

**PROCUREMENT OF GOODS
UNDER
NATIONAL SHOPPING PROCEDURES**

*(For Contracts valued less than the
equivalent of US \$50,000 each)*

For

AUTOMOBILE ENGINEERING DEPARTMENT

No. / Category of quotation: - RIT/TEQIP/E5/ AUTO/NOV. 2005/02

Supply of equipments for various laboratories in Automobile Engineering Department

Schedule A-1

Sr. No	Brief Description of item	Specifications	Quantity	Period of delivery	Place of Delivery	Installation if any
1.	Electronic fuel measurement unit	Volumetric / gravimetric fuel consumption meter continuous flow type for petrol engine 800-1500 CC at 5000 rpm.	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	Yes

Schedule A-2

Sr. No	Brief Description of item	Specifications	Quantity	Period of delivery	Place of Delivery	Installation if any
1.	Air flow measurement unit	Air flow measurement unit for engine with air box for 4- stroke engine of swept volume 800-1500 CC at 5000 rpm	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	Yes

Schedule A-3

Sr. No	Brief Description of item	Specifications	Quantity	Period of delivery	Place of Delivery	Installation if any
1.	Load cell with indicator	Load cell with digital load indicator for measurement of load up to 20 Kg	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
2.	Tachometer	Digital Tachometer with contact and non contact type measuring arrangement	02	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule A-4

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Variable compression ratio engine	Variable compression ratio engine: Single cylinder, Air/water Cooled, Petrol-Diesel, 1500 RPM, 3 – 5 kW, Crank Starting, Forced Lubricating. Provision to vary Compression ratio 8:1 to 2.5:1 for Petrol and 15:1 to 20:1 for diesel engine.	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule A-5

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Petrol Engine	Single cylinder 4 Stroke Petrol Variable Speed Engine, 75-100 CC, Power –3 to 7 kW @ 6000 RPM	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule A-6

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Diesel Engine	Single cylinder 4 Stroke D.I. Diesel Variable Speed Engine, 500-700 CC, Power – 8 to 12 kW @ 3000 RPM	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule B-1

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Battery Tester	a) To test 12V/ 24V batteries b) Working on power from battery being tested c) Provision to digitally indicate voltage, current & starting capacity of the battery d) LCD display with report printing facility e) Operating temp. range up-to min 50°C	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
2.	Battery Charger	a) For charging batteries of two wheelers and four wheelers. b) Portable and handy. c) Provision for setting current d) Digital display	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

3.	Spark plug Tester	a) For cleaning and testing of sparkplugs of various make b) Should check electrode gap, dielectric strength and ignition voltage requirement	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
4.	Cut sections	a) Cut section of Spark plug of any 2/3/4 wheeler b) Cut section of Alternator of any 12 V, 22-60 Amp output alternator, Inner details should be clearly visible c) Cut section of Starter of any 12 V, 0.7 kW starter, Inner details should be clearly visible	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
5.	Glow duration unit	Glow duration unit of any 12 V automotive electrical system	02	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
6.	Alternator rectifier	Any 14 V, 22- 60 amp alternator rectifier for testing on Auto-Electrical test bench	02	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
7.	Alternator regulator	Any 14 V, 22- 60 amp alternator regulator for testing on Auto-Electrical test bench	02	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
8.	Automotive Electrical Tool kit	Should comprise of various tools required for automotive Electrical repairs	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
9.	Relays	Horn relay and headlight relay of any four wheeler automobile for testing purpose	02	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule B-2

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Alternator	14 V, 22-90 Amp. output alternator assembly used for LMV/LCV, HCV of reputed manufacturer	03	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
2.	Starter Motor	Starter Motor assembly of reputed manufacturer used for LMV/ LCV, HCV, 12 V, 0.7 KW starter assembly	03	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule B-3

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Micro controller Training kit along with development board	a) Min. 32 K monitor EPROM b) Min. 8 K scratch pad RAM c) Min. 32 K user RAM with battery backup. d) PC type keyboard e) RS 232 serial interface f) LCD display	02	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule B- 4

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	D. C. Supplier	a) Constant voltage supply up-to 30 V in the step of 5 volt b) Amperage 1-5 in steps of 1 Amp	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule B-5

