GOVERNMENT GENERAL DEGREE COLLEGE SALBONI

GOVERNMENT OF WEST BENGAL

Office of the Principal

P.O. – BHIMPUR, **DIST. – PASCHIM MEDINIPUR**

Memo No:- 169/Q2/Tender Date- 02/07/19

Tender Notice

Quotations are hereby invited from the competent bonafide resourceful vendors for supplying of the following items as mentioned below to the Department of Physics **within 10 days after the publication of the notice in a sealed envelope addressed to Department of Physics, Govt. General Degree College Salboni, Vill.- Koyma, P.O.- Bhimpur, Dist.- Paschim Medinipur, Pin-721516.**

Terms and Condition: -

- Rates quoted should be valid for acceptance for at least 10 months from the date of submission.
- The materials should be of reputed brand.
- Institute reserves the right to select the brand at its own discretion.
- Institute is not bound to accept the lowest rate and reserve the right to accept or reject any or all the quotation without assigning any reason whatsoever.
- The supplier should complete the supply of all the items within such period as maybe specified in the supply order
- The supplier shall submit GST bills in printed form, in triplicate duly completed in all respects.
- Payment due to the supplier will be made through the R.T.G.S./NEFT direct to the party bank account.
- A vendor may submit quotation for a single item or for more than one item. GST registration must be submitted along with the quotation.
- The vendors must submit up to date documents relating to (a) GST (b) Trade License (c) P.Tax (d) Income Tax.
- Institute reserves the right to increase/decrease the quantity to be purchased.
- Quotation name/number/date should be mentioned on top of the envelope.
- **The vendors must mention all the components in each complete set up and they must mention the rate of all individual components. Quotation without break up of all the components in a complete set up will not consider.**

List of instruments

Sl. No.	Instruments	Quantity
1	Complete setup for the measurement of the Magnetic susceptibility of Solids.	1
2	Complete setup for the determination of the Coupling Coefficient of a piezoelectric crystal.	1
3	Complete setup for the measurement of the Dielectric Constant of a dielectric Materials with frequency	1
4	Complete setup for the determination of the complex dielectric constant and plasma frequency of metal using Surface Plasmon resonance (SPR)	1
5	Complete setup for the determination of the refractive index of a dielectric layer using SPR	1
6	Complete setup for the study the PE Hysteresis loop of a Ferroelectric Crystal.	1
7	Complete setup for the study the BH curve of iron using a Solenoid and determine the energy loss.	1
8	Complete setup to show the tunneling effect in tunnel diode using I-V characteristics.	1
9	Complete setup for the determination of the wavelength of laser source using diffraction of single slit.	1
10	Complete setup for the determination of the wavelength of laser source using diffraction of double slits.	1
11	Complete setup for the determination of (1) wavelength and (2) angular spread of He-Ne laser using plane diffraction grating	1
12	Complete setup for the study of V-I characteristics of PN junction diode, and Light emitting diode.	1
13	Complete setup for the study of the V-I characteristics of a Zener diode and its use as voltage regulator	1
14	Complete setup for the study of V-I & power curves of solar cells, and find maximum power point & efficiency	1
15	Complete setup for the study of the characteristics of a Bipolar Junction Transistor in CE configuration.	1
16	Complete setup for the study of the various biasing configurations of BJT for normal class A operation.	1
17	Complete setup to design a CE transistor amplifier of a given gain (mid-gain) using voltage divider bias.	1
18	Complete setup for the study of the frequency response of voltage gain of a RC-coupled transistor amplifier.	1
19	Complete setup to design a Wien bridge oscillator for given frequency using an op-amp.	1
20	Complete setup to design a phase shift oscillator of given specifications using BJT.	1

