

Seat No. : \_\_\_\_\_

# FE-118

February-2025

B.C.A., Sem.-I (NEP)

## DSC-C-BCA-111T : Elements of Programming and Computer Organization

Time : 2:00 Hours]

[Max. Marks : 50

1. List the different types of Programming Languages in detail. Write/Draw an Algorithm/Flowchart to get reverse number from the enter number. **10**

**OR**

1. Write down basic structure of C and explain C tokens in detail. **10**
2. Describe if statement with all its types in detail. **10**

**OR**

2. Explain any one loop in detail. **10**
3. What is function ? Explain in detail. **10**

**OR**

3. What is structure ? How can we access structure variable? Differentiate Structure vs. Union. **10**
4. List different Types of Gates. Explain only Universal Gates with Truth table and Logical diagram. **10**

**OR**

4. Explain JK Flip-Flop with Truth-table and Logical Diagram in detail. **10**
5. Answer the following Questions : (Any **10**) **10**

- (1) Define break statement.
- (2) Explain conditional operator.
- (3) Define goto statement.
- (4) Define Typecasting.
- (5) Which symbol used for condition in flowchart ?
- (6) Explain ++ and – operator.
- (7) What is the use of strlen() ?
- (8) What is the use of ‘.’ in structure ?
- (9) Describe comments in C.
- (10) \_\_\_\_\_ is use to do addition of single bit.  
(A) Full Adder (B) Multiplexer  
(C) Half Adder (D) Encoder
- (11) \_\_\_\_\_ Flip-Flop is going to store Single Bit data.  
(A) D Flip-Flop (B) T Flip-Flop  
(C) Both (A) and (B) (D) None of these
- (12) \_\_\_\_\_ is used to Select Single input from ‘n’ Inputs.  
(A) Encoder (B) Decoder  
(C) Multiplexer (D) Demultiplexer