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Ignition coil & CDI Unit Tester	Should test Ignition coil and CDI unit of all two wheelers	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule B-6

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Electronic modular system	Automotive electronic modular system	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule B-7

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Fuel cell	Working model of fuel cell	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule C-1

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Gear Box test Rig	<ul style="list-style-type: none"> • Gear box of Car or Jeep – Motor driven • Measurement of Input torque, speed, output speed and efficiency of transmission 	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
2.	Live rear axle Test rig	Motorized Rear live axle with provision to apply load at two different wheels and to measure input torque, speed and output torque, speed at different loading condition at different wheels.	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule C-2

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Clutch friction Tester	Measurement of slipping torque, holding torque, coefficient of friction & efficiency of single plate clutch of Light Commercial vehicle	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
2.	Brake Lining Friction Test Rig	Brake Lining Friction Test Rig 1. Test evaluation: Coefficient of friction of the friction materials 2. Methods of Test: Friction method by using the constant torque conditions.	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule C-3

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Instillation if any
1.	Cut section of working model of	<ol style="list-style-type: none"> 1. Multi-plate clutch assembly of 150 cc motorcycle 2. Rotary clutch assembly of two wheeler 3. Continuous variable transmission assembly of two wheeler 4. Single plate clutch assembly of utility vehicle. 5. Single plate clutch assembly of heavy commercial vehicle 6. Centrifugal clutch 7. Diaphragm Clutch assembly of a car 8. Sliding mesh gear box 9. Complete Transmission of a tractor 10. Automatic Transmission of a car 11. Synchromesh gear box of Heavy Commercial vehicle 12. Synchromesh gear box of Car 13. Synchromesh gear box of Utility vehicle 14. Transfer gear box of four wheel drive vehicle 15. Two wheeler engine 16. Final drive with differential of HCV 17. Final drive with differential of Front wheel drive Car 18. Transmission system of rear engine rear wheel drive vehicle 19. Three quarter floating differential and wheel mechanism 20. Full floating differential and wheel mechanism 21. Engine, transmission system and end drive of three wheeler 	01 each	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
2.	Fluid Flywheel	Working model of fluid flywheel	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
3.	Torque Converter	Working model of torque converter	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
4.	Electrical system	Layout of Working model of 12 V automobile electrical system mounted on a board, color coded of a) Two wheeler b) Four wheeler	01 each	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
5.	Cut Sections	<ol style="list-style-type: none"> a) Distributor of 12 V automotive electrical system b) Dynamo of 12 V automotive electrical system c) Speedometer of 12 V automotive electrical system d) Alkaline battery of 12 V alkaline battery of automotive electrical system Should demonstrate internal constructional details and mounted on wooden base e) Ignition coil of 12 V automotive electrical system 	01 each	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

6.	Ignition Systems	a) Working model of Conventional ignition system of four wheeler automobile b) Working model of Electronic ignition system of four wheeler automobile c) Working model of conventional ignition system of two wheeler automobile d) Working model of electronic ignition system of two wheeler automobile	01 each	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
7.	Demonstration model	a) Fuel supply system of the petrol engine b) Fuel supply system of the diesel engine c) MPFI system	01 each	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
8.	Common rail Fuel Injection system	Working model of Common rail Fuel Injection system	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
9.	Cut-section models	a) Engine (4-valve, overhead camshaft type) b) Mechanical fuel pump c) Electrical fuel pump d) Radiator e) Water pump f) Fuel injection pump – in-line & rotary j) Injectors k) Gear lubrication pump l) Silencer of a light motor vehicle	01 each	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
10.	Cut sections	a) Cut section of Spark plug of any 2/3/4 wheeler b) Cut section of Alternator of any 12 V, 22-60 Amp output alternator, Inner details should be clearly visible c) Cut section of Starter of any 12 V, 0.7 kW starter, Inner details should be clearly visible	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule D-1

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Power Windows	Working model of Power Windows	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule D-2

