

**PACKAGE-I (Mechanical Engineering)**

Sl. No	Name of the Items	
1	Screw Jack Apparatus (Simple Type)	
2	Screw Jack Apparatus (Compound Type)	
3	Cut Section Model of 2 Stroke Petrol Engine	
4	Cut Section Model of 4 Stroke Petrol Engine	
5	Cut Section Model of 2 Stroke Diesel Engine	
6	Cut Section Model of 4 Stroke Diesel Engine	
7	Searls Apparatus for determination of Youngs Module.	
8	Cut Section Model of Francis Turbine	
9	Cut Section Model of Pelton Wheel	
10	Cut Section Model of Kaplan Turbine	
11	Pensky Marten Flash & Fire point Apparatus	
12	Slip Gauge (Standard Make) (Range of 0.005 to 100mm)	
13	Complete working Model of Electrical system of Automobile (Mock lay board)	
14	Cut Section working Model of differential Mechanism for determination of differential ratio.	
15	Lathe Turret	
(Workshop)	<u>Specification:</u>	
	Collet Chucking Capacity	i) Round bar 25 mm. ii) Hexagonal bar 22A/F iii) Square bar 18A/F
	3 Jaw true chuck size	i) 110mm
	Cross slide travel	60mm.
	Vertical slide travel	25mm.
	Turret	v) No. of stations -06 vi) Tool reception bore 19.05 mm. vii) Dia of Turret 120 mm. viii) Distance between turret face to spindle 215 mm.
	Spindle drive	iii) Direct drive -6 speeds Speed range 315 to 3200 rpm. iv) Counter shaft drive-12 speeds. Speed range 125 to 4000 rpm.
	Threading attachment	iii) M5 –M14 (ferrous) iv) M5-m16 (Non-Ferrous)
	Long Turning attachment	ii) 75 mm.
16	2 Ton Split AC with Accessories	
17	Desktop Computer	
18	Scanner –cum-Printer.	
19	Slotting Machine	

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**MINING ENGINEERING DEPARTMENT**

**1. MICROMATE**

**General Specifications :**

Channels	Microphones and Triaxial Geophones (ISEE or DIN)
Vibration Monitoring (Triaxial Geophone)	
Range	Up to 254 mm/s (10 in/s)
Resolution	0.00788mm/s (0.00031 in/s)
Accuracy (ISEE/DIN)	+/-5% or 0.5mm/s(0.02 in/s), whichever is larger, between 4 and 125 Hz/DIN 45669-I standard
Transducer Density	2.0 g/cc (127 lbs/ft <sup>3</sup> )
Frequency Range (ISEE/DIN)	2 to 250 Hz between zero to - 3dB of an ideal flat response / 1 to 315 Hz
Maximum Cable Length(ISEE/DIN)	1,000 m (3280 ft)
Air Overpressure Monitoring	
Weighting Scales	ISEE Linear Microphone
Response Standard	ISEE Seismograph Specification
Range	88 to 148 dB (500 Pa (0.72 Psi) Peak )
Resolution	0.0156 pa (2.2662 x 10 <sup>-6</sup> psi)
Accuracy	+/- 10% or +/- 1 dB, whichever is larger, between 4 and 125 Hz
Frequency Range	2 TO 250 Hz between-3 dB roll off points
<b>Waveform Recording</b>	
Record Modes	wave form, wave form manual
Seismic Trigger	0.13 to 254 mm/s
Acoustic Triggers	2.0 pa to 500 pa (100 Db to 148 Db)
Linear	100 to 148 dB
Sample Rate	1,024 and 2,048 S/s in compliance mode, independent of record time- in advanced mode, 8 channel 512-8 192 S/S, up to 65,536 S/s in single channel mode
Record Stop Modes	Fixed record time
Record Time	1 to 90 seconds (programmable in one-second steps) Or 500 seconds plus 0.25 seconds pre-trigger
Auto Record Time	Event is recorded until Activity remains below trigger level for duration of Quiet window, or until available memory is filled.
Cycle Time	Recording uninterrupted by event processing-no Dead time
Storage Capacity	
Full Waveform Events	1000,1 second events at 2048 S/s Sample rate ( memory upgrade optional)

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