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NA—120—2023

FACULTY OF SCIENCE

B.Sc. (Fourth Semester) EXAMINATION

NOVEMBER/DECEMBER, 2023

(New Pattern)

ELECTRONICS

Paper-VIII

(Oscillator and Multivibrator)

(Thursday, 21-12-2023)

Time : 2.00 p.m. to 4.00 p.m.

Time—2 Hours

Maximum Marks—40

N.B. :— (1) Attempt *all* questions.

(2) Figures to the right indicate full marks.

1. Explain : 15
 - (i) Gain stability
 - (ii) Increased bandwidth
 - (iii) Decreased noise.

Or

- (a) Explain the working of Wien bridge oscillator with neat circuit diagram. 8
- (b) Explain requirements of an oscillator. 7
2. Explain the working of transistorised bistable multivibrator with waveforms. 15

Or

- (a) Write different methods of generating time base waveforms. 8
- (b) Explain bootstrap sweep circuit. 7

P.T.O.

WT

(2)

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3. Write short notes on (any *two*) :

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- (a) Concept of positive and negative feedback
- (b) What is RC and LC oscillator
- (c) Transistor as a switch
- (d) Time base circuit.

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