

Tender Notice

Department of Geospatial Science

The University of Burdwan

Golapbag, Burdwan - 713104

Ref: GSS/07122017/BB/1

Date: 08.12.2017

Date of advertisement: 08-01-2018

Sealed quotations are invited from reputed vendors/suppliers for the repair & maintenance as well as supply of following equipment for the Department of Geospatial Science, BU. Vendors/suppliers are asked to quote the lowest rate over listed price for the same for the financial year 2017-2018. GST and other applicable taxes must be clearly mentioned in the quotation. The quotation should reach to the following address within 14 days from the date of the advertisement. The quotation should follow the specifications as per given in the tender:

Budget Head	Items
GSS/07122017/BB/1/R.E. 2. Repair & Maintenance of Equipment	Theodolite
GSS/07122017/BB/1/ R.E. 3A. Repair & Maintenance of Laboratories, Instrument Room & Class Room	Relocate the LCD Projector Screen
GSS/07122017/BB/1/ R.E. 4C. Repair & Maintenance of LCD Projector	Maintenance of LCD Projector
GSS/07122017/BB/1/ R.E. 11A. Technical Aids including Teaching Aids (includes purchase of technical materials, glassware, etc.)	Maintenance of Black Board; LCD Projector Cable replacement



Budget Head	Items
GSS/07122017/BB/1/C.E. 3A. Equipment & Machinery	Weather Station (Annexure-I)
	EDM/LDM (Annexure-IIA) Infrared Thermometer (Annexure-II B)
	Sextant, Clinometers, Burton compass (Annexure-III)
GSS/07122017/BB/1/C.E. 5. Computer & Peripherals	One PSC (Annexure-IV)
GSS/07122017/BB/1/C.E. 11 A. Furniture	One U Shaped Table (Annexure-V)
GSS/07122017/BB/1/C.E. 13. Tools & Plants	One Vacuum Pump, (Annexure-VI A) Satellite Imageries (From NRSC, Govt. of India) (Annexure-VI B)
GSS/07122017/BB/1/C.E. 17. Overhead Projector/Slide Projector/L.C.D. Projector	ONE LCD Projector (Annexure-VII)
GSS/07122017/BB/1/C.E. 17A. TV VCR, Sound System, Camera	Public Address System (PAS) (Annexure-VIII)



Tender No: GSS/07122017/BB/1/C.E/3A

Equipment & Machinery

(Annexure-I)

1. Software controlled weather monitoring station model requirements

Sl No.	Parameter	Specifications
1	Wind Speed Sensor	0.1-150 mph with accuracy of ± 2 mph (± 3 km/h)
2	Wind Direction Sensor	1° increments with accuracy $\pm 4^\circ$
3	Temperature Sensor	-32° c to 100° c with accuracy $\pm 0.6^\circ\text{C}$
4	Relative Humidity Sensor	10% to 100% @ 5° c to 50° c with accuracy $\pm 3\%$
5	Rainfall Sensor	0.25 mm with accuracy $\pm 2\%$ at < 2 in (5 cm)
6	Solar Radiation Sensor	1 - 1500 W/m ² with accuracy $\pm 5\%$
7	Dew point Sensor	-73 to 60° c with accuracy $\pm 2^\circ\text{c}$
8	Evapotranspiration	Evapotranspiration rate should be given
9	Provision for other external sensors	Should be upgradable with minimum 5 sensors like barometric pressure, rainfall, CO2 sensor, light and soil sensor
10	LCD display	To check all current and daily high/low readings, battery life without PC
11	Memory and storage capacity	Approx 180 days data storage. Measurement intervals from 1 to 60 minutes.
12	Communication type	Direct connection, wireless, cellular or other data transfer options
13	PC controlling software	Complete package for collection, display and reporting of meteorological data. Original software CD, manual and necessary cable to connect the PC.
14	Power requirement	Alkaline battery
15	Equipment mounting	Should be rugged galvanized steel, folding type with minimum of 3 ft in height
16	Weight and dimension	Equipment should be portable, light weight and easily transportable
17	Barometric pressure sensor	Range / Resolution 26 to 32 inHg, 880-1080 hPa Accuracy ± 0.05 inHg, ± 1.7 hPa



(Annexure-IIA)

GSS/07122017/BB/1/C.E/3AEDM/LDM

A. Laser Distance Meter: Measures from 2" to 115' (0.05 to 35m) Laser measurement accurate to 0.08 inches at 32 feet Continuous measurement function with Min/Max distance tracking updates every 5 seconds

B. Laser Distance Meter: Precise design, High strength, Accurate reading Range: 3 to 60 FT. (0.91 to 18.28 Meters) With Back Light, Area & Volume Calculation Range: 0.5 to 15 Meter (Single Unit), 1 to 60 Meter (Double Unit)

Infrared thermometer with surface moisture and dew point

(Annexure-IIB)

