Seat No:_____   Enrollment No:_____

PARUL UNIVERSITY
FACULTY OF IT & COMPUTER SCIENCE
Parul Institute of Computer Application
Bachelor of Computer Application
Mid Semester Examination

Semester: 1   Date: 06/09/2018
Subject Code: 05101102   Time: 10:00 to 12:00
Subject Name: Fundamentals of Programming   Total Marks: 40

Instructions:
1. Figures to the right indicate full marks.
2. Make suitable assumptions wherever necessary.

Q.1   Answer the following.

(a)   Answer the following questions.   [3]

1. Distinguish between constant and variable.

2. How many times i value is checked in the below code?

```c
#include <stdio.h>
int main()
{
        int i = 0;
        do {
        i++;
                printf ("in while loop\n");
        }
        while (i < 3);
}
```

3. List the different types of bit-wise operator.

(b)   Do as directed.   [7]

1. Which is valid C expression?
   a) int my_num = 100,000;   b) int my_num = 100000;
   c) int my num = 1000;   d) int $my_num = 10000;

2. What is the output of this C code?

```c
#include <stdio.h>
int main()
{
   int i = 0;
   int x = i++, y = ++i;
   printf("%d % d\n", x, y);
   return 0;
}
```

   a) 0, 2   b) 0, 1   c) 1, 2   d) Undefined

3. All keywords in C are in _____
   a) LowerCase letters
   b) UpperCase letters
   c) CamelCase letters
   d) None of the mentioned

4. Which of the following is not a correct variable type?
   a) float   b) real   c) int   d) double

5. How many bytes are required to store integer type value?
   a) 1   b) 2   c) 4   d) 8

6. The _____ operator is true only when both the operands are true.

7. In exit controlled loop, if the body is executed 5 times, the test condition is evaluated _____ times.

Q.2 Answer the following.

(a)   [4]
   1. Explain Conditional Operator with syntax and giving example.
   2. Explain for loop using syntax and give one example.

(b)   [6]
   1. What is a constant? Explain different types of constants?
   2. What is the difference between while loop and do…while loop?
   3.

Q.3 Attempt any TWO.

1 Write a C Program to calculate Addition, Multiplication, Subtraction, and Division using Switch Statement.   [5]

2 List out operator supported by C programming. Explain relational operator in detail.   [5]

3 What is algorithm? Write an algorithm and Draw flowcharts to print larger number from any three numbers.   [5]

Q.4 Answer the following.

(a) Draw and explain the Structure of C Programming with giving example.   [5]

(b) Explain if else ladder statement with flowchart with giving example.   [5]

OR

Explain nested if else statement with flowchart and give one example.   [5]