

**Package-01**  
**Automobile Equipments**  
**Industrial Training Institute, Bhawanipatna**

**Page-01**

<b>Sl. No.</b>	<b>Description of Goods</b>	<b>Rate per Unit</b>	<b>Rate of Vat %</b>	<b>Total Amount Incl. Vat.</b>
1	Belt Tensioner gauge			
2	<b>Constant Mesh Gear box with stand for dismantling and assembly</b> This model is made out of original parts such as Clutch plates, etc. to demonstrate the working of clutch assembly. By operating the pedal provided the model can be demonstrated. The entire model is mounted on a sturdy iron frame			
3	<b>Cut section of cross ply and radial tyres</b> Cut section of cross ply and radial tyres heavy duty with standard accessories Cut section of cross ply and radial tyres: This model is made out of original used parts, will be suitably sectioned to demonstrate the internal construction details showing the minute information, the model will be suitably painted and mounted on a navopan wooden base			
4	<b>Cut section working model of centrifugal clutch assembly</b> This model is made out of original parts such as Clutch the model can be demonstrated. information, the model will be suitably painted and mounted on a navopan wooden base			
5	<b>Cut section working model of Diaphragm clutch assembly</b> This model is made out of original parts such as Clutch plates, etc. to demonstrate the working of clutch assembly. By operating the pedal provided the model can be demonstrated. The entire model is mounted on a sturdy iron frame			
6	<b>Cut section working model of single plate clutch assembly</b> This model is made out of original parts such as Clutch plates, etc. to demonstrate the working of clutch assembly. By operating the pedal provided the model can be demonstrated. The entire model is mounted on a sturdy iron frame			
7	Engineers Stethoscope			
8	Tread Wear indicator			

Principal  
Industrial Training Institute  
Bhawanipatna

**Package-01**  
**Automobile Equipments**  
**Industrial Training Institute, Bhawanipatna**

**Page-02**

<b>Sl. No.</b>	<b>Description of Goods</b>	<b>Rate per Unit</b>	<b>Rate of Vat %</b>	<b>Total Amount Incl. Vat.</b>
9	<p><b>Air bag simulator</b></p> <p>The Instruction board adopts most of the real components of Air bag system to illustrate Air bag safety system structure and working principle. The components are rigged onto colour circuit diagram and made functional.</p> <p>Features</p> <ol style="list-style-type: none"> <li>1. Real and operatable Air bag system is assembled onto a colour printed board to illustrating the structure and working process .</li> <li>2. The Vehicle Crash is Simulated by pushing and hitting the crash sensor along the rail provided to demonstrate the quick air bag inflation.</li> <li>3. The training module is fabricated using Mild Steel pipe frame with spray painted for good looks and the entire setup is provided with caster wheels for easy movement of the same.</li> </ol>			
10	<p><b>Air conditioning trainer kit</b></p> <p>air conditioner complete set with stand the motor for driving compressor in this demonstration kit. air cond. component : compressor type : rotary, condenser unit, cooling fan, condenser unit, cooling fan, evaporator, fan, electronic thermostat, thermometer can be read °c unit and pressure gauge low and high.</p>			
11	<p><b>Discrete Component Trainer / Basic Electronics Trainer</b></p> <p>In built DC Power Supply : +12V/250mA &amp; +5V/250mA.</p> <p>In built AC Power Supply : 9-0-9V/500mA.</p> <p>Logic Input : 4 no.with toggle switch.</p> <p>Digital Output : 4 no LED indicator</p> <p>Resistances : 12 nos Different types of (WireWound ,Carbon Film &amp; Metal Film Resistor).</p> <p>Capacitors : 12 no. Different types of ( Ceremic,Polyster &amp; Electrolytic capacitor)</p> <p>Diodes : 9 no. Different types of ( Si diode, Ge diode,Zener diode, Photo diode &amp; Light Emitting diode )</p> <p>On board Power Electronics compnent : DIAC, TRIAC, SCR, MOSFET, UJT -1no each</p> <p>On board Transistors : 2 no. PNP &amp; NPN FET.</p> <p>On board Thermister : 1 no</p> <p>On Board</p>			

	<b>Dual Magnetization Yoke : AC / HWDC, 230 VAC, 50Hz</b> Accessories;- a) Copper bulb - 1 no b) Pipe gauge - 1 no c) Manual - 1 no d) Calibration certificate e) Carrying bag f) Test Bar		
12	Liquid penetrant Inspection kit		
12	<b>Ultrasonic Injection cleaning equipment</b> 48 “vibra-bar®” transducers, 84 piezoelectric (pzt) stacks 4,000 watts of “simultaneous multi-frequency™” ultrasonic cleaning power four (4) 1000 watt, 40khz immersible transducers, 316l stainless steel opposing side mount configuration- two per side nema 4x control box power intensity controls 7500 watts of heat, thermostatically controlled, stainless steel, screw plug immersion heater, capable of heating tank above 160 degrees f, will not interfere with working dimensions 12 gauge, 316l stainless steel tank double wall stainless steel construction digital timer for controlling ultrasonic wash time digital temperature controller, omron e5cs-x two piece, stainless steel lift off cover, with handles		
13	<b>Working Condition of Diesel Engine – CRDI - 4 stroke Engine Assembly with fault simulation board</b> Working Condition of Diesel Engine –CRDI - 4 stroke Engine Assembly with fault simulation board Working condition of diesel engine - CRDI-4 stroke engine assembly with fault simulation board. The device is designed based on latest technology diesel engines with Common rail direct fuel injection system. The trainer helps to simulate engine startup, speedup, slowdown and other actions so as to illustrate the structure and working principle of CRDI engines.		
14	<b>Working Condition of Petrol MPFI Engine Assembly with fault simulation board</b> Working Condition of Petrol MPFI Engine Assembly with fault simulation board Petrol MPFI Engine Assembly with fault simulation board: Working of Petrol MPFI Engine Assembly with fault simulation board The device is designed based on latest technology petrol engines with Multi point fuel injection system. The trainer helps to simulate engine startup, speedup, slowdown and other actions so as to illustrate the structure and working principle of MPFI engines.		

	<b>Oscilloscope 20MHz</b>		
	<u>Technical Secification :-</u>		
	Band Width : 20MHz		
	Operating Modes : Channel I, Channel II, X-Y operation		
	Add/Sub CH I ± CH II, Invert CH II		
	Vertical deflection (Y) Identical channels		
	Bandwidth : DC -20 MHz (-3 dB)		
	Risetime : 12 ns approximately		
	Deflection coefficients : Microcontroller based 12 calibrated steps 5 mV / div. - 20 V / div. (1-2-5 sequence)	Electronic control.	
15	Display on LCD : 1 MW II 30 pF approximately	Input Impedance	
	Input : BNC connector		
	Input coupling : DC-AC-GND		
	Maximum Input voltage : 400 V (DC + Peak AC)		
	Timebase : Microcontroller based 18 calibrated steps, 0.5 µs/div.-0. 2s/div. (1-2-5 sequence).		
	Electronic control Magnifier :		
	X10		
	Tine Base speed : 20 ns		
	Trigger Bandwidth : 40 MHz		
	Modes : Auto/ Level		
	Calibrator output : Square Wave generator 1KHz 0.2 Vpp		