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Instrumentation for wind tunnel	<p>Description of Wind Tunnel Set Up Test Section size 39 cm ht. X 60 cm wt. X 131 cm length</p> <p>Motor Power : 7.5 kW, Speed 1500 rpm Air flow : 0.15 cubic meter / sec at 40 mm WG</p> <p>Required instruments</p> <p>Instrumentation for measurement of</p> <ol style="list-style-type: none"> 1. Drag force 2. Lift force 3. Air velocity <p>For models such as, Aerofoil, Scale model of Car, Truck, Jeep</p> <p>Instrumentation for demonstration of</p> <ol style="list-style-type: none"> 1. Pressure distribution around test object 2. Air flow visualization <p>In wind tunnel of given specification</p>	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule D-3

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Passenger Seats	Passenger Seats of vehicles a) Car – Inclined, fixed, adjustable b) Luxury, semi-luxury, ordinary Bus - Inclined, adjustable	01 each	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
2.	Drivers seat	Drivers seat of vehicle 1. Car 2. Truck 3. Passenger bus	01 each	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule D-4

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Experimental Test set up for Driver Seat Ergonomics	Experimental Test set up for Automobile Vehicles Driver Seat Ergonomics (including its position, dimensions, postures etc.)	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

2.	Experimental Test set up for Passenger Seat Ergonomics	Experimental Test set up for Automobile Vehicles Passenger Seat Ergonomics (including its position, dimensions, postures etc.)	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
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Schedule D-5

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Ergonomics Testing and Measurement system	Ergonomics Testing and Measurement system	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule E-1

Sr. No	Brief Description of item	Specifications	Quantity	Period of delivery	Place of Delivery	Installation if any
1.	Data Acquisition system	8 digital I/O lines, two 24-bit counters; analog triggering 1.25 MS/s, 16 analog inputs: two 12-bit analog outputs Cable and connector. Easy-to-use, powerful, graphical development with LabVIEW	04	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule E-2

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Sound measuring instrument	Sound level meter with data Storage and provision to interface with computer	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule E-3

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Instillati on if any
1.	Simulation software	<ul style="list-style-type: none"> Engineering mechanics & control, power transmission, Electrical & Electronics Library details – mechanics 1D linear, Mechanics 1D rotary, mechanics 3D, CAD Import via STL, Motors & Engines, Coupling/clutches transmission components, general signal blocks, signal sources, linear signal blocks, non-linear blocks, special signal blocks, time-discrete block Magnets, electronic analog, electronics (Spice Elements), Spice net list import, electrical motors 2/5 user 	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule E-4

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Instillati on if any
1.	Decelerometer	<ul style="list-style-type: none"> Measurement of deceleration Pedal force 1 KN Pressure sensor pneumatic 20 bar Traction sensor 20 KN Performance Testing Computer Braking Test Computer Data Acquisition System On-Board Dynamometer Dual Axis Accelerometer 	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule E-5

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Instillati on if any
1.	Brake Tester	<ul style="list-style-type: none"> Maxi. Braking force per wheel – 1350 lbs Maxi. Axle weight – 5000 lbs Motor Power each side – 1.5 hp Wheel speed – 1.5 mph 	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule E-6

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Vehicle Diagnostic System	<ul style="list-style-type: none"> • Diagnosis equipment with ESI (tronic) software • 2-channel multi-meter • 2-channel oscilloscope 	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule E-7

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Combustion Analyser	Capable of measuring flame front velocity, flame travel etc. with the help of combustion software, including A/D connectors and suitable data acquisition system	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule F-1

Sr. No	Brief Description of item	Specifications	Quantity	Period of delivery	Place of Delivery	Installation if any
1.	Oil Analysis Kit	Lubricating Oil Analysis Kit	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
2.	Ferroglyphic Oil Analysis Kit	Spectrographic analysis giving microscopic photo and detailed technical analysis of used engine, gearbox or rear end oil. Spectra oil analysis should be limited to 5 microns and smaller particles	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule F-2

