

ASUTOSH COLLEGE
(Affiliated to University of Calcutta)

Part II – Examination, 2020
Electronics – General
Paper – III
(Practical)

N.B. : Email your answer script to asutoshelta@gmail.com in PDF format

Time – 2 hours

Full Marks – 50

SECTION A
(Electricity and Analog Electronics)

Answer **any one** question:

1 X 25

1. Verify Thevenin's theorem by using a resistive Wheatstone bridge network.
2. Verify Norton's theorem by using a resistive Wheatstone bridge network.
3. Discuss how the load regulation is obtained by using a Zener diode.
4. Discuss how full-wave rectification is obtained by using p-n diode.

SECTION B
(Digital Electronics)

Answer **any one** question:

1 X 25

5. Verify De Morgan's theorems by using TTL ICs.
6. Construct a half-adder using NAND gates and discuss the process to verify its truth table.
7. Construct a full-adder using NAND gates and discuss the process to verify its truth table.
8. Construct a 4:1 multiplexer using NAND gates and discuss the process to verify its truth table.

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