Principal  
Industrial Training Institute  
Bhawanipatna

**Package-02**  
**Electrical Equipments**  
**Industrial Training Institute, Bhawanipatna**

**Page-01**

<b>Sl. No.</b>	<b>Description of Goods</b>	<b>Rate per Unit</b>	<b>Rate of Vat %</b>	<b>Total Amount Incl. Vat.</b>
1	Thermometer 0 to 100 deg Centigrade (Reputed Brand)			
2	Laboratory Type Induction Coil (Reputed Brand)			
3	DC Power Supply 0-30V, 2A Technical Specification :- DC Output : 0 - 30 V, 2 A variable Current Limit : 100 mA to 2 A Load Regulation : $\pm$ (0.05 % +10 mV) Line Regulation : $\pm$ (0.05 % +10 mV) Display : 3 digit 7-segment LED indicator for Voltage and Current			
5	Brake Test arrangement with two spring balance 0 to 25 kg rating only			
6	Knife Switch DPDT fitted with fuse terminals 16 amp (Raw Material)			
7	Knife Switch TPDT fitted with fuse terminals 16 amp(Raw Material)			
8	Used DC Generators-series, shunt and compound type Machine for overhauling practice with all accessories control Panel,DC Power supply(0-200V/10A) For Series Generator :- DC Series Machines (2 Nos.)Rating : 2HP , Speed : 1500 rpm , Insulation : Class "B",Meters used Digital (DCV : 3 Nos. ,DCA: 2 Nos.), DC Supply : 0 to 200V fixed & Variable/10A,Rheostat : 5A,110 ohm For Shunt Generator :- DC Motor (Type : Shunt, Rating : 2HP,Voltage Rating : 200V,Speed : 1500 RPM), Insulation : Class 'B' DC Generator(Type : Series,Rating : 2HP ,Speed : 1500 RPM Insulation : Class B Meters Digital(DCV : 300V,DCA : 5A & 1A ) DC Supply : 0 to 200V fixed & Variable/10A, Rheostat : 2.8A/220 ohm & 8A/100 $\Omega$ For Compound Generator :- DC Motor (Type : Shunt,Power Rating : 2HP, Voltage Rating : 200V $\pm$ 10%, Speed : 1500 rpm),Insulation Class : "B" DC Machine (acts as Generator) (Type : Compound,Power Rating : 2HP ,Speed : 1500 rpm Current Rating : 4.1A) Insulation Class : " B"			
9	Diesel Generator Set with change over switch, over current breaker and water-cooled with armature, star-delta connections AC 3 phase, 5 KVA, 240 V. (Honda,Kiloskar)			

	DC Series Motor 2HP/5A with all related accessories to perform the experiment.			
10	Type : Series Rating : 2HP Voltage rating : 200V Speed : 1500 RPM (at load) Insulation : Class 'B' Loading Arrangement : Mechanical Brake Drum/Pulley : Aluminum Casted Meters used Voltmeter : 300V Digital			
11	DC Shunt Motor 2HP/5A with all related accessories to perform the experiment.  Type : Shunt Rating : 2 HP Voltage Rating : 180V/200V Current Rating : 5A Speed : 1500 rpm Insulation : Class 'B' Loading arrangement : Mechanical Brake Drum/Pulley : Aluminum casted Digital Meters used Voltmeter : 300V Ammeter : 1A Ammeter : 10A	Type		
12	DC compound Motor 2HP/5A with all related accessories to perform the experiment.  Type : Compound Rating : 2 HP Voltage Rating : 180V/200V Current Rating : 5A Speed : 1500 rpm Insulation : Class 'B' Loading arrangement : Mechanical Brake Drum/Pulley : Aluminum casted Digital Meters used Voltmeter : 300V 2nos Ammeter : 1A			
13	Single phase Transformer, core type, air cooled 5KVA , 240/415 V, 50 Hz with all necessay Accessories			
14	Three phase transformer, shell type oil cooled  Type : Three Phase Power Rating : 3KVA Primary Voltage : 415V Secondary Voltage : 230V Delta/Star Configuration Three Phase Variac Three Phase Restive load			

**Package-02**  
**Electrical Equipments**  
**Industrial Training Institute, Bhawanipatna**

**Page-02**

<b>Sl. No.</b>	<b>Description of Goods</b>	<b>Rate per Unit</b>	<b>Rate of Vat %</b>	<b>Total Amount Incl. Vat.</b>
15	Function Generator Technical Specification :- Wave form : Sine, Square, Triangle & DC Outputs Frequency Range : 0.1 Hz - 1 MHz Frequency Display : 16 x 2 LCD Output Voltage : 10 Vpp Attenuation : -60dB DC Offset : ± 5 V DC Trigger Output : TTL			
16	Discrete Component Trainer Technical Specification:- In built DC Power Supply : +12V/250mA & +5V/250mA. In built AC Power Supply : 9-0-9V/500mA. Logic Input : 4 no. with toggle switch. Digital Output . Resistances (WireWound) : 4 no LED indicator : 12 nos Different types of , Carbon Film & Metal Film Resistor). Capacitors : 12 no. Different types of (Ceremic, Polyester & Electrolytic capacitor) Diodes : 9 no. Different types of (Si diode, Ge diode, Zener diode, Photo diode & Light Emitting diode ) On board Power Electronics component : DIAC, TRIAC, SCR, MOSFET, UJT-1no each Transistors : 2 no. PNP & NPN FET. On board On board Thermister : 1 no On Board Solar Cell : 1no on Board Speaker : 1no On board Voltage			
17	Hygrometer a. Cut out Relay 32A b. Reverse current Relay 32A c. Over current Relay 30-63A d. Under voltage Realy 230-415V e. Current Varier 0 to 400A			

Principal  
 Industrial Training Institute  
 Bhawanipatna

**Package-02**  
**Electrical Equipments**  
**Industrial Training Institute, Bhawanipatna**

**Page-03**

<b>Sl. No.</b>	<b>Description of Goods</b>	<b>Rate per Unit</b>	<b>Rate of Vat %</b>	<b>Total Amount Incl. Vat.</b>
18	Bath Impregnating Station (Reputed Brand)			
20	Synchronous motor 3 Phase, 3 HP, 415V, 50Hz, 4 Pole, with accessories. With all accessories ,DC Supply, with control Pannel			
21	Lux meter (Reputed Brand)			
22	Inverter- 1 KVA with 12 V Battery. Input- 12 volt DC, Output- 220 volt AC (Reputed Brand)			
23	Domestic Appliances			
	a. Electric Hot Plate 1500 watt (Reputed Brand)			
	b. Electric Kettle, 1500 watts (Reputed Brand)			
	c. Electric Iron 1500 watts (Reputed Brand)			
	d. Immersion Heater 1500 watt (Reputed Brand)			
	e. A.C. Fan (Reputed Brand)			
	f. Geyser (Storage type) 15 ltr minimum (Reputed Brand)			
	g. Mixture & Grinder (Reputed Brand)			
24	Thyristor /IGBT controlled D.C. motor drive with tacho-generator feedback arrangement 1 HP (Reputed Brand)			
25	Thyristor/IGBT controlled A.C. motor drive with VVVF control 3 Phase, 2 HP (Reputed Brand)			
26	Washing Machine Trainer (Reputed Brand)			
27	Motor Pump set 1 HP, 1 Phase, 240 V (Reputed Brand)			
28	Three phase K.W.H Energy meter digital 25A,415 V A. C (Reputed Brand)			
29	Automatic Reverse Forward starter (Reputed Brand)			
30	Flux meter			
31	Autotransformer Single phase 0-240V 1kVA (Reputed Brand)			
33	Hydrometer			

Principal  
 Industrial Training Institute  
 Bhawanipatna

**Package-03**  
**Electronics Equipments**  
**Industrial Training Institute, Bhawanipatna**

Page No.