Temperature - TC Type K (NiCr-Ni)	
Measuring range	-50 to +600 °C
Accuracy	±(0.5 °C + 0.5 % of mv)
Resolution	0.1 °C
Temperature - Infrared	
Measuring range	-30 to +600 °C
Accuracy	±2.5 °C (-30.0 to -20.1 °C) ±1.5 °C (-20.0 to -0.1 °C) ±1.0 °C (0.0 to +99.9 °C) ±1 % of mv (Remaining Range)
Infrared resolution	0.1 °C
Humidity - Capacitive	
Measuring range	0 to 100 %RH
Accuracy	±2 %RH ±0.5 °C
Resolution	0.1 °C 0.1 % RH 0.1 ° Ctd



GSS/07122017/BB/1/C.E. 3A

Sextant, Clinometers and Burton compass

a. Nautical Sextant with compass Size: 3" x 3" x 1.75" to give maximum accuracy with stainless steel scale with 20 cm radius marked from 0 to 130 degrees. Direct reading upto 15 minutes and with vernier upto 15

b. Box Sextant 75mm dia made of gun metal and brass arc divided into from 0 to 140 degree fitted with vernier to read 1 minute and also with magnifier to read in telescope.

c. Vernier Clinometer: Vernier clinometers with two ground bases with V-groove. Vial holder with vernier and fine adjustment. Measuring range 0 - 90°. Vernier 10'. Graduation vial 0.3 mm/m \cong 1'. Dimensions 150 x 39 x 150 mm.

d. Digital Clinometer: Size :60X90X26mm; Double row digital display; High resolution : 0.001° ; High anti-shock performance >2000g ; Wide temperature working -10° ~ +70°C; Various combination methods; IP65 protection class; ZERO setting function; Measuring range : $\pm 5^\circ \sim \pm 35$

e. Analog Transit type Brunton Compass: Cast aluminum body, two inclinometer, Pocket transit-type vernier inclinometer, Stratum-type inclinometer on lid hinge (2 deg. increments for 1 deg. resolution), Two levels, Spirit level on side of case



(Annexure-IV)

GSS/07122017/BB/1/C.E. 5

Desktop computers along with peripherals

a. 8 GB RAM, 1TB HDD, 7th Generation core i5; 2GB Graphic card; 2.1 GHz intel processor, Windows 16 with 4 USB ports; Multimedia speakers along with woofers

b. 22" full LED Monitor

c. 1KVA UPS

d. LaserJet Pro MFP - Copy on both sides (duplex) both manually and automatically



(Annexure-V)

GSS/07122017/BB/1/C.E. 11 A.

U Shaped Table

The dimension of the table shall be 3.5ft width, 2.5 ft height and 20 ft long (One arm of the U) and the gap between the arms shall be 4ft.



(Annexure-VI A)

GSS/07122017/BB/1/C.E. 13

Vacuum Pump

- Cord Length (m) : 8, Automatic cord winder, 8 mt radius of operation
- Hose Length : 2 (Powerful Suction)
- Performance Features: Powerful Suction & Blower Function with 1150W Motor
- Bag : YES
- Capacity : 10 L
- Type : Wet & Dry Cleaner
- Color Family : Black
- Power Features : AC 230 V/50 Hz
- In the Box : Multipurpose Brush, Wet Squeeze, 2 Extension Tubes, 1 Unit, User Manual, Upholstery Brush, Flexible Hose Pipe, Warranty Card, Crevice Nozzle
- Product Depth (cm): 39
- Product Height (cm): 50.5
- Product Width (cm): 40.5

(Annexure-VI B)

GSS/07122017/BB/1/C.E. 13

Satellite imageries from NRSC (Govt. of India), Hyderabad

Image specification:

RESOURCESAT 2,

LISS IV

Path 107; Row 55; Reference no. 2; Subscene C; Cloud free data of 2017

CARTOSAT 2A



(Annexure-VII)

GSS/07122017/BB/1/C.E. 17

LCD Projector

Small and portable LCD Projector can be moved and used in different rooms conveniently.

Design and Dimensions:

compact measuring 11.6 × 9.6 × 3.5 (W × D × H) inches including feet and weighing 2.6 kg.

Display Features:

Powered with 3LCD technology,

Connectivity:

projector has various connectivity options including 1 USB 2.0 type A, 1 USB 2.0 type B, 2 VGA input, 1 HDMI input, 1 composite video input, 1 component video input, 1 S-video input, 2 RGB input, 1 RJ 45, 2 VGA output and 1 serial RS-232.

Other Features:

Some other additional features of the LCD projector include manual focus, 1.2x zoom factor, security lock slot, remote control with Wi-fi Connectivity etc.



(Annexure-VIII)

GSS/07122017/BB/1/C.E. 17A

Podium with PAS

Built in 60W amplifier, one tweeter, three woofers and gooseneck mic

Flexible goose neck mic with lamp

Two MIC inputs, one line input and four AUX inputs

60W rated power output

Wooden top, steel bottom and steel body



Separate sealed quotations must reach within 14 days from the date of publication of this notice to The Coordinator, Department of Geography/Geospatial Science, The University of Burdwan, Golapbag, Burdwan-713104, West Bengal, India.