BAT-003-003108   Seat No. _____

B. C. A. (Sem. I) (CBCS) Examination

November / December – 2015

CS-02 : Problem Solving Methodologis & Programming in C

(New Course)

Faculty Code : 003

Subject Code : 003108

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

1   Attempt the following :   **20**

(1)   BCPL was developed by _____

   (A)   Brain Kerninghm   (B)   Dennis Ritchie

   (C)   Martin Richards   (D)   Ken Thompson

(2)   _____ is a tool which shows the flow of data by drawing symbols in particular format.

   (A)   Dry Run   (B)   Algorithm

   (C)   Flow Chart   (D)   Programming

(3)   _____ symbol is used in conditional ternary operator to represent true part.

   (A)   /*.........*/   (B)   ?

   (C)   :   (D)   //

(4) _____ function is used to copy string.

    (A) strlen( )   (B) strcmp( )