Sl. No.	<b>Description of Goods</b>	<b>Rate per Unit</b>	<b>Rate of Vat %</b>
1	<p><b>Digital IC Trainer</b></p> <p><u>Technical Specification :-</u></p> <p>AC Input : <math>230V \pm 10\%</math></p> <p>DC Voltage : <math>+5V/500mA</math> Fixed &amp; <math>-5V/500mA</math> Fixed</p> <p>DC Voltage : 0 to <math>+25V/500mA</math> Variable &amp; 0 to <math>-25V/500mA</math> Variable</p> <p>Bread board : having 1680 tie points is mounted on front panel.</p> <p>using SPDT switch.</p> <p>indicator shot with pulser switch having output frequencies of 10Hz, 100Hz, 1KHz &amp; 10KHz selectable</p> <p>Common Anode LT542 : 2 Nos.</p> <p>Common Cathode LT543 : 1 No.</p> <p>Seven segment display connected with sockets for each segment</p> <p>Potentiometer : <math>1K\Omega</math> &amp; <math>1M\Omega</math></p> <p>Instrument will be supplied along with following IC's to perform various experiment. Kit will be set of IC 7408, 7400, 7432, 7404, 7402,</p>		
2	<p><b>DSO (COLOR) (Digital Storage Oscilloscope) 200MHz (with Colour LCD TFT Display)</b></p> <p><u>Technical Specification :-</u></p> <p>Bandwidth : 100MHz</p> <p>Realtime Sample Rate : <math>1GSa/s</math> (Single Channel)</p> <p>Equivalent Sample Rate : <math>50GSa/s</math></p> <p>Number of Channels : 2 nos</p> <p>Memory Depth : 2Mpts</p> <p>Acquisition Modes : Normal/Average/Peak Detect</p> <p>Vertical Sensitivity : <math>2mV/div - 5V/div</math> (1-2-5 Sequence)</p> <p>Vertical Resolution : 8bits</p> <p>RiseTime : <math>&lt;3.5ns</math></p> <p>Input Impedance : <math>1 M\Omega \parallel 13 pF</math></p> <p>Input Coupling : DC, AC and GND</p> <p>Maximum Input Voltage : <math>\pm 400Vpp</math></p> <p>Timebase Range : 2.5ns - 50s/div</p> <p>Trigger Sources : CH1, CH2, Ext, Ext /5, AC Line</p> <p>Trigger Modes : Auto, Normal, Single</p> <p>Trigger Type : Edge, Pulse Width, Slope, Video, Alternate</p> <p>Auto Measure : Vpp, Vmax, Vmin, Vamp, Vtop, Vbase, Vavg</p> <p>Mean, Crms, Vrms, ROVShoot, FOVShoot</p> <p>Cursor Measure : Manual, Track and Auto measure mode</p> <p>Maths : <math>+, -, \times, /, FFT</math></p>		
3	Soldering & Desoldering Station (Infrared BGA Rework Station especially for micro BGA rework) With BGA Stencils, reballing Balls 25k Packs of all types, BGA Flux and accessories		

**Package-03**  
**Electronics Equipments**  
**Industrial Training Institute, Bhawanipatna**

Pa

Sl. No.	Description of Goods	Rate per Unit	Rate of Vat %
4	<p><b>SMD Soldering &amp; De soldering Station</b></p> <p><u>Technical Specification :-</u></p> <p>Hot air Soldering and desoldering station with Digital tempreture control. Soldering :- Power consumption : <math>60\Omega</math></p> <p>Input voltage : 170 to 270 V</p> <p>Temperature range : 180 to 270 V</p> <p>Temperature stability : <math>\pm 10^\circ\text{C}</math></p> <p>Temperature accuracy : <math>\pm 1^\circ\text{C}</math> of tolerance at idling time</p> <p>Tip to ground potential : under 2 mV</p> <p>Tip to ground resistance under : 2 Ohms</p> <p>Desoldering :- Desold : 70 watts</p> <p>Input : 170 to 270 V (190 to 290 V AC)</p> <p>Temperature range : 180 to <math>480^\circ\text{C}</math></p> <p>Pump : diaphragm type</p> <p>Vacuum : 600 mm/Hg</p> <p>For SMD Rework :- Power consumption : 270 W</p> <p>Air pump : diaphragm pump</p> <p>Capacity : 24L/min</p> <p>Hot air temperature : 200 to <math>550^\circ\text{C}</math></p> <p>Temperature accuracy : <math>\pm 1^\circ\text{C}</math></p>		
5	<p><b>Frequency modulator and Demodulator trainer kit</b></p> <p><u>Technical Specification :-</u></p> <p>Audio Oscillator : Sine wave</p> <p>Frequency Range : 300 Hz - 3.4 KHz FM Modulators</p> <p>Reactance Modulator : Carrier Frequency 455 KHz (<math>\pm 3\text{KHz}</math>)</p> <p>Varactor Modulator : Carrier Frequency 455 KHz (<math>\pm 2\text{KHz}</math>)</p> <p>VCO Based Modulator : Carrier Frequency (IC XR2206 based) 10 KHz - 200KHz (adjustable)</p> <p>Mixer / Amplifier : Allows FM input signal to modulated</p> <p>, and demodulation, with gain adjustment.</p> <p>FM Demodulator : Detuned Resonant Detector : Quadrature Detector : Foster-Seeley Detector : Ratio Detector : Phase-Locked Loop Detector</p>		
6	<p><b>PAM, PPM,PWM trainer kit</b></p> <p><u>Technical Secification :-</u></p> <p>Modulation : 1. Pulse Amplitude Modulation 2. Pulse Position Modulation 3. Pulse Width Modulation</p> <p>Sampling Frequency (Pulse) : 8 KHz, 16 KHz, 32 KHz, 64 KHz</p> <p>Signal Generators : 1. Sinewave 1 KHz &amp; 2 KHz (Gain Adjustable) 2. Square wave 1 KHz &amp; 2 KHz</p> <p>Low Pass Filter : 4th order Butter worth Filter</p>		

**Package-03**  
**Electronics Equipments**  
**Industrial Training Institute, Bhawanipatna**

Pa:

