MBI-0031011010 Seat No. _____

B. Sc. (Sem. I) (CBCS) Examination

November / December – 2016

CS - 101 : Programming Fundamentals Using C & C++

Time : $2\frac{1}{2}$ Hours] [Total Marks : **70**

1 (a) Answer the following short question. 4

(1) Which year C language was developed ?

(2) Who developed C language ?

(3) What is the use of scanf( ) function in C language?

(4) Which operators are used for give comment in C & C++ ?

(b) Answer any one of the following questions : 2

(1) Define keywords

(2) What is C ?

(c) Answer any one of the following questions : 3

(1) Difference between POP vs OOP.

(2) Explain cin and cout operator in detail.

(d) Answer any one of the following questions : 5

(1) Basic Structure of C language

(2) Basic Data types of C language.

2 (a) Answer the following short questions : 4

(1) List the types of function

(2) List the conditional statement

(3) Write a C++ program to print "hello world."

(4) Give the syntax of nested while loop.

(b) Answer any one of the following question : 2

(1) What is loop ? List the loops which are used in C/C++ ?

(2) Explain "if else" statement with syntax.

(c) Answer any one of the following questions : 3

(1) Explain break statement with example.

(2) Write a program to generate below pattern.

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

(d) Answer any one of the following question. 5

(1) Explain switch case with example.

(2) Write a program to find max value out of 3 value using nested "if else".

3 (a) Answer the following short questions : 4

(1) What is Structure ?

(2) Define Macro.

(3) What is the use of get( ) function ?

(4) What is the use of write( ) function ?

(b) Answer any one of the following questions. 2

(1) Explain union with its syntax.

(2) List the pre-processor directives.

(c) Answer any one of the following questions : 3

(1) Explain command line argument.

(2) Difference between static and dynamic memory.

(d) Answer any one of the following questions : 5

(1) Difference between malloc( ) and calloc( ).

(2) Difference between structure and union.

4 (a) Answer the following short questions : 4

(1) Define Array.

(2) What is overloading ?

(3) Give the syntax of pointer to array.

(4) How to declare pointer variable in C ?

(b) Answer any one of the following questions : 2

(1) Write a programme to print your name using pointer.

(2) Give the example of pointer to pointer.

(c) Answer any one of the following questions : 3

(1) What is pointer and its advantages ?

(2) Difference between pointer and reference.

(d) Answer any one of the following question : 5

(1) Explain operator overloading with example.

(2) Explain function overloading with example.

5 (a) Answer the following short question. 4

(1) List the OOP concept

(2) List the different types of inheritance.

(3) Define class in C++.

(4) What is the use of catch ( ) in exception handling

(b) Answer any one of the following questions : 2

(1) What is polymorphism ?

(2) Explain the types of accessing method of class member.

(c) Answer any one of the following questions. 3

(1) Explain inheritance.

(2) Explain destructor.

(d) Answer any one of the following questions : 5

(1) Explain constructor with example.

(2) Explain try, throw and catch with example.