

# National Institute of Technology, Delhi

Name of the Examination: B. Tech. / M. Tech. / Ph.D.

Mid-Semester Examination September, 2019

Branch :CSE / ECE / EEE

Semester :Spring

Title of the Course :Problem Solving and

Course Code :CSB 101

Computer Programming

Time: 2 Hours

Maximum Marks: 25

Note: 1. All questions are compulsory. Write proper comments while writing programs.

2. The questions in each section should be answered at one place.

3. For Section 3, write question number and correct option.

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## Section 1: Each question carry 01 mark.

- Q1. Write the difference between the low level languages and the high level languages?
- Q2. Differentiate between type casting and type conversion.
- Q3. Draw the flowchart to find the average height of boys and girls.
- Q4. Differentiate between syntax errors and logical errors.
- Q5. Write a single line command to find largest of three numbers using ternary operators.

## Section 2: Each question carry 02 marks

Q6. Write a C program to print the below pattern:

```
A
A B
A B C
A B C D
A B C D E
```

Q7. Write a C program to swap two numbers using functions demonstrating call by value and call by reference.

Q8. Write a menu driven C program to compute the following on user-entered inputs using switch case:

- A) Addition
- B) Subtraction
- C) Multiplication
- D) Division
- E) Exit

P.T.O

Q9. Write a program to reverse an integer and check if it is a palindrome or not.

Q10. Write a C program to find perfect cubes upto 100.

(1, 8, 27, 64 are perfect cubes of 1, 2, 3, 4)

**Section 3: Each question carry 02 marks**

Q11. Choose the correct answer.

<p>(i) <code>int x = 5.3 % 2;</code> <code>printf("Value of x is %d", x);</code></p> <p>a) Value of x is 2.3 b) Value of x is 1 c) Value of x is 0.3 d) Compile time error</p>	<p>(iv) <code>float x = 'a';</code> <code>printf("%f", x);</code></p> <p>a) a b) run time error c) a.0000000 d) 97.000000</p>
<p>(ii) <code>#include &lt;stdio.h&gt;</code> <code>void main()</code> <code>{</code> <code>    int k;</code> <code>    for (k = -3; k &lt; -5; k++)</code> <code>        printf("Hello");</code> <code>}</code></p> <p>a) Hello b) Infinite hello c) Run time error d) None of the above</p>	<p>(v) <code>#include &lt;stdio.h&gt;</code> <code>int main()</code> <code>{</code> <code>    int a = 1;</code> <code>    switch (a)</code> <code>    {</code> <code>        case a:</code> <code>            printf("Case A ");</code> <code>        default:</code> <code>            printf("Default");</code> <code>    }</code> <code>}</code></p> <p>a) Case A b) Default c) Case A Default d) Compile time error</p>
<p>(iii) <code>int i = 0;</code> <code>do{</code> <code>    i++;</code> <code>    if (i == 2)</code> <code>        continue;</code> <code>    printf("In while loop ");</code> <code>} while (i &lt; 2);</code> <code>printf("%d\n", i);</code></p> <p>a) In while loop 2 b) In while loop in while loop 3 c) In while loop 3 d) Infinite loop</p>	

**\*\*All the Best\*\***