



**NBM-003-001207**

Seat No. \_\_\_\_\_

**B. Sc. (Sem. II) (CBCS) Examination**

**March / April - 2017**

**CA - 201 : Computer Application**

*(Advanced Programming in C)*

*(Old Course)*

**Faculty Code : 003**

**Subject Code : 001207**

Time :  $2\frac{1}{2}$  Hours ]

[ Total Marks : 70

1 Select only correct answer from given choice : 20

- (1) First index of array is \_\_\_\_\_.
- (2) Index of last element of numeric array is always one less than size of array.  
True or False ?
- (3) Last character of string is \_\_\_\_\_.
- (4) Ascii code of null is \_\_\_\_\_.
- (5) Number written between box brackets, in declaration line of array is called \_\_\_\_\_.
- (6) \_\_\_\_\_ and gets() functions can be used to scan string.
- (7) gets( ) belongs to \_\_\_\_\_ header file.
- (8) toupper( ) belongs to \_\_\_\_\_ header file.
- (9)strupr( ) belongs to \_\_\_\_\_ header file.
- (10) Return type of strcmp( ) is \_\_\_\_\_
- (11) char s[30] = "ABCDEF"; occupies \_\_\_\_\_ bytes.
- (12) \_\_\_\_\_ operator is used with structure variable to access member of structure.
- (13) Size of union variable is same as size of member having maximum size among all members.  
True or False ?

- (14) \_\_\_\_\_ is "value at the address" operator.
- (15) Increment operator ++ with pointer always moves by type size of pointer.  
True or False ?
- (16) \_\_\_\_\_ function is used to close all files.
- (17) \_\_\_\_\_ or \_\_\_\_\_ arguments can be passed as mode to append to text file.
- (18) \_\_\_\_\_ and \_\_\_\_\_ are parameter passing techniques.
- (19) Function call from within the function is called \_\_\_\_\_.
- (20) Function having \_\_\_\_\_ return type does not return anything.

2 (a) Explain the following : (any **three**) 6

- (1) Define: Arrays.
- (2) What are 2-D character Arrays in C?
- (3) Define: strrev( ) and strepy( )
- (4) What is UDF?
- (5) What is a parameter in function?
- (6) What are \* and & known as in Pointers?

(b) Explain the following : (any **three**) 9

- (1) What are strings?
- (2) Explain declaration and initialization of integer pointer.
- (3) Explain scope and lifetime of variable in a function.
- (4) What are library functions in C?
- (5) What is a header file in C?
- (6) What is the use of free( ) function?

(c) Explain : 10

- (1) What are arrays? Explain its types.
- (2) Write a note on Recursive functions.
- (3) What is structure in C? Explain Pointers with structures.
- (4) Explain Pointer to Array using example.
- (5) What are Command line arguments?

3 (a) Answer the following short questions : 6

(All compulsory)

- (1) Define preprocessor directives.
- (2) What is DMA concept in pointers?
- (3) Define: character arrays.
- (4) What is a structure?
- (5) Explain Pointer Arithmetic.
- (6) Sequential files vs. Random access files.

(b) Answer the following short questions : 9

- (1) List and explain File Modes in C.
- (2) Call by value vs. Call by reference.
- (3) Define: Pointer to Pointer.
- (4) What is malloc( ) function?
- (5) What are Arrays and Matrices?
- (6) Give the difference between Structure and Union.

(c) Answer the following short questions :

**10**

- (1) Explain do.....while loop and while loop using example.
- (2) Explain in detail Switch statement with example.
- (3) What is a UDF? Explain its types with example.
- (4) Write a C program to print reverse of a string without using built-in function.
- (5) Write a C program to write integer values to a file "Number.txt". While reading the content of the file, display the formatted list of odd numbers from the file and then the even numbers from the file.

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