No. P1/5882/18/GECBH Government Engineering College, Barton Hill, Thiruvananthapuram
Dated: 27.09.2018

NOTICE

Quotation No:5882/18

Sealed quotations are invited for the supply of the materials specified in the schedule attached below/overleaf. The rates quoted should be for delivery of the articles at the place mentioned below the schedule. The necessary superscription, due date for the receipt of quotations, the date up to which the rates will have to remain firm for acceptance and the name and address of officer to whom the quotation is to be sent are noted below. Any quotation received after the time fixed on the due date is liable to be rejected. The maximum period required for delivery of the articles should also be mentioned. Quotations not stipulating period of firmness and with price variation clause and/or 'subject to prior sale' condition are liable to be rejected.

The prices quoted should be inclusive of all taxes, gst etc. which are or may become payable by the contractor under existing or future law or rules of the country of origin/supply or delivery during the course of execution of the contract.

Special conditions, if any, printed on the quotation sheets of the tenders or attached with the tender will not be applicable to the contract unless they are expressly accepted in writing by the purchaser.

Superscription	: Purchase of Vibration set up for PG Lab
Quotation No	: 5882/18
Due date and time for receipt of quotations	: 08/10/2018; 2pm
Date and Time for opening Quotation	: 08/10/2018; 3pm
Date up to which the rates are to remain firm for acceptance	: 31/03/2019
Designation and address of Officer whom the quotation is to be addressed	: Principal Government Engineering College, Barton Hill

Place:Thiruvananthapuram
Date:27.09.2018

Details of items	**Quantity**
1. Vibration set up [Detailed specification attached]	1

_____

Place:Thiruvananthapuram
Date:27.09.2018

Government Engineering College, Barton Hill

Copy to

1.Prof Satheeshkumar S,AP In ME Dept
2.Jijimol,Com Programmer
3.SF&OC

Specification of the vibration set up

MDOF damped Free and forced vibration setup having tri-axial-accelerometer with NI Data acquisition 6000 USB DAQ with PC interface and software for plotting and saving data and capable of doing Fast Fourier Transform, Windowing, sampling rate selection, averaging etc.

The required Features of the set up

Six springs and mass systems capable of producing 5 natural frequencies and mode shapes. Mass and springs shall be varied to study the features. Tuned mass vibration experiment. DC motor with speed control using variable DC power Source. Damping studies using various oils (Viscous damping) with one tri-axial accelerometer, RPM Sensor and indicator.

Experimental capability required

1. Free vibration analysis: Determination of 5 different natural Frequencies and mode shapes of spring mass system.
2. Forced vibration analysis: Determination of 5 different resonant Frequencies and mode shapes of spring mass system by varying the speed of a DC motor mounted with eccentric mass for forced excitation.
3. Effect of different mass, participation factor and spring stiffness on the natural frequencies.
4. Effect of damping on vibration characteristics.
5. Effect of tuned mass absorber on free and forced vibration Characteristics.