## BACHELOR OF SCIENCE (COMPUTER SCIENCE) (CBCS - 2018 COURSE) F.Y.B.Sc.(Computer Science) Sem-I : WINTER- 2022 SUBJECT : PRINCIPLES OF DIGITAL ELECTRONICS-I

Day: Friday

Time: 10:00 AM-01:00 PM

1) All questions are COMPULSORY. 2) Figures to the right indicate FULL marks. 3) Draw diagrams WHEREVER necessary.  Q.1 Answer ANY TWO of the following: a) Explain the working of 4:1 multiplexer with necessary diagram and truth table. b) Construct the Hamming code for the data 1010 with odd parity. c) Give the symbol, Boolean equations and truth table for the following gates: i) NAND ii) EX-OR iii) AND  Q.2 Answer ANY TWO of the following: a) Explain the working of decimal to BCD encoder with logic diagram. b) Reduce the following four variable functions to its minimum sum-of-product-form: $Y = ABCD + AB$	16-12-2	2022	<b>W-20071-2022</b> Max. Marks : 60	
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		f)	Explain the concept of analog multiplexer.  * * * *	