of Half Round Fit
5. Preparation to Round Rod to square Rod
6. Preparation of Round Rod to Flat Ring.
7. Preparation of Series and parallel Connection of three bulbs
8. Preparation of Stair Case Wiring.
9. Preparation of Open Scoop
10. Preparation of square Box without lid

Experiment list beyond the curriculum

1. Preparation of Bridle Joint
2. Preparation of Arrow Fit