<b>Sl. No.</b>	<b>Description of Goods</b>	<b>Rate per Unit</b>	<b>Rate of Vat %</b>
7	Microcontroller kits (8051) along with programming software (Assembly level Programming) With 6 nos of application kits (Reputed Brand with all accessories)		
8	<b>Sensor trainer kit</b> <u>Technical Secification :-</u> ( containing Various sensors like Thermocouple, RTD, Thermocouple, load cell, strain gauge, LVDT, smoke sensors, speed sensor ) (Reputed Brand with all accessories) 7" capacitive touch screen LCD with inbuilt processor for viewing the output waveforms,		
9	Fiber optic communication trainer (Reputed Brand with all accessories)		
10	<b>Seven segment DPM (Digital Panel Meter) Current and Voltage</b> <u>Technical Secification :-</u> : 3 ½ Digit LED 12.5mm High Resolution : 1 in 1999 Count Basic Accuracy : ± 0.1% ± 1 Digit Operating Voltage : 230V AC ± 10% DC Voltage: 0 To ± 199.9mV or ± 1.999V or ± 19.99V or ± 199.9V or ± 1000V AC Voltage : 0 To 199.9mV or 1.999V or 19.99V or 199.9V or 750V DC Current : 0 To ± 199.9µA or ± 1.999mA or ± 19.99mA or ± 199.9mA or ± 1.999A or ± 19.99A AC Current: 0 To 199.9µA or 1.999mA or 19.99mA or 199.9mA or 1.999A or 19.99A	<u>Technical</u> <u>Display</u>	
11	<b>LCD based DPM (Digital Panel Meter) Current and Voltage</b> <u>Technical Secification :-</u> : 16 by 2 Alphanumeric LCD Input Voltage : 5 - 300 VInput Current : 0.01 to 10A Accuracy : Class 0.5 (For P.F. ± 0.02) Resolution : Floating Decimal Point Auxiliary : 230V ± 20%	<u>Technical</u> <u>Secification</u> <u>Display</u>	
12	<b>UPS trainer</b> <u>Technical Secification :-</u> 1) Based on highly reliable Microchip PIC microcontroller. 2) MOSFET based power stage, with PWM AC output. 3) Mains to Backup mode changeover time less than 9mSec. 4) Backup mode protected against Overload, short circuit, reverse phase and unbalanced MOSFET drive. 5) Line Synchronized change over from Mains to Backup and Back. 6) Over current of MOSFET's protected within micro seconds. 7) Three step AVR with input range 140V to 280V AC. and output range 200-245V AC. 8) MOSFET based PWM battery charger. 9) Automatic low battery warning and cut off.		

**Package-03**  
**Electronics Equipments**  
**Industrial Training Institute, Bhawanipatna**

Pa

<b>Sl. No.</b>	<b>Description of Goods</b>	<b>Rate per Unit</b>	<b>Rate of Vat %</b>
13	Smart phones of different make (android/Windows) Android 4.4.2 different make 2 nos and Windows phone different model 2 nos.		
14	Home theatre system 5 Channel with Dolby and DTs Decoder (Reputed Brand with all accessories)		
15	<p><b>Solar Power Inverter 500VA With required Storage batteries and Solar panel and accessories.</b></p> <p>(Reputed Brand with all accessories)</p> <p><u>Technical Specification:-</u></p> <p>Solar PV Module : 500 Wp (100W X 5 Nos.)      Battery Bank : 12V, 100AH (2 Nos.)      Inverter : 500 VA      Charging Controller : 40A</p>		
16	<p><b>Oscilloscope Dual Trace Dual Channel</b></p> <p><u>Technical Secification :-</u></p> <p>Band Width : 20MHz      Operating Modes : Channel I, Channel II, X-Y operation      Add/Sub CH I ± CH II, Invert CH II      Vertical deflection (Y) Identical channels      Bandwidth : DC -20 MHz (-3 dB)      Risetime : 12 ns approximately      Deflection coefficients : Microcontroller based 12 calibrated steps      5 mV / div. - 20 V / div. (1-2-5 sequence)</p> <p>Input Impedance : 1 MW II 30 pF approximately      Input : BNC connector      Input coupling : DC-AC-GND      Maximum Input voltage : 400 V (DC + Peak AC)      Timebase : Microcontroller based 18 calibrated steps,      0.5 µs/div.-0. 2s/div. (1-2-5 sequence).      Electronic control      Magnifier : X10      Tine Base speed : 20 ns      Trigger Bandwidth : 40 MHz      Modes : Auto/ Level      Calibrator output : Square Wave generator 1KHz 0.2 Vpp</p>		
17	<p><b>Digital Multi Meter</b></p> <p><u>Technical Secification :-</u></p> <p>DCV Range : 200mV/2V/20V/200V/1000V      ACV Range : 750V/1000V      DCVA Range : 200µA/2mA/200mA/20A      ACVA Range : 200mA/20A      Resistance : 2Ω/2KΩ/20K/2m/200m      Capacitance : 2F/2µF/200µF      Buzzer Mode, Diode mode, direct transistor testing Frequency 20KHz/200KHz</p>		

18	<p><b>Oscilloscope Dual Trace Dual Channel</b></p> <p><u>Technical Specification :-</u></p> <p>Band Width : 30MHz Operating Modes : Channel I, Channel II, X-Y operation Add/Sub CH I ± CH II, Invert CH II</p> <p>Vertical deflection (Y) Identical channels</p> <p>Bandwidth : DC -30 MHz (-3 dB) Risetime : 12 ns approximately</p> <p>Deflection coefficients : Microcontroller based 12 calibrated steps 5 mV /div. - 20 V / div. (1-2-5 sequence)</p> <p>Electronic control. Display on LCD</p> <p>Input Impedance : 1 MW II 30 pF approximately</p> <p>Input : BNC connector</p> <p>Input coupling : DC-AC-GND</p> <p>Maximum Input voltage : 400 V (DC + Peak AC)</p> <p>Timebase : Microcontroller based 18 calibrated steps, 0.5 µs/div.-0. 2s/div. (1-2-5 sequence). Electronic control</p> <p>Magnifier : X10</p> <p>Tine Base speed : 20 ns</p> <p>Trigger Bandwidth : 40 MHz</p> <p>Modes : Auto/ Level</p> <p>Calibrator output : Square Wave generator 1KHz 0.2 Vpp</p>		
19	<p><b>Linear I.C. Trainer</b></p> <p><u>Technical Specification :-</u></p> <p>DC Voltage : 0 to 5V/ 100mA + 12V/ 250mA 5V/ 250mA</p> <p>AC Voltage : 12V/250mA</p> <p>On Board Resistance : 100Ω, 1KΩ, 3K3, 5K, 10K, 22K, 100K</p> <p>On board Capacitor : 0.01µf, 1µf, 10µf, 22µf, 100µf</p> <p>On board Diode : IN4007, IN4008</p> <p>On board Zener Diode : 5V</p> <p>Potentiometer : 5K, 10K</p> <p>On board IC mounted : IC 741, IC 723, &amp; IC 555</p>		
20	Solar street light lamp set 12v , 18 / 24 watts (set of 3) Reputed Brand		
	<p><b>PAM, PPM,PWM trainer kit</b></p> <p><u>Technical Specification :-</u></p> <p>Modulation : 1. Pulse Amplitude Modulation 2. Pulse Position Modulation 3. Pulse Width Modulation</p> <p>Sampling Frequency (Pulse) : 8 KHz, 16 KHz, 32 KHz, 64 KHz</p> <p>Signal Generators : 1. Sinewave 1 KHz &amp; 2 KHz (Gain Adjustable) 2. Square wave 1 KHz &amp; 2 KHz : 4th order Butter worth Filter</p>		
	<b>AM/FM Commercial radio receivers</b> 3 Band AM & FM receiver , AC power with 500mw audio output		

**ge-01**

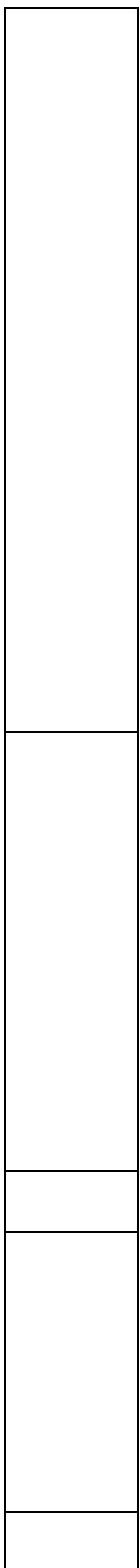
Total Amount Incl. Vat.

al  
ig Institute  
atna

Total Amount Incl. Vat.

