PARUL UNIVERSITY
FACULTY OF IT & COMPUTER SCIENCE
MCA Winter 2017 – 18 Examination

Semester: 01   Date: 22/12/2017
Subject Code: 05201101   Time: 02:00pm to 04:30pm
Subject Name: Fundamentals of Programming   Total Marks: 60

Instructions:
1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1   Answer the followings.

A.   Write short notes.   **(05)**

    1. Explain logical operator in C?

    2. Write down the syntax of IF-ELSE statement.

    3. How many bytes are required to store char type of values?

    4. Define call By Reference function.

    5. What are the basic symbol of flow chart?

B.   Multiple choice type questions/ Give the sentence true or false. (Each of 01 marks)   **(10)**

    1. Which is the only function all C programs must contain?

        (a) start()   (b) system()

        (c) main()   (d) getch()

    2. Which of the following is not a correct variable type?

        (a) char()   (b) float()

        (c) real()   (d) int()

    3. Which of the following operator takes only integer operands?

        (a) +   (b) *

        (c) /   (d) %

    4. Which of the following is relation operator?

        (a) %   (b) <=

        (c) &&   (d) *

    5. Which command is used to skip the rest of a loop and carry on from the top of the loop again?

        (a) Break   (b) resume

        (c) continue   (d) break

    6. Any C program

        (a) Must contain at least one function.   (b) Need not contain any function.

        (c) Needs input data.   (d) None of the above

    7. Invalid variable name

        (a) _salary   (b) A2Z

        (c) contact no   (d) first_name

    8. What is right way to Initialize array?

        (a) int num[6] = { 2, 4, 12, 5, 45, 5 };   (b) int n{} = { 2, 4, 12, 5, 45, 5 };

        (c) int n{6} = { 2, 4, 12 };   (d) int n(6) = { 2, 4, 12, 5, 45, 5 };

    9. a+=6 means

        (a) a=a+1   (b) 6=6+a

        (c) a+6=a   (d) a=a+6

    10. A function may have several declarations, but only one definition. State True/False.

Q.2 **Answer the followings.**   **(15)**

    1. Explain External variables with example.   **(02)**

    2. What is nested loop?   **(02)**

    3. Difference between structure and union.   **(02)**

    4. What will be the output of the following program?   **(03)**

```
#include<stdio.h>
#include<conio.h>
int main()
{
int i=0;
clrscr();
for(; i<=5; i++);
printf("%d", i);
getch();
return 0;
}
```

    5. What is role of compiler?   **(03)**

    6. Distinguish between object oriented language and procedure oriented language **(03)**

Q.3 **Answer the following. (Any three)**   **(15)**

    1. Explain Implicit Type Conversion and Explicit Type Conversion with example.

    2. Write a C program to Convert centigrade into Fahrenheit.

    3. Explain the use of switch block with example.

    4. Write a C program to find factorial of given number.

Q.4 **Answer the following.**

A. Write a C program to draw following pattern.   **(05)**

```
*
* *
* * *
* * * *
* * * * *
```

B. Define function and its structure with example.   **(10)**

<div align="center">OR</div>

B. What is looping? Explain for, while and do..while loop in detail.   **(10)**