## RAN-1811040101030001

MCA 1st Semester Examination
March / April - 2019

## PAPER: 103 : Computer Programming \& Programming Methodology (OLD \& NEW)

## Time: 3 Hours ]

[ Total Marks: 70
સૂચના : / Instructions
नીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the details of signs on your answer book
Name of the Examination:
MCA 1st Semester
Name of the Subject :
Computer Programming \& Programming Methodology
Subject Code No.: 1811040101030001
Q.1(A) Answer the following. (Any Five) 05
(1) What is the significance of main( ) function?
(2) How many values can function return?
(3) How dose expression statement differ from a compound statement.
(4) What is symbolic constant? Explain with example.
(5) What is the difference between algorithm and flowchart.
(6) When should we use the register storage specifier?

Q1 (B) Explain following with example. (Any Three)
(1) Write difference between the array of pointer and pointer to array.
(2) Write difference between structure and typedef.
(3) Write difference between variable declaration and variable definition.
(4) Write difference between getchar() and getch().

Q2 (A) Rewrite the following code, removing errors if any, and then show the output.
(1) Void fn() \{
int $\mathrm{a}=10$;

```
        static int b = 20;
printf("a = %s b = %d", ++a, ++b)
}
int main() {
    fn();
    fn();
    return 0;
}
```

Q2 (B) Write following C program.(Any Two)
(1) Write a C program to find the sum of the digits of a 4 digit no.
(2) Write a c program which prints initial of any name
(3) c program to display the series $1,2,6,15,31,56$ $\qquad$ N

Q3 Answer the following.(Any Four)
(1) Explain call by value and call by reference with example.
(2) Explain with example, how we can pass two dimension array to UDF.
(3) Explain nested structure with example.
(4) What is the use of break and continue statements in a while loop? Are their usages essential?
(5) Explain static storage class with example.

Q4 (A) Explain following with example (Any three)
(1) Strcmp
(2) Getchar
(3) Gets
(4) Printf
Q4 (B) Write following C program. ..... 05Write a C program to create structure of 100 students with fields asroll_no, name and marks (out of 100) of 5 subjects. Display merit listdescending order.
Q5(A) Write Short note on following. (Any two) ..... 10
(1) Static storage class
(2) Do while loop
(3) Bitwise operator
Q5(B) Explain following errors. ..... 04
(1) warning: division by zero [-Wdiv-by-zero]
(2) error: lvalue required as left operand of assignment