Total Amount <u>Incl. Vat.</u>

**Total  
Amount  
Incl. Vat.**



al  
ng Institute  
atna

**GOVT. ITI, BHAWANIPATNA**

**CONSOLIDATED RAW MATERIAL FOR TURNER FOR THE SESSION : 2018 -19**

**PACKAGE :I -TURNER /ITIBPT/18/19**

<b>SL. No</b>	<b>Discription of Material</b>	<b>Quantity</b>	<b>Rate per Unit in Rs</b>	<b>GST in Rs</b>	<b>TOTAL in Rs</b>
1	M.S Round rod 35 mm	50kg			
2	M.S Round rod 40 mm	100kg			
3	M.S Round rod 50 mm	100kg			
4	M.S Round rod 80 mm	100kg			
5	M.S Square bar 16 mm	30kg			
6	M.S Square bar 25 mm	25kg			
7	M.S. flat 50x20 mm	50kg			
8	M.S. flat 100x10 mm	50kg			
9	M.S. angle 40x40 mm	30kg			
10	M.S. Pipe 32 mm	30kg			
11	M.S Channel 35x70x95 mm	50kg			
12	Emery Cloth G-80	50pcs			
13	Emery Cloth G-120	50pcs			
14	Cotton waste	20kg			

<b>SL. No</b>	<b>Discription of Material</b>	<b>Quantity</b>	<b>Rate per Unit in Rs</b>	<b>GST in Rs</b>	<b>TOTAL in Rs</b>
1	Emery Cloth G-80	50pcs			
2	Emery Cloth G-120	50pcs			
3	Cotton waste	20kg			
4	Coal	05kg			
5	White Chuck	05pkt			
6	Drawing sheet	15pcs			
7	Pencil with Eraser	03 sets			
8	Marker pen with Ink	20sets			

**GOVT. ITI, BHAWANIPATNA**

**CONSOLIDATED RAW MATERIAL FOR TURNER FOR THE SESSION : 2018 -19**

**PACKAGE :I -FITTER /ITIBPT/18/19**

<b>SL NO</b>	<b>DESCRIPTION OF RAW MATERIALS</b>	<b>QUANTITY</b>	<b>RATE PER UNIT IN PRICE</b>	<b>GST IN Rs</b>	<b>TOTAL IN Rs</b>
1	M S FLAT 100 X 12 MM	100 KG			
2	M S FLAT 75 X 12 MM	100 KG			
3	M S FLAT 75 X 10 MM	100 KG			
4	M S FLAT 75 X 6 MM	100 KG			
5	M S FLAT 65 X 10 MM	100 KG			
6	M S FLAT 65 X 8 MM	100 KG			

7	M S FLAT 65 X 6 MM	100 KG			
8	M S FLAT 50 X 10 MM	100 KG			
9	M S FLAT 50 X 8 MM	100 KG			
10	M S FLAT 50 X 6 MM	200 KG			
11	M S FLAT 25 X 6 MM	100 KG			
12	M S FLAT 25 X 3 MM	100 KG			
13	M S FLAT 18 X 3 MM	100 KG			
14	ANGLE 25 X 25 MM	100 KG			
15	ANGLE 18 X 3 MM	100 KG			
16	ELECTRODE 3.15 MM	20 PKT			
17	ELECTRODE 2.5 MM	20 PKT			
18	M S PIPE 100 DIAMETER	50 KG			
19	M S ROUND BAR 16 MM DIA	50 KG			
20	M S ROUND BAR 25 MM DIA	50 KG			
21	M S ROUND BAR 40 MM DIA	50 KG			
22	M S CHANNEL 75 x 40 x 4.8	50 KG			
23	M S CHANNEL 100 x 50 x 5	50 KG			
24	FILLER ROD FOR GAS WELDING	10KG			
25	POWERSAW BLADE 14 " , 16 "	50 PC			
26	HACKSAW BLADE 12"	30 PKT			
27	FILE HANDLE 4 " , 6"	500 PC			
28	EMERY CLOTH SMOOTH 180	200 PC			
29	EMERY CLOTH GRADE 50	100 PC			
30	EMERY CLOTH GRADE 80	100 PC			
31	EMERY CLOTH GRADE 100	100 PC			
32	EMERY CLOTH GRADE 120	100 PC			
33	M.S RIVET 6MM DIA	2KG			
34	M S SHEET 2 MM	50 KG			
35	GI SHEET .8 MM	50 KG			

OTHER ITEMS					
1	COTTON WASTE	20 KG			
2	MOBIL OIL	10 LIT			
3	WHITE CHALK	10 PKT			
4	COLOUR CHALK	10PKT			

<b>SL. No</b>	<b>Description of Material</b>	<b>Quantity</b>	<b>Rate per Unit in Rs</b>	<b>GST in Rs</b>	<b>TOTAL in Rs</b>
1	PVC insulated single strand aluminum cable 1.5sq mm 250 V	300 m			
2	PVC insulated single strand copper cable 1/20 250 V	300 m			
3	PVC insulated copper cable 3/0.914/250V	300 m			
4	PVC insulated PVC sheathed twin cable aluminum 2.5 sq mm250V	300 m			
5	PVC weather proof twin cable aluminum 4 sq.mm 250V	300 m			
6	Flexible PVC insulated cable 14/0.2/250V	300 m			
7	PVC insulated flat three core cable 1.5 sq mm of 250V	300 m			
8	Flexible twin twisted PVC insulated cable medium thick 14/0.2 mm/250V	300 m			
9	PVC insulated copper cable 1.00 sq mm	600m			
10	PVC insulated copper cable 1.5 sq mm	600m			
11	PVC insulated copper cable 2.5 sq mm	600m			
12	PVC insulated copper cable 4.00 sq mm	600m			
13	PVC insulated copper cable 6.00 sq mm	600m			
14	Bare copper wire 8 SWG	2 kgs			
15	Super enamelled copper wire 21,22,23,27, 28,29,30,32,33,34,35 and 36 SWG	1kg each			
16	Nichrom wire 18 SWG 31 SWG,34 SWG	200g each			
17	Fuse wire 1,2,5,10 and 20 Amps	25g each			
18	Glass cartridge fuse withholder 1 A, 2A,100mA 200mA ,500mA	10 Nos each			
19	Low pressure M.V. lamp 60W 240V complete set	2 Sets			
20	Electric bulb 15w 240V	50 Nos			
21	Electric bulb 25W 240V	6 Nos			
22	Electric bulb 40W 240V	25 Nos			
23	Electric bulb 60W 240V	6 Nos			
24	Electric bulb 100W 240V	100 Nos			
25	Electric bulb 200W 240V	100 Nos			
26	Electric bulb 500W 240V	20 Nos			
27	LED Bulb 10W 240v	50 Nos			
28	CFL Bulb 18W 240v	50 Nos			
29	Tube light 40W 240v	50 Nos			
30	Torch cell dry 1.5v D type	8 Nos			
31	Torch cells flat type 4.5V	8Nos			
32	PVC conduit pipe 19 mm 1.2 mm thick	50 Nos			
33	PVC conduit pipe 25 mm 1.2 mm thick	10 Nos			
34	PVC conduit saddle 19 mm	200 Nos			
35	PVC conduit saddle 25 mm	100 Nos			
36	PVC 4 way junction box 19 mm	20 Nos			
37	PVC 3 way junction box 19 mm	20 Nos			
38	PVC bend 19 mm dia	10Nos			
39	PVC junctoin box 25 mm	10 Nos			
40	PVC flexible conduit 19 mm and 25 mm	20 m.each			
41	Rawl plug No.8	200 Nos			
42	G.I. saddles 19 mm	200 Nos			

