

Seat No.

OCT-NOV 2025 WINTER EXAMINATION**1154 B.Tech. CBCS****Sub. Name: Fundamentals of Electronics and Computer****Sub. Code: 71818/72508****Day and Date: Tuesday ,27-01-2026****Total Marks: 70****Time: 10:30 AM To 01:00 PM****Instructions: 1. Figures to the right indicate full marks****Special Inst.: Solve any three questions from each section. (Section I - Que. 1 to Que 4 and Section II - Que. 5 to Que 8)**

- Q1)** Solve the following [12]
- Explain Semiconductor diode with its VI characteristics [6]
 - Explain basic gates and NAND as universal gate with its truth table [6]
- Q2)** Solve the following [11]
- What is leakage current? Explain with CE configuration. [5]
 - Explain de Morgan's theorem with truth table. [6]
- Q3)** Solve the following [11]
- Explain Full Wave Bridge Rectifier with necessary circuit diagram and waveform [6]
 - Explain LVDT transducer with suitable diagram. [5]
- Q4)** Solve the following [12]
- What is multiplexer? Explain 4:1 MUX with truth table and logic diagram. [6]
 - Explain washing machine with block diagram. [6]
- Q5)** Solve the following: [12]
- Convert following number system [6]
 - 11101.011 Binary to Decimal
 - A1.5D Hexadecimal to octal
 - 183 Decimal to Binary
 - Discuss the different generations of computers. [6]

- Q6)** Solve the following [11]
- a. Explain Programming Control Structures for computer programming. [5]
 - b. Explain different types of networks. [6]
- Q7)** Solve the following [11]
- a. What is an algorithm? Draw a flowchart for find the addition of two different numbers entered by the user. [5]
 - b. Enlist and elaborate various input devices of computer system. [6]
- Q8)** Solve the following [12]
- a. Enlist and elaborate any five applications of computers. [6]
 - b. Explain different types of operating system. [6]

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

This Question Paper may be distributed for following Subjects as common code.

सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

1] (1154) B.Tech. CBCS (71818) Fundamentals of Electronics and Computer Part 1 SEM 1

2] (1154) B.Tech. CBCS (72508) FUNDAMENTALS OF ELECTRONICS AND COMPURTER Part 1 SEM 2