Sr. No	Brief Description of item	Specifications	Quantity	Period of delivery	Place of Delivery	Instillation if any
1.	Flash & Fire Point Apparatus	As per IP-36, ASTM-D-92, IS-1448 (P-69) (without thermometer). Electrically heated model with Voltage variance Spare Reducing socket with cock (essential) for gas test flame. Wooden case for gas or electrical set. <u>Thermometer for Cleveland:</u> IP 28C (-6/400c x 2c) with manufacturers certificate.	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
2.	Cloud & Pour Point Apparatus	As per IP-15 & 219 & ASTM-D-2500, IS-1448 (P-10) (Without thermometer). Double test set with insulated body. Four Test with insulated body. Spare Glass Jar. <u>Thermometer for Cloud & Pour Point:</u> IP 1C (-38/50c x 1c) with manufacturers certificate. IP 2C (-80/20c x 1c) with manufacturers certificate.	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
3.	Carbon Residue Apparatus	As per ASTM-D-2416 Electrically heated model with digital controller.	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
4.	Aniline Point Apparatus	As per IP-2 method B & IS-1448 (P-3), ASTM-D-611 by thin film method. Electrically heated with motorized stirrer. (without thermometer). <u>Thermometer for Aniline Point Apparatus:</u> IP 20C (-38/42c x 0.2c) with manufacturers certificate. IP 21C (25/105c x 0.2c) with manufacturers certificate. IP 59C (90/170c x 0.2c) with manufacturers certificate.	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
5.	Drop Point of grease Apparatus	As per IP-371 (without thermometer) complete with beaker and hand stirrer. Apparatus complete with electrical heater with control and motorized stirrer. <u>Thermometer for Drop Point:</u> IP 40C (20/120c x 1c) with manufacturers certificate. IP 41C (100/230c x 1c) with manufacturers certificate.	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

6.	Grease Penetrometer	Standard grease Penetrometer As per IP-50, IS-1448 (P-60) & ASTM-D-217, 1403 without cone, container & weight. <u>Essential Accessories :</u> Brass Cone for above. Aluminum solid cone for above. Grease container 10 cm dia. & 10cm height for above.	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
7.	Bomb Calorimeter	Should be able to determine calorific values of oil, coal, foodstuffs etc. The Calorimeter Jacket and Inner Vessel should be made from Bright chrome plated Copper. Water Jacket & Calorimeter Vessels should be made of Chromium Plated Copper as per international standards. Digital Model with compact stirrer, differential type Digital Thermometer, Accuracy 0.01°C, with Built-in Timer and connected to Electronic Firing Unit for simultaneous operation of Timer.	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule F-3

Sr. No	Brief Description of item	Specifications	Qty	Period of Del.	Place of Delivery	Installation if any
1.	Diesel Knock Analyzer	Accurate in indicating the presence and intensity of knock on any diesel engine	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule F-4

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Installation if any
1.	Portable octane analyzer	<ul style="list-style-type: none"> Determines the Pump Octane Number (AKI), Research Octane Number (RON), and Motor Octane Number (MON) of unleaded gasoline, and optional Cetane Index and Cetane Number for diesel fuels. Accuracy and repeatability equivalent to ASTM approved CFR engines test methods (ASTM D2699 and D2700 for Octane Number and ASTM D613 for Cetane Number) Sample Holder: Sealed, cylindrical glass container (75mm optical path length) Sample Volume: 8 Ounces (approx. 225 mL) Pre-calibrated for unleaded gasoline & ethanol-blended fuels. (Analyzer can be calibrated for up to 8 additional fuel types.) Battery operated (6 AA batteries) 	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule F-5

Sr. No	Brief Description of item	Specifications	Qty	Period of del.	Place of Delivery	Instillation if any
1.	Pressurized Lubricity Tester	Pressurized Lubricity Tester	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule F-6

Sr. No	Brief Description of item	Specifications	Qty	Period of delivery	Place of Delivery	Instillation if any
1.	Fuel Analysis tester	Cetane index, ISO Cleanliness level, Water in parts per million (Karl Fischer), distillation, API Gravity	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule G-1

Sr. No	Brief Description of item	Specifications	Quantity	Period of delivery	Place of Delivery	Instillation if any
1.	Cut section model	Cut section model of steering gear box 1. Rack & pinion 2. Worm & roller 3. Recirculating ball (With wheels & Axles)	01 each	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
2.	Power steering system hydraulic type	Cut section model Power steering system hydraulic type	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
3.	Cut section models of shock absorbers	Cut section models of shock absorbers	04	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
4.	Working model of mechanical brake system	Cut section model of Working model of mechanical brake system	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
5.	Cut section model of brake cylinder & master cylinder	Cut section model of brake cylinder & master cylinder	04	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