43	Insulation tape 20 mm width 10 m roll	50 rolls				
44	Tube light choke 40W 240V (Electronic)	60 Nos				
45	complete single tube light fittings 40W 240V	50 Nos				
46	copper lug for 16 sq mm cable	20 Nos				
47	S.p. Switch flush type 6A 240V	200 Nos				
48	S.p. Socket flush type 6A 240V	100 Nos				
49	S.p. Switch flush type 2 way 6A 240V	24 Nos				
50	S.p. Switch flush type 16A 240V	25 Nos				
51	S.p. Socket flush type 16A 240V	25 Nos				
52	DP switch flush type 16A 240v	10 Nos				
53	Brass angle holder 6A 240V	100 nos				
54	Brass batten holder 6A 240V	100 Nos				
55	Brass pendant holder 6A 240V	20 Nos				
56	2pin 6A socket flush mounting types	12 Nos				
57	Electric bell 240V AC 50 Hz	6 Nos				
58	Electric buzzer 240V AC 50 Hz	6 Nos				
59	Neon lamp indicator flush mounting type with holder 6A 240V	20 Nos				
60	3 pin socket with fuse and switch 16A 250V flush mounting type	6 Nos				
61	Appliance plug with earth clips 6A 250V	6 Nos				
62	Appliance plug with earth clips 16A 250V	6 Nos				
63	Ceiling rose 6A 250V 2 plate	20 Nos				
64	Ceiling rose 6A 250V 3 plate	20 Nos				
65	Kit kat fuse base and carrier porcelain 16A 250V	24 Nos				
66	M.C.B (B) series 10,16,32,40 A	10Nos/Each				
67	PVC M.C.B Encloser 2 way,4 way	5 Nos/Each				
68	M.C.B DP Switch 32A,40A	2Nos/Each				
69	Intermediate switch 6A 250V	6 Nos				
70	3 pin 6A 250V plug rubberized or unbreakable PVC	24 Nos				
71	Neutral link 16 A	12 Nos				
72	Distribution box 4 way 16A 250V	10 Nos				
73	Bell push switch 6A 250V flush type	10 Nos				
74	Kettle element 500W 240V M.I. insulated	2 Nos				
75	Element for eletric iron 750W 240V	2 Nos				
76	Open type heating element 750W 240V	2 Nos				
77	Thermostat control for automatic eletric iron	2 Nos				
78	Asbestos sheet for eletric iron	6 Nos				
79	Mica sheet for electric iron	6 Nos				
80	Heating element 1000 watts 240V open type	6 Nos				
81	Porcelain 2 way connector 32 amps	20 Nos				
82	Crocodile clips 16A	12 Nos				
83	Crocodile clips insulated 2A	40 Nos				
84	Crocodile clips 6A 250V	40 Nos				
85	Alca " P" solder	5 kgs				
86	Eyre No.7 fulx 100 gm bottle	1 No.				
87	Lethoride paper 3,4,7 mils	100 g each				
88	cotton tape 10 mm , 20 mm ,25 mm width	20 m each				
89	Electrician Solder	500 grm				
90	Rocian Flux	2 box				

CHEMICALS ,OIL AND GREASE					
SL. No	Description of Material	Quantity	Rate per Unit in Rs	GST in Rs	TOTAL in Rs
1	Bearing grease shell alvania or equivalent	200 g			
2	Mobil oil S1 40	2 litre			
3	disteel (battery) water	20 Litres			
4	Varnish air drying 1 litre pack	1 No.			
5	Milinex Paper 5no,7no	25 feet/each			
6	Ampire Sleep(Glass Type)1no,2no,3no,4no	20nos/each			

HARDWARE ITEMS					
SL. No	Description of Material	Quantity	Rate per Unit in Rs	GST in Rs	TOTAL in Rs
1	Wire nails 12 SWG 50mm	5 Kg			
2	Sand paper No.60,80,100	5 Nos/ each			
3	Brass machine screws with nut and washers cheese haed 5 mm dia 25 mm long	24 Nos			
4	Wood screws No.5.20 mm	300 Nos			
5	Wood screws No.4.15 mm	100 Nos			
6	Wood screws No.6.20	200 Nos			
7	Wood screws No.8.40	200 Nos			
8	Wood screws No.4.25	100 Nos			
9	Wood screws No.8.45	100 Nos			
10	Wood board with Hylam Sheet 4/4 inch	40 Nos			
11	Wood board with Hylam Sheet 4/6 inch	40 Nos			
12	Wood board with Hylam Sheet 6/8 inch	40 Nos			
13	Wood board with Hylam Sheet 8/10 inch	40 Nos			
14	Wood board with Hylam Sheet 10/12 inch	10 Nos			
15	Steel Screw 1/2 Inch,1 Inch, 3/4 Inch, 2 Inch	1Pack/Each			
19	Bearing 6201,6202	50nos/each			





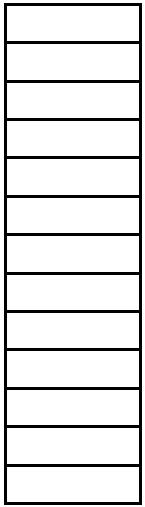


**GOVT. ITI, BHAWANIPATNA**  
**CONSOLIDATED RAW MATERIAL FOR WIREMAN FOR THE SESSION : 2018 -19**  
**PACKAGE -III WIREMAN /ITIBPT/18/19**

