

**AH -1547 CV-19**  
**M.A./M.Sc. (Final)**  
**Term End Examination, 2019-20**  
**MATHEMATICS**  
**Paper - III**  
**Programming in C (With ANSI features)**

Time:- Three Hours |

[Maximum Marks: 100]

[Minimum Pass Mark : 36]

**Note:** Answer any five question. All questions carry equal marks.

1. Write a simple program to demonstrate the program structure at C Programming language.
2. Evaluate the following expression using C Programming language concept.
  - (a)  $5-10\%3*2-1+3.0*0.2$
  - (b)  $10*2/3+1.5*2-1$
  - (c)  $10-3*2+4/3.1+5$
  - (d)  $20*2/2/4*(2-4+5)$
3. Write a program to print the following pattern using for loop (take the value of n from keyboard)

```

n
n, n-1
n, n-1, n-2
n, n-1, n-2, n-3
,
,
,
:
:
:
n, n-1, n-2, n-3, ... 3, 2, 1
Ex. if n is 5
5
5,4
5,4,3
5,4,3,2
5,4,3,2,1

```

4. Write a simple program to demonstrate the use of break, continue and go to statement in a simple program?

5. Evaluate the following expression.

- (a)  $10 << 3$  (b)  $-20 << 3 + 2$
- (c)  $-10 \wedge 3 * 1$  (d)  $-40 >> 2 \& \& 5$
- (d)  $-10 \& + 1$

6. Evaluate the following expressions

- (i)  $10 * \text{size of } ('A') + 5$  (ii)  $10 * \text{size of } (10.5)$
- (iii)  $10-5*2/3\&\&5||6$  (iv)  $10>12\&\&-5+1$
- (v)  $1085+1\&\&3>=4$

7. Write a simple program to read n number from the keyboard and allocate memory to read the numbers dynamically and calculate the average of the given number after that release the allocated memory.

8. Write a program to calculate the row/column wise sum of the two dimensional array of  $m \times n$  size take the value of m and n through keyboard and store the number in array and display the result on console screen.

for example:

Array of 2x3			sum
3	5	8	→16
5	10	15	30
↓	↓	↓	
8	15	23	
sum→			

9. write a simple program to store the string (take from the keyboard) in the file in text format.
10. write a program to demonstrate the use of multidimensional macro in which scenario we should use macro instead of function.