Estd. 1962
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SCHOOL OF ENGINEERING AND TECHNOLOGY
(Department of Technology)
SHIVAJI UNIVERSITY, KOLHAPUR -416004 (MAHARASHTRA)
अभियांत्रिकी व तंत्रज्ञान प्रशाळा
(तंत्रज्ञान अधिविभाग)
शिवाजी विद्यापीठ, कोल्हापूर -४१६००४ (महाराष्ट्र)
दुरध्वनी 0231-2609424, 2609414
web-site : http://unishivaji.ac.in E-mail :director.tech@unishivaji.ac.in

No. SUK/SET/ETC/ 8823 Date: 02/11/2026

To,
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Sub. : Request to send the quotation for Educational Trainer Kits

Dear Sir / Madam,
We are interested in the purchase of the Educational Trainer Kits mentioned below. Please send your quotation in a sealed cover so as to reach this office on or before- **20/11/2026**

Sr. No.	Name of the Item & Specifications	Qty
1	**AM transmitter** Should contain **1)** audio oscllator with variable amplitude(0-2v) and freq (300Hz-3.4KHz) **2)** a) IF carrier 455KHz. amp 400mvpp b)Final carrier 1 MHz amp 100mv. **3)** Modulator a)SSB b)DSB. **4)** Switch to connect either SSB and DSB o/p to antenna. **5)** Collapsible antenna to transmit 1 MHz AM waves. (Antenna min length after collapsing 25 cm max length after expansion 1 meter).	02
2	**AM receiver** Should contain **1)** Antenna. Collapsible antenna to Receive 1 MHz AM waves. (Antenna min length after collapsing 25 cm max length after expansion 1 meter). **2)** RF amplifier to amplify 1 MHZ AM wave. **3)** Tuneable freq. local osc (from 980 KHz to 2060 KHz) **4)** Mixer it take input from RF amplifier and local oscillator and produces IF 455 KHz. **5)** IF amplifier: after mixer 2 to 3 stages of IF amplifiers are used to amplify IF signal. **6)** Detector: the output of IF amplifier is given to diode detector and product detector (selectable) **7}** Audio amplifier: with output from 0v to 10 volts **8)** The kit should consists of AGC (automatic gain control circuit) to handle large signal changes in input. **9)** Speaker: should handle 0v to 10v input signal.	02
3	**Frequency Modulation & Demodulation trainer** Should contain **1)** audio oscllator with variable amplitude(0-10v) and freq (300Hz-3.4KHz) **2)** various types of FM modulators a) Balanced b) varactor modulator and c) Freq modulator (IC XR2206 based VCO). All the modulators should produce output frequency 455 KHz +/- 3KHz. **3)** Mixer/Amplifier: gives output 0v to 10 volt. **4)**Amplitude Limiter: gives constant amplitude signal. **5)** various types of FM demodulation circuits a) Quadrature detector. b) Detuned resonance detector c) Foster Seely d/ratio detector. d) Phase locked loop detector (IC 4046). **6)** LPF Amplifier: (20-20KHz) **7)** Frequency Demodulator (IC LM 565 based) to FM demodulate the FM signal generated by (IC XR 2206).	02

So, kindly request you to send the quotations as per the specifications including supply, installation, commissioning and other charges **up to 20/11/2026**. Quotation is to be submitted in the form of TWO separate closed envelops (Technical & Financial). Mention warranty period. Quotation Cover must be sealed and superscripted "Quotation **for 1. AM Transmitter 2. AM receiver 3.Frequnecy Modulation & Demodulation trainer**" and bear the address of **Director, School of Engineering and Technology, (DOT), Shivaji University, Kolhapur** to **Inward Section, Room No.138, Shivaji University, Kolhapur**

Yours faithfully,

I/c Director
School of Engineering & Technology,
Shivaji University, Kolhapur.

TERMS AND CONDITIONS

1. While indication the make of a product, the name of manufactures may be clearly specified to us to consider your offer and expedite orders. Supplies are to be made in the manufactures packing only. Your quotation should accordingly be adjusted to the nearest size of the original packing of the manufactures.

2. The price may be as indicated below in clause (a) for outstation firms and (b) local firms

   a) F.O.R. Destination/dispatching station by goods/passenger train.

   b) For free delivery at the **School of Engineering and Technology, (DOT), Shivaji University, Kolhapur 416 004**

3. Your rates are assumed to include packing and forwarding charges, unless separately stated. The Goods should be insured against theft, loss or breakages during transits and insurance charges should not exceed 3 of the cost of materials supplied.

4. The rate of Sales Tax, GST, CST and excise duty may be clearly indicated wherever chargeable, in the absence of which it will be deemed that no taxes are payable by us.

5. A.P. form for Sales Tax Concession will be sent to you after execution of order for claiming concession in payment of Sales Tax in Maharashtra State.

6. a) Specification information is required as to whether the items have been offered ex-stock or will have to be imported, as also how much time will be required for delivery after placing of the order.

   b) Your offer should be kept open for at least 2 months from the date of opening of the quotation/tender.

7. **The quotation must be submitted in two separate envelopes, one for Technical (Specifications, GST certificate, Registration Certificate, and PAN card details) and the second for commercial (price and other relevant information)**

8. The outer cover must be sealed and superscripted **"Quotation for AM Transmitter 2. AM receiver 3.Frequnecy Modulation & Demodulation trainer"** Your No. ..... Date ..... " **up to 20/11/2026.** In addition the outer cover may bear only the address of **Director, School of Engineering and Technology, (DOT), Shivaji University, Kolhapur to Inward Section, Room No.138, Shivaji University, Kolhapur**

9. Offers made on conditions like "subject to prior sale" 'subject to availability of stores' taxes as applicable or with similar other vague conditions are liable to be ignored.

10. In the case of supply order for the scientific equipment /apparatus/Glassware/Chemicals, the date of delivery should be strictly adhered; otherwise the supply order is liable to cancelled.

11. Department reserves to all rights to change or cancel the quotation without assigning reason.

12. Terms of Payment
    A) Bill will be paid after delivery & proper installation of material.
    B) Any standard deductions as per government rules will be made from the bill of payment