

Seat No.

MAR_APR 2025 SUMMER EXAMINATION
11731 Bachelor of Technology (NEP-2.0)
Sub. Name: Fundamentals of Electronics and Computer
Sub. Code: 71818/72508

Day and Date: JUNE ,13-06-2025

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]
- a. Explain working of Half Wave Rectifier with necessary circuit diagram and waveforms. [6]
 - b. What is De- Multiplexer? Explain 1:8 Demux with truth table and logic diagram [6]
- Q2)** Solve the following [11]
- a. Explain temperature transducer. What is RTD transducer? [5]
 - b. Explain BJT as CE amplifier with suitable diagram. [6]
- Q3)** Solve the following [11]
- a. Explain load line and operating point with suitable diagram. [5]
 - b. Explain different Boolean laws (at least 6) [6]
- Q4)** Solve the following [12]
- a. Explain basic gates and NAND as universal gate with its truth table. [6]
 - b. Explain Microwave Oven with block diagram. [6]
- Q5)** Solve the following [12]
- a. Convert following number system [6]
 - i) $(10101.01)_2$ to Decimal
 - ii) $(67.41)_{10}$ to Binary
 - iii) $(7B4.C1)_{16}$ to Decimal
 - b. Explain different Network Topologies use in computer network. [6]

- Q6)** Solve the following: [11]
- a. Explain following Linux commands. i) Ls ii) mkdir iii) Cd [6]
- b. Differentiate OSI and TCP/IP Model. [5]
- Q7)** Solve the following: [11]
- a. Define algorithm? Write an algorithm, find the largest among Two different numbers. [5]
- b. Give the classification of computers based on their speed. [6]
- Q8)** Solve the following: [12]
- a. Enlist and elaborate various input devices of computer system. [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