Assignment

SET-A

Subject: Digital Electronics (CASC-04T)

Last Date for Submission: 03.05.2025

(Solve any 5 question from Section B)

Section-A
(One Word Answer)

Q1. What are universal gate?

Q2. What is decimal number of $(01011.110)_2$?

Q3. How much cells required for 4 variable in K-Map ?

Q4. What is the word length of an 8 bit microprocessor?

Q5. Which gate is a basic comparator ?

Section-B
(Descriptive Answer)

Q1. What is Number System? Explain its types?

Q2. What is Complement system? Explain its types?

Q3. Explain Boolean laws with example?

Q4. What is K-Map Simplification ? Explain with example?

Q5. What is Flip flop? Explain its types with truth table?

Q6. Sort Note –

    a. Digital Logic Circuit   b. 8085 microprocessor

    c. Adder & Subtractor with types   d. SOP & POS

    e. Register & Its Types

Assignment

SET-B

Subject: Digital Electronics (CASC-04T)

Last Date for Submission : 03.05.2025

(Solve any 5 question from Section B)

Section-A
(One Word Answer)

Q1. What is 2's complement of (10010110) ?

Q2. Which gate is a basic comparator ?

Q3. Haw many types of Boolean law ? Write only name of law?

Q4. How many stable states combinational circuits have?

Q5. What is the Name of first Microprocessor ?

Section-B
(Descriptive Answer)

Q1. How many types of Number conversion available in digital electronics?

Q2. Simplify F(ABCD)= $\sum$ (0,1,2,3,8,9,10,11) using K-Map?

Q3. Explain decoder and encoder with its types?

Q4. Describe ASCII code, UNICODE, BCD, EBCDIC, Gray code, Excess-3 code with example?

Q5. Explain evolution of microprocessor in details?

Q6. Sort Note –

    a.   Digital Logic Circuit   b. 8085 microprocessor

    c.   Adder & Subtractor with types   d. SOP & POS

    e.   Register & Its Types

Assignment

SET-A

Subject : Programming in C++(CASC-05T)

Last Date for Submission : 03.05.2025

(Solve any 5 question from Section B)

Section-A
(One Word Answer)

Q1. Pointer are a variable that can hold _____?

Q2. The starting index of an array is always_____?

Q3.What is abstract data type in C++?

Q4. What is inheritance ?

Q5. Which header file is required to use file I/O operation?

Section-B
(Descriptive Answer)

Q1. Write the history of C language? Also Explain the feature of C language?

Q2. What do you understand by Control Statement? Explain each with example?

Q3. What is Constructor & destructor in c++? Explain its types with example?

Q4. What is Inheritance? Explain its types with suitable program?

Q5. What is exception? Explain its types with suitable example?

Q6. What is Inline & friend function? Explain with suitable program?

Assignment

SET-B

Subject : Programming in C++(CASC-05T)

Last Date for Submission : 03.05.2025

(Solve any 5 question from Section B)

Section-A
(One Word Answer)

Q1. What is Keyword?

Q2. What is name of function which is call itself ?

Q3. What is Virtual function ?

Q4. What are the name of access specifier in c++ ?

Q5. What is array?

Section-B
(Descriptive Answer)

Q1. Explain various types of language translator with the help of example?

Q2. What is Operator? Explain its type with example?

Q3. What is function? How many types of Function ? Differentiate Call by Value & Call by reference?

Q4. What is Constructor? Explain its types with suitable program?

Q5. What is Inline Function ? Explain with suitable example?

Q6. Explain object I/O in c++ language with suitable program?

Assignment

SET-A

Subject: Data Structure (CASC-06T)

Last Date for Submission: 03.05.2025

(Solve any 5 question from Section B)

Section-A
(One Word Answer)

Q1. What is Sparse Array?

Q2. What is Circular Linked List?

Q3. What is called to process of inserting an element in Stack ?

Q4. What is the principle follow by a queue?

Q5. What is an AVL tree?

Section-B
(Descriptive Answer)

Q1. What is Queue? Explain its Type. Also write its application?

Q2. What is Linked List? Explain its types with various operation?

Q3. Explain recursion using stack?

Q4. What is Searching? Also Explain the types of searching technique available in Data Structure?

Q5. Explain pre-order and post-order in order traversal with example?

Q6. What is sorting? Explain its type with example?

Assignment

SET-B

Subject : Data Structure(CASC-06T)

Last Date for Submission : 03.05.2025

(Solve any 5 question from Section B)

Section-A
(One Word Answer)

Q1. What is the operation of Stack?

Q2. What is Dequeue?

Q3. Write the various operation of Linked List?

Q4. What is Tree and its Operation?

Q5. Write the application of Stack?

Section-B
(Descriptive Answer)

Q1. Explain Linked List? Explain its types with application?

Q2. What is Array? Explain its types with various operation?

Q3. What is Queue? Explain its operation with suitable example?

Q4. Explain Tree? brief note about Spanning Tree?

Q5. What is Sorting? Explain Bubble, Insertion, Selection sort?

Q6. What is Searching? Explain Linear search with example?