Sl. No.	Description of Material	Quantity	Rate per Unit in Rs	GST in Rs
1	Diode IN4007.	5 Nos		
2	Resistor 470 ohm.	2 Nos		
3	Multistrand wire,red,blue, 23/0.2 of 220v grade	1 coil		
4	Base board (laminated board 30x15x3mm).	5 Nos		
5	Mains cord 3 core cable 23/0.2 of 250v.	1 coil		
6	3pin plug 5Amp 250v.	10 Nos		
7	Rasin core solder 60/40.	2 roll		
8	Log board General purpose 20 point.	5 Nos		
9	Hook-up wire(red&black).	30 mtrs		
10	Switch 16 A,240v.	6 Nos		
11	Diodes IN4001.	5 Nos		
12	Capacitor-1uf,2.5uf,3.5uf,10uf,100uf,.	2 Nos each		
13	Resistor 10ohm,100ohm,470ohm,1k,10k.	2 Nos each		
14	Connecting wire.	30 mtrs		
15	Tag Board/PBC.	5 Nos		
16	Zener diode 10v 1w.	8 Nos		
17	Potentio meter ww 10 ohm 10w.	2 Nos		
18	Diode data manual.	2 Nos		
19	Wire sleeve (yellow,red,blue,black) 1mm dia.	100 cm each		
20	1.5 volt dry cells.	6 Nos		
21	Connecting lead.	10 mtrs		
22	Transistor BC 107.	10 Nos		
23	Lamp 6v,150mA.	10 Nos		
24	Variable resistor-(250k,1w) (10k,1w).	10 Nos each		
25	Resistor 150 ohm, 220 ohm,1k,1k5,27k,2m2(1/4 watt).	10 Nos each		
26	Pendent lamp holder 6A,220v.	10 Nos		
27	Batten holder 6A,220v.	10 Nos		
28	Angel holder 6A,220v	10 Nos		
29	One way switch 6A,200v.	30 Nos		
30	Two way switch 6A,220v.	30 Nos		
31	ICDP Switch 16A,220v.	3 Nos		
32	Lamp cow,100w,200w.	10 Nos each		
33	Copper wire 2.5 sq. mm(PVC).	1 coil		
34	Copper wire 1.5 sq mm(PVC).	1 coil		
35	Aluminium wire 1.5 sq mm(PVC).	1 coil		
36	Fuse wire, 10 Amp.	1 roll		
37	Single phase single throw switch 16 A,220v.	5 Nos		
38	Socket 16 A 220v.	5 Nos		
39	SV lamp set (choke250w/230v,capacitor, connecting leads).	2 Nos		
40	MV lamp set ( choke 250/230v, capacitor, connecting leads).	2 Nos		

41	PVC conduit pipe 20mm,1.5mm thick.	5 Nos		
42	Saddle 20 mm.	30 Nos		
43	PVC junction box 20mm 4 way,3 way.	10 Nos each		
44	T .W box 100x100x50mm.	12 Nos		
45	Screw 20 mm,25 mm,(5,6 no)	1 pkt each		
46	Insulation tap.	6 roll		
47	Hacksaw blade 300mm.	20 Nos		
48	Sand paper 00 smooth.	10 sheet		
49	Grease.	500 gm		
50	Varnish.	1 ltr		
51	Milinex paper 0.5 mm.	5 sheet		
52	Electric bell 250v Ac 50 hz.	2 Nos		
53	Chack- white & colour.	3 pkts each		

**TOTAL**  
in Rs



**GOVT. ITI, BHAWANIPATNA**  
**CONSOLIDATED RAW MATERIAL FOR WIREMAN FOR THE SESSION : 2018 -19**

**PACKAGE -IV COE (FABRICATION) /ITIBPT/18/19**

SL NO	DESCRIPTION OF RAW MATERIALS	QUANTITY	RATE PER UNIT IN PRICE	GST IN Rs	TOTAL IN Rs
1	M.S FLAT 50 X6	200 kg			
2	M.S FLAT 50 X8	200kg			
3	M.S FLAT 50 X10	150 kg			
4	M.S FLAT 65 X8	100kg			
5	M.S FLAT 75 X8	50 kg			
6	M.S ROD $\phi$ 12mm	30 kg			
7	Hack saw Blade	1000 Pices			
8	Power Saw Blade	20nos			
9	Mobile oil	5 Lts.			
10	Emery paper	100 Piece			
11	Emery cloth	20mts			
12	Cotton Waste	10 kg			
13	Chalk	05 pkt.			
14	Colour Chalk	05 pkt.			

<b>Sheet Metal Work</b>		
Sl. No.	Items	Quantity
1	M.S. Sheet 2mm	20kg
2	M.S. Sheet 3mm	30kg
3	Rivet (Soft)	1kg
4	G.I. Sheet	30 kg
5	Screw	

<b>Basic Machine Shop</b>		
Sl. No.	Items	Quantity
1	M.S round rod $\phi$ 25 mm	100 kg
2	M.S round rod $\phi$ 32 mm	100 kg
3	M.S round rod $\phi$ 40 mm	200kg
4	M.S round rod $\phi$ 50 mm	100 kg
5	Hack saw Blade	500 Pcs
6	Power Saw Blade	20 Pcs
7	Mobile oil (20-40)	05 Lters
8	Emery cloth	20mtrs
9	Cotton Waste	05 kg
10	Chalk	05 Pkt
11	Marker Pen with Ink	10 Sets

<b>Basic Welding</b>		
Sl. No.	Items	Quantity
1	M.S FLAT 50 X10	200 Kg
2	M.S FLAT 50 X8	200 Kg

3	M.S FLAT 65 X8	100 Kg			
4	M.S FLAT 100 X 8	100kg			
5	G.I Pipe $\phi$ 100mm	32 ft			
6	G.I Pipe $\phi$ 50mm	32ft			
7	Electrode 2.5 mm	100 pkt			
8	Electrode 3.15 mm	100 pkt			
9	Electrode 4 mm	50 pkt			
10	Oxygen Gas Cylinder	1Cylinder			
11	Carbide	10 kg			
12	Cotton Waste	05kg			
13	Chalk	05 Pkt			
14	Colour Chalk	05 pkt.			

<b>Metal and Surface finishing</b>		
Sl. No.	Items	Quantity
1	M.S Flat 50 X8 mm	100 kg
2	M.S Flat 50 X6 mm	100 kg
3	Emery Paper (G-120, G-80, G-50)	150 Pcs.
4	Oil Stone	05 Pcs
5	Emery cloth (G-120, G-80, G-50)	20 Mts
6	Water Proof Emery Paper	30Pcs.
7	Enamel Paint	20 Ltr.
8	Redoxide	15 Lts.
9	Char Coal	05 Bag
10	Metal Putty	01 Kg
11	Cotton Waste	05 Kg

<b>Basic Electrical and Electronics &amp; Computer</b>		
Sl. No.	Items	Quantity
1	Ball 60 wt, 100wt. 200wt.	15 pc
2	Copper Wire	8 Mts
3	Brass Wire	5mts.
4	Soldering	1 Pc.
5	Soldering flux	1 Pc.

**GOVT. ITI, BHAWANIPATNA**  
**CONSOLIDATED RAW MATERIAL FOR WIREMAN FOR THE SESSION : 2018 -19**  
**PACKAGE -V, MMV /ITIBPT/18/19**