21	Complete setup for the study of the Colpitt`s oscillator.	1
22	Complete setup to design a digital to analog converter (DAC) of given specifications.	1
23	Complete setup for the study of the analog to digital convertor (ADC) IC.	1
24	Complete setup to design an inverting amplifier using Op-amp (741,351) for dc voltage of given gain	1
25	Complete setup to design inverting amplifier using Op-amp (741,351) and study its frequency response	1
26	Complete setup to design non-inverting amplifier using Op-amp (741,351) & study its frequency response	1
27	Complete setup for the study of the zero-crossing detector and comparator	1
28	Complete setup to add two dc voltages using Op-amp in inverting and non-inverting mode	1
29	Complete setup to design a precision Differential amplifier of given I/O specification using Op-amp.	1
30	Complete setup to investigate the use of an op-amp as an Integrator.	1
31	Complete setup to investigate the use of an op-amp as a Differentiator.	1
32	Complete setup to design a circuit to simulate the solution of a 1st/2nd order differential equation.	1
33	Complete setup to observe the loading effect of a multimeter while measuring voltage across a low resistance and high resistance.	1
34	Complete setup to observe the limitations of a multimeter for measuring high frequency voltage and currents	1
35	Complete setup to measure Q of a coil and its dependence on frequency, using a Q- meter.	1
36	Complete setup for measurement of voltage, frequency, time period and phase angle using CRO.	1
37	Complete setup for measurement of time period, frequency, average period using universal counter/ frequency counter.	1
38	Complete setup for measurement of rise, fall and delay times using a CRO.	1
39	Complete setup for measurement of distortion of a RF signal generator using distortion factor meter.	1
40	Complete setup for measurement of R, L and C using a LCR bridge/ universal bridge.	1
41	Complete setup for conversion of vibration to voltage using piezoelectric materials	1
42	Complete setup for conversion of thermal energy into voltage using thermoelectric modules.	1
43	Complete setup for determination of the grating radial spacing of the Compact Disc (CD) by reflection using He-Ne or solid state laser.	1
44	Complete setup to find the width of the wire or width of the slit using diffraction pattern obtained by a He-Ne or solid state laser	1
45	Complete setup to find the polarization angle of laser light using polarizer and analyzer	1
46	Complete setup for thermal expansion of quartz using laser	1

47	Complete setup for V-I characteristics of LED	1
48	Complete setup to study the characteristics of solid state laser	1
49	Complete setup to study of the characteristics of LDR	1
50	Complete setup for Photovoltaic Cell	1
51	Complete setup for characteristics of IR sensor	1
52	Complete setup for fourier optic and image processing, a. Optical image addition/subtraction, b. Optical image differentiation, c. Fourier optical filtering, d. Construction of an optical 4f system	1
53	Complete setup for Recording and reconstructing holograms	1
54	Complete setup for Constructing a Michelson interferometer or a Fabry Perot interferometer	1
55	Complete setup for Measuring the refractive index of air	1
56	Complete setup for Constructing a Sagnac interferometer	1
57	Complete setup for Constructing a Mach-Zehnder interferometer	1
58	Complete setup for white light Hologram	1
59	Complete setup for measurement of the numerical aperture of an optical fibre	1
60	Complete setup to study of the variation of the bending loss in a multimode fibre	1
61	Complete setup to determine the mode field diameter (MFD) of fundamental mode in a single-mode fibre by measurements of its far field Gaussian pattern	1
62	Complete setup for measurement of the near field intensity profile of a fibre and study its refractive index profile	1
63	Complete setup to determine the power loss at a splice between two multimode fibre	1
64	Complete setup to design a CE amplifier of given gain (mid-gain) using voltage divider bias	1
65	Complete setup to design an inverting amplifier of given gain using Op-amp 741 and study its frequency response.	1
66	Complete setup to design a non-inverting amplifier of given gain using Op-amp 741 and study its Frequency Response.	1
67	Complete setup to study Differential Amplifier of given I/O specification using Op-amp.	1
68	Complete setup to investigate a differentiator made using op-amp.	1
69	Complete setup to design a Wien Bridge Oscillator using an op-amp.	1
70	Extention cord: 10 m long wire, two 15 A plug, three 5 A plug.	1

Head of the Department
Department of Physics
Govt. General Degree College Salboni

Officer-in-Charge
Govt. General Degree College Salboni