

FACULTY OF INFORMATICS

M.C.A. I-Year I Sem. (Main) Examination, 101148

February/March, 2012

Subject : COMPUTER PROGRAMMING AND PROBLEM SOLVING

Time : 3 Hours]

[Max. Marks : 80

Note : Answer One question from each Unit. All questions carry equal marks.

UNIT - I

1. (a) Explain different conditional statements in 'C' language ?
- (b) Write a 'C' program for calculating fibonacci series.
- (c) Describe about 'type casting' in C-language.

OR

2. (a) Explain about different input and output statements in 'C'.
- (b) Write a 'C' program to check whether the given number is Palindrome or not.

UNIT - II

3. (a) Write a 'C' program for finding the factorial of a given number using recursion.
- (b) Explain :
 - (i) malloc
 - (ii) pointer to pointers

OR

4. (a) Write a 'C' program for finding multiplication of two given arrays ?
- (b) Explain different string functions ?

Contd...2

UNIT - III

5. Write a 'C' program to create a file using a structure called student having fields as R no, name, marks and compute the total.

OR

6. (a) Explain different modes of opening files with their syntax.
(b) Write notes on pre-processor Directives.

UNIT - IV

7. (a) Explain static and dynamic polymorphism with example.
(b) Write a program for addition of two number using function template.

OR

8. (a) What are user-defined functions in C++ ? Explain.
(b) Write a C++ program to find whether a given number is prime or not.

UNIT - V

9. Explain the following :
- (a) constructor
 - (b) copy constructor
 - (c) virtual function
 - (d) abstract class

OR

10. Explain different types of inheritances with example.

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