Roll No. | | | | | | | | | | | | | **Total No. of Pages : 01**

Total No. of Questions : 08

B.Tech (AI & ML / CSE / IT/ CSE(Internet of things and Cyber Security including Block Chain Technology)) / PIT B.Tech CSE / Computer Engg. (Sem.–3)

DIGITAL ELECTRONICS

Subject Code : BTES301-18

M.Code : 76435

Date of Examination : 28-01-22

Time : 2 Hrs. **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :

1. **Attempt any FIVE question(s), each question carries 12 marks.**

1. Express the function Y= A+ BC in canonical POS & SOP Form.
2. Show how to connect NAND gates to get an AND gate and OR gate? Explain in detail.
3. Simplify the following expression

   Y = (A + B) (A = C) (B + C)
4. Explain classification of saturated bipolar logic families.
5. Mention the important characteristics of digital IC's.
6. List the different versions of TTL. Explain one in detail with neat sketches.
7. Explain the design procedure for combinational circuits.
8. Explain Full Adder with neat sketches.

Note: Any student found attempting answer sheet from any other person(s), using incriminating material or involved in any wrong activity reported by evaluator shall be treated under UMC provisions.

Student found sharing the question paper(s)/answer sheet on digital media or with any other person or any organization/institution shall also be treated under UMC.

Any student found making any change/addition/modification in contents of scanned copy of answer sheet and original answer sheet, shall be covered under UMC provisions.