

vi) A switch statement can always be replaced by series of if..else statements. 6

3. (a) Write a C program using nested if..else to find out the lowest of three given numbers. 3

(b) What will be the output of the following function if the value of "i=5":

```
printf("%d %d %d %d %d", i, ++i, i++, i++, ++i)
```

2

(c) With an initial value a = 10, what is the value of a if we execute a = ++a + a++. Explain. (You are to consider GCC compiler). 1

4. (a) Write a C program to find out the largest amongst 6(six) given integers using ternary (?) operator and while loop. (Do not use if else or else if statements). 4

(b) Write a C program to find out whether a given number is odd or even using switch statement. 2

5. What is initialization? Why is it important? Describe the characteristics and purpose of escape sequence. 1+1+4

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## B.Tech Even (Mid) Semester Examination-2021

### Computer Science & Engineering / Agricultural Engineering / Electronics & Communication Engineering

Course No.: SOTCF-08 / ASH-203

(Computer System and Programming / Programming for  
Problem Solving)

*Full Marks: 30*

*Pass Marks: 09/15*

*Time: 1½ hours*

- Note:**
1. All questions are compulsory.
  2. Answer parts of a question at a glance.
  3. Assume reasonable data wherever required
  4. The figures in the right margin indicate full marks for the question.

1. (a) What is Pseudo-code? What is the difference between Algorithm and Pseudo-code? 1+1  
(b) What are those problems we may face without translators? 4
2. State whether the following statement is true or false
  - i) All variables must be given a type when they are declared.
  - ii) The scanf function can be used to read one variable at a time.
  - iii) In C, if data item is zero, it is considered as a false.
  - iv) The expression!(x<=y) is same as expression x>y.
  - v) A printf statement can generate only one line output.

Turn Over