

Total No. of printed pages = 4

CS 181106

Roll No. of candidate

BINA CHOWDHURY CENTRAL LIBRARY
(GIMT & GIPS)

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Guwahati - 781017

2019

B.Tech. 1st Semester End-Term Examination
PROBLEM SOLVING THROUGH PROGRAMMING
USING C

(New Regulation)

(w.e.f. 2017-2018) and (New Syllabus-Group - A)

(w.e.f. 2018-2019)

Full Marks – 70

Time – Three hours

The figures in the margin indicate full marks
for the questions.

Answer question No. 1 and any *four* from the rest :

1. Answer the following (MCQ/Fill in the blanks)
(10 × 1 = 10)
 - (i) Ternary operator operates on how many operands?
 - (a) 1
 - (b) 2
 - (c) 3
 - (d) 4

[Turn over

- (ii) Which among the following is a multi-way decision statement?
- (a) if-else (b) if-else-if
(c) switch (d) do-while loop
- (iii) The _____ statement is used to terminate the execution of the nearest enclosing loop in which it appears
- (iv) Variable declared inside a function is known as _____
- (v) When a function is recursively called all the automatic variables are stored in a
- (a) Stack (b) Queue
(c) Array (d) Register
- (vi) Which keyword allows a variable to have file scope?
- (a) Auto (b) Static
(c) Register (d) Extern
- (vii) _____ searching method in which an array is searched by checking elements one at a time
- (viii) Strlen ("oxford university press") is?
- (a) 22 (b) 23
(c) 24 (d) 25
- (ix) Every string is terminated with a _____
- (x) Typedef can be used with which of these data types?
- (a) Struct (b) Union
(c) Enum (d) All of these

2. (a) Differentiate between type casting and type conversion write short note on operators variable in C language. (3+5=8)
- (b) Write a program to find whether the given number is an arunstrong number or not. (7)
3. (a) Write a short note on iterative statements that C language supports. Explain usefulness of default statement in switch case statement. (4+3=7)
- (b) Write a program to enter a decimal number calculate and display binary equivalent of this number. (8)
4. (a) Differentiate between function declaration and function definition. Differentiate between formal parameters and actual parameters. (3+4=7)
- (b) Write a program to print the fibonacci series using recursion. (8)
5. (a) What is the advantages of using structures? Differentiate between structure and an array. (3+4=7)
- (b) Write a program to read and display the information of all the students in a class using array of structure. (8)
6. (a) What do you understand by preprocessor directive? Explain all the types of preprocessor directives. (2+8=10)
- (b) Write a program to print all even numbers from m to n using pointers, where m and n are any two integers and $m \leq n$. (5)

7. (a) Explain the importance of a switch case statement. In which situations is a switch case desirable? Also give its limitations. Write a short note on goto Statement. (4+4=8)
- (b) Write a program to calculate GCD (Greatest Common Divisor) of two numbers. (7)
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