6.	Cut section model of disc brake system	Cut section model of working of disc brake system	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
7.	Cut section model of drum brake working unit (Hydraulic)	Cut section model of drum brake working unit (Hydraulic)	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
8.	Working Model of Air brake system	Working Model of Air brake system	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
9.	Cut section model of Vacuum pump vane type	1.Cut section model of Vacuum pump vane type 2.Cut section model of piston pump / air compressor	01 each	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
10.	Model of hydraulic braking system with vacuum booster	A Model of Hydraulic Braking System showing all detailed components along with vacuum booster.	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule G-2

Sr. No	Brief Description of item	Specifications	Quantity	Period of Del.	Place of Delivery	Installation if any
1.	Various Springs	1.Coil springs of Vehicle 2. Leaf spring assembly rear vehicles	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule G-3

Sr. No	Brief Description of item	Specifications	Quantity	Period of Del.	Place of Delivery	Installation if any
1.	Mechanical steering system & links of jeep	Mechanical steering system & linkages of jeep from front steered wheels to steering wheel	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule G-4

Sr. No	Brief Description of item	Specifications	Quantity	Period of Del.	Place of Delivery	Instillati on if any
1.	Electric bike	Electric bike/moped	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

Schedule G-5

Sr. No	Brief Description of item	Specifications	Quantity	Period of Del.	Place of Delivery	Instillati on if any
1.	Anti Lock Braking (ABS) System	Demonstration model of anti lock braking system	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
2.	McPherson strut with drive shaft, disc brake	Cut section model of one/two side McPherson strut with drive shaft, disc brake	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
3.	Front suspension	Cut section model of complete front suspension with longitudinal torsion bar	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
4.	Front suspension	Cut section model of complete coil spring type front suspension system	01	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES
5.	Cut section model	a) Complete both side with double wishbone suspension with drive shaft b) Complete leaf spring suspension with rear axle & shock absorber c) Complete coil spring type rear suspension system	01 Each	30 Days	Auto. Engg. Dept., RIT, Sakharale	YES

1. Government of India has received a credit from the International Development Association (IDA) in various currencies equivalent to US\$ 250 Million towards the cost of the TEQIP Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.

2. **Bid Price**

- a) The contract shall be for the full quantity as described above. Corrections, if any, shall be made by crossing out, initialing, dating and re writing.
- b) All duties, taxes and other levies payable by the contractor under the contract shall be included in the total price.

- c) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
 - d) The Prices should be quoted in Indian Rupees only.
3. Each bidder shall submit only one quotation.
4. **Validity of Quotation**
Quotation shall remain valid for a period not less than 45 days after the deadline date specified for submission.
5. **Evaluation of Quotations**

The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which

- (a) are properly signed ; and
- (b) confirm to specifications and the specific terms and conditions as follows:

The Quotations would be evaluated for all the items together in each schedule (from A to G).

The Quotations would be evaluated for each item separately in the schedule B-1.

6. **Award of contract**
- The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.
- 6.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
- 6.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.
7. Payment shall be made immediately after delivery and successful installation and commissioning of the goods.
8. Normal commercial warranty/ guarantee shall be applicable to the supplied goods.
9. You are requested to provide your offer latest by 12.30 PM. hours on 31st Dec. 2005.
10. We look forward to receiving your quotations and thank you for your interest in this project.

Principal
Rajarambapu Institute of Technology, Rajaramnagar
Sakharale Dist – Sangli 415 414
MAHARASHTRA (India)

FORMAT OF QUOTATION *

Sl. No.	Description Goods	Specifications	Qty.	Unit	Quoted Unit Rate in Rs.	Total Amount	
						In Figures	In Words

Gross Total Cost: Rs.

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs.(amount in figures) (Rs. amount in words) within the period specified in the Invitation for Quotations.

We also confirm that the normal commercial warrantee/guarantee of months shall apply to the offered goods.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

- *Applicable while the bids are being invited for more than one item and would be evaluated for all the items together. Modify where evaluation would be made for each item separately.*