



- 3 a. Choose your answers for the following : (04 Marks)
- 'C' language is a \_\_\_\_\_
 

A) Structured language	B) Object-oriented language
C) Machine language	D) Assembly language
  - Identify valid identifier
 

A) a123	B) \$123
C) 123a	D) a#123
  - A step by step procedure to solve a given problem is called
 

A) Logarithm	B) Algorithm
C) Flowchart	D) Program
  - The range of char data types on 16 bit machines is:
 

A) -126 to 127	B) -128 to 127
C) -127 to 128	D) -127 to 127
- b. Explain the different phases of solving a given problem using computer. (10 Marks)
- c. Write an algorithm and flowchart to calculate factorial of a number. (06 Marks)

- 4 a. Choose your answers for the following : (04 Marks)
- The operator % yields
 

A) Quotient	B) Remainder
C) Percentage	D) Fractional part
  - Evaluate the expression  $10! = 10 \parallel 5 < 4 \& \& 8$ . The result is:
 

A) 1	B) 0	C) 2	D) 10
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  - Which of the following bitwise operator shifts their first operand to its left?
 

A) &&	B) <<	C) >>	D) ^
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  - If  $a = 10$ ,  $b = 5$  find  $C = ++a - b$ . The result is:
 

A) 5	B) 7	C) 6	D) -6
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- b. Explain precedence and associativity of operators in 'C' with an example. (08 Marks)
- c. What is type conversion? What are the different ways of type conversion? Explain with an example. (08 Marks)

### PART - B

- 5 a. Choose your answers for the following : (04 Marks)
- What is the output of following program?
 

```
#include <stdio.h>
Void main( )
{ int num;
  for(num = 0; num <= 10; num ++)
  { ;
  }
  printf("%d", num);
}
```

A) 012345678910	B) 11
C) 10	D) 01234567891011
  - A for loop with no test condition is known as \_\_\_\_\_ loop
 

A) Finite	B) Infinite	C) While	D) do-while
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  - In 'C' which of the following is not a storage class specifier?
 

A) Static	B) Auto	C) Const	D) Register
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  - Which of the following is the last character that is stored in a char array in 'C'?
 

A) \0	B) \NULL	C) 0	D) /0
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- b. Describe the different ways of passing parameters to functions. (08 Marks)
- c. Write a 'C' program using functions, to compute the sum of N numbers. (08 Marks)
- 6 a. Choose your answers for the following : (04 Marks)
- i) Which of the following command will place the program control out of the loop when it gets executed  
 A) goto                      B) Break                      C) exit                      D) continue
- ii) How many times the following loop will be executed?  

```
for(;;)
{
    printf("Hello");
}
```

 A) 1                      B) 0                      C) Infinite                      D) Finite
- iii) What would be the output of the following code segment?  

```
for(i = 1; i <= 5; i++)
{
    if(i == 3) continue;
    printf("%d", i);
}
```

 A) 12                      B) 1245                      C) 1234                      D) 345
- iv) The minimum number of times the do-while loop will be executed  
 A) 0                      B) 1                      C) 2                      D) Both a and b
- b. Differentiate between while and do while statements, with an example for each. (08 Marks)
- c. Write a 'C' program to calculate area of circle, rectangle and triangle using switch statement. Area of circle =  $\pi * r * r$ , Area of rectangle = length  $\times$  breadth, Area of triangle =  $0.5 * \text{base} * \text{height}$ . (08 Marks)
- 7 a. Choose your answers for the following : (04 Marks)
- i) In the following segment of code, what will be the values of x and y after execution, if n assumes a value of zero(0)  

```
x = 1; y = 1;
if (n > 0)
{ x = x + 1;
  y = y - 1;
}
printf("%d %d", x, y);
```

 A) 0, 0                      B) 1, 0                      C) 0, 1                      D) 1, 1
- ii) Arrays can be initialized at  
 A) Compile time                      B) Run time                      C) Both A and B                      D) None of these
- iii) Strncmp( ) function has \_\_\_\_\_ number of parameters  
 A) 2                      B) 3                      C) 1                      D) 4
- iv) How many times the following while loop is executed?  

```
While (0)
{
    Statements;
}
```

 A) 0                      B) 1                      C) Infinite                      D) Finite