SL NO	DESCRIPTION OF RAW MATERIALS	QUANTITY	RATE PER UNIT IN PRICE	GST IN Rs	TOTAL IN Rs
1	DIESEL	50 L			
2	PETROL	50 L			
3	KEROSINE OIL	30 L			
4	GREASE AP 3 , WHITE	5 KG			
5	ENGINE OIL, 15 W 40	10 L			
6	GEAR OIL, 80 W 90	3 L			
7	EMERY PAPER( WATER PROOF)	2 ROLL			
8	COTTON WASTE	50 KG			
9	ENGINE COOLANT	5 L			
10	DISTILED WATER	10 L			
11	PACKING PAPER	2 ROLL			
12	WHITE CHALK	10 PACK			
13	COLOUR CHALK	5 PACK			
14	WHITE BOARD MARKER PEN	5 PCS			
15	A4 XEROX PAPER	2 PACK			
16	NUT & BOLT( 10/11,12/13,14/15,16/17,18/19WITH PLAINWASHER)	EVERY 20 PCS			
17	BANJO WASHER	50 PCS			
18	SPRING WASHER	50 PCS			
19	ANABOND PASTE	5 NOS			
20	GASKET SALAQ	5 NOS			
21	GRINDING STICK & PASTE	10 NOS			
22	HEAD GASKET FOR JEEP, TATA -407	2 SET EACH			
23	OIL SEAL KIT SET FOR JEEP	2 SET EACH			
24	BRAKE FLUID( DOT-3, DOT-4)	2 L EACH			
25	POWER STEERING OIL ( Tq, 80 g)	2 L			
26	TYRE PRESSURE GAUGE	2 PCS			
27	HYDROMETER	2 PCS			
28	AIR COMPRESSOR DELIVERY PIPE	20 FT			
29	AIR FILTER FOR JEEP, TATA-407	2 SET EACH			
30	FUEL FILTER JEEP, TATA -407	2 SET EACH			
31	ENGINE OIL FILTER JEEP, TATA -407	2 SET EACH			
32	OIL SUMP PACKING JEEP, TATA-407	2 NOS EACH			
33	DRAIN PLUG JEEP	2 NOS			
34	BATTERY CLAMP	10 NOS			
35	CAR WASHER 1/2 INCH GATEWAY VALVE BRASS	2 NOS			
36	MS FLAT ( 50/8, 50/10, 50/6)	100 KG			
37	HACKSAW BLADE	200 PCS			
38	SAFETY GOGGLES	21 NOS			
39	ELECTRODE ( 2.5, 3.1, 4 MM	2 PACK EACH			
40	DRAWING SHEET	10 NOS			

**GOVT. ITI, BHAWANIPATNA**  
**CONSOLIDATED RAW MATERIAL FOR WIREMAN FOR THE SESSION : 2018 -19**  
**PACKAGE -V, DIESEL MECH. /ITIBPT/18/19**

SL NO	DESCRIPTION OF RAW MATERIALS	QUANTITY	RATE PER UNIT IN PRICE	GST IN Rs	TOTAL IN Rs
1	DIESEL	50 L			
2	PETROL	50 L			
3	KEROSINE OIL	30 L			
4	GREASE	5 KG			
5	ENGINE OIL	10 L			
6	GEAR OIL	3 L			
7	EMERY PAPER( WATER PROOF)	2 ROLL			
8	COTTON WASTE	50 KG			
9	ENGINE COOLANT	5 L			
10	DISTILED WATER	10 L			
11	PACKING PAPER	2 ROLL			
12	WHITE CHALK	10 PACK			
13	COLOUR CHALK	5 PACK			
14	WHITE BOARD MARKER PEN	5 PCS			
15	A4 XEROX PAPER	2 PACK			
16	NUT & BOLT( 10/11,12/13,14/15,16/17,18/19WITH WASHER)	EVERY 20 PCS			
17	BANJO WASHER	50 PCS			
18	SPRING WASHER	50 PCS			
19	ANABOND PASTE	5 NOS			
20	GASKET SALAQ	5 NOS			
21	GRINDING STICK & PASTE	10 NOS			
22	HEAD GASKET FOR JEEP, TATA -407	2 SET EACH			
23	OIL SEAL KIT SET FOR JEEP	2 SET EACH			
24	BRAKE FLUID( DOT-3, DOT-4)	2 L EACH			
26	TYRE PRESSURE GAUGE	2 PCS			
27	HYDROMETER	2 PCS			
29	AIR FILTER FOR KIRLOSKAR ENGINE	2 SET EACH			
30	FUEL FILTER KIRLOSKAR ENGINE	2 SET EACH			
31	ENGINE OIL FILTER KIRLOSKAR ENGINE	2 SET EACH			
32	OIL SUMP PACKING KIRLOSKAR ENGINE	2 NOS EACH			
33	DRAIN PLUG JEEP	2 NOS			
34	BATTERY CLAMP	10 NOS			
35	MS FLAT ( 50/8, 50/10, 50/6)	100 KG			
36	HACKSAW BLADE	200 PCS			
37	SAFETY GOGGLES	21 NOS			

**GOVT. ITI, BHAWANIPATNA**  
**CONSOLIDATED RAW MATERIAL FOR WIREMAN FOR THE SESSION : 2018 -19**  
**PACKAGE -V, TRACTOR MECH.. /ITIBPT/18/19**

SL NO	DESCRIPTION OF RAW MATERIALS	QUANTITY	RATE PER UNIT IN PRICE	GST IN Rs	TOTAL IN Rs
1	MS FLAT 50 X 6 MM	200 KG			
2	M S SHEET .8 MM THICKNESS	2 PC			
3	HACKSAW BLADE 12 "	5 PKT			
4	DIESEL	80 LIT			
5	DIESEL FILTER	2 NO			
6	MOBIL 20-40	15 LIT			
7	MOBIL FILTER	2 NO			
8	GEAR OIL	20 LIT			
9	GREASE	10 KG			
10	NUT AND BOLT 16-17 ,20-22, 10-12, EACH	2 DOZ			
11	WASHER PLAIN 16-17 ,20-22, 10-12, EACH	1 KG			
12	OIL SEAL FRONT WHEEL	2 NO			
13	HOSE PIPE I TYPE, LTYPE EACH	2 NO			
14	SEAM THIN , MEDIUM	4 DOZ			
15	BOLT 27-30 MM EACH	06 NOS			

**GOVT. ITI, BHAWANIPATNA**  
**CONSOLIDATED RAW MATERIAL FOR WIREMAN FOR THE SESSION : 2018 -19**  
**PACKAGE -VI ELECTRONIC MECH. /ITIBPT/18/19**

SL. NO.	DESCRIPTION OF RAW MATERIALS	QUANTITY	RATE PER UNIT IN PRICE	GST IN Rs	TOTAL IN Rs
1	7/20 Copper Wire	1 coil			
2	2.5mm square copper wire	1 coil			
3	2mm square copper wire	1 coil			
4	5 amp Flush Type Switch (Cona , Anchor or Havels)	36 nos			
5	5 amp Flush Type Socket (Cona , Anchor or Havels)	36 nos			
6	7x4 pvc board	18 nos			
7	Two pin top (Cona , Anchor or Havels)	10 nos			
8	Three pin top (Cona , Anchor or Havels)	10 nos			
9	Pendent Holder	4 nos			
10	12-0 Transformer 1 Amp	22 nos			
11	12-0-12 Transformer 1 Amp	22 nos			
12	Diode 1N4007	100 nos			
13	Diode 1N4001	100 nos			
14	LED Red 3 mm	66 nos			
15	LED Green 3 mm	22 nos			
16	Solder (Westex) 100gm Pack	20 nos			
17	12 volt zener	20 nos			
18	IC 7812	44 nos			
19	IC LM 317	22 nos			
20	IC 7912	12 nos			
21	Capacitor 4700 micro farad 25 volt	22 nos			
22	Capacitor 2200 micro farad 25 volt	66 nos			
23	Capacitor 10 micro farad 25 Volt	44 nos			
24	Capacitor 10 micro farad 50 Volt	44 nos			
25	Disc Capacitor 270 nano Farad	100 nos			
26	1 Amp Glass Cartridge Fuse (Big)	22 nos			
27	Glass Cartridge fuse Circuit mount holder (Big)	22 nos			
28	Resistor 820 Ohms 1/4 Watt	60 nos			
29	Resistor 470 Ohms 1/4 Watt	60 nos			
30	Resistor 2.2 Kilo Ohms 1/2 Watt	22 nos			
31	Preset 4k7	22 nos			