2504E0170

Candidate's Seat No :_____

B.Sc. Sem.-2 (NEP) Examination

DSC-C-ELE-121 (T)

Electronics

(History of Indian Satelite Network, Electric Device & Digital)

Time : 2-00 Hours] **April 2024** **[Max. Marks : 50**

Instructions : (1) Figures to the right indicate Full Marks of the questions.
(2) Symbol used their usual meaning.

1 Draw the block diagram of typical Earth station & explain Fixed satelite service in detail. 10

OR

Draw the INSAT frequency plan & explain INSAT in detail.

2 Explain about Norton's theorem & Maximum power transfer theorem in detail. 10

OR

State & explain Kirchhoff's voltage law in detail. Also discuss Ideal constant voltage source.

3 Explain how zener diode works as voltage regulator. Also discuss how zener diode works as peak cliper. 10

OR

Draw the symbol of LED & discuss its construction, working & application.

4 $\underline{Y} = F(A, B, C) = \sum m(3, 5, 6, 7)$ 10

OR

Explain 7 segment decoder & Ex - OR gate in detail.

5 Attempt any ten out of twelve : 14

(1) Name two distinct parts of satelite system.
(2) The satelite revolves round the Earth at altitude of ..... km over the equator.
(3) In satelite communication ..... modulation is used.
(4) Generally current leaving from the network is taken as .....
(5) The superposition theorem is essentially based on the concept of .....
(6) An ideal constant current source has ..... resistance.
(7) Draw the symbol of Tunnel diode.
(8) A varacter diode is always ..... biased.
(9) PIN diode is composed of ..... section.
(10) What is overlapping in K-Map?
(11) What is Rolling in K-Map?
(12) Give the full form of ROM.
