**MBC-003-1041002**   Seat No. _____

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

### November / December – 2016

## CS - 02 : Problem Solving Methodologies & Programming in C

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

**Q-1(A) Attempt following questions**                    **4**

1. What is Identifier?
2. What is high level language?
3. What is the use of compiler?
4. Write name of primary data types.

**Q-1(B) Attempt any one**                    **2**

1. Explain explicit type casting
2. Explain relational operator

**Q-1(C) Attempt any one**                    **3**

1. Explain keyword.
2. Difference between compiler and interpreter

**Q-1(D) Attempt any one**                    **5**

1. What is Variable?
2. Explain data types available in C.

**Q-2(A) Attempt following questions**                    **4**

1. What is the Syntax of ternary operator?
2. write name of conditional statements available in C
3. What is the syntax of do.. while loop?
4. write name of jumping statements available in C

**Q-2(B) Attempt any one**                    **2**

1. Explain simple if.
2. What is loop?

**Q-2(C) Attempt any one**                    **3**

1. Explain for loop.
2. Explain break statement

**Q-2(D) Attempt any one**                                          **5**

   1.  Write a program to check entered number is Armstrong or not?

   2.  Explain switch case with example

**Q-3(A) Attempt following questions**                              **4**

   1.  What is Header file

   2.  Write two function name of ctype.h header file.

   3.  Explain strcpy().

   4.  Definition: recursion

**Q-3(B) Attempt any one**                                          **2**

   1.  Write any four names of mathematical library functions.

   2.  Explain return keyword

**Q-3(C) Attempt any one**                                          **3**

   1.  Explain actual argument and formal argument

   2.  Difference between call by value and call by reference.

**Q-3(D) Attempt any one**                                          **5**

   1.  What is pointer? Write down advantages of pointer

   2.  What is UDF? Explain Two Types of UDF

**Q-4(A) Attempt following questions**                              **4**

   1.  Explain union keyword

   2.  What is string?

   3.  List out types of array

   4.  How to declare single dimensional array? Draw memory allocation of it

**Q-4(B) Attempt any one**                                          **2**

   1.  Explain tyepdef

   2.  Explain memory structure of character array.

**Q-4(C) Attempt any one**                                          **3**

   1.  Difference between structure and union.

   2.  Explain structure with pointer

**Q-4(D) Attempt any one**                                          **5**

   1.  What is array? Explain Two dimensional array with example

   2.  Write a program to sort array.

**Q-5(A) Attempt following questions**                              **4**

   1.  What is pointer variable?

   2.  How to open binary file?

   3.  Explain NULL.

   4.  Which function is used to close file?

**Q-5(B) Attempt any one**      **2**
1. What are the uses of a pointer?
2. Difference between write and append mode

**Q-5(C) Attempt any one**      **3**
1. Explain fprintf() and fscanf()
2. Write a program to read content from file.

**Q-5(D) Attempt any one**      **5**
1. Explain dynamic memory allocation.
2. Write a program to copy content of one file into another file.

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