

I Semester B.C.A. Degree Examination, March/April 2022 (CBCS Scheme) COMPUTER SCIENCE Digital Electronics

Time: 3 Hours Max. Marks: 70

Instruction : Answer all Sections.

SECTION - A

I. Answer any ten questions.

 $(10 \times 2 = 20)$

- 1) State Ohms Law.
- 2) Give the equivalent resistance for two resistors in series and parallel.
- 3) Define Kirchhoff's current Law.
- 4) Define frequency and cycle with respect to AC waveform.
- 5) What is Conductor and Insulators?
- 6) What is Intrinsic and Extrinsic semiconductors?
- 7) What is Doping?
- 8) Find the 2's complement of 0011001.
- 9) Prove that A + AB = A.
- 10) Write the logical symbol and truth table of NOR gate.
- 11) What is combinational circuit?
- 12) What is ASCII?

SECTION - B

II. Answer any five questions. (5×10=50)
13) a) State and explain Norton's theorem.
5
b) State and explain superposition theorem.
5
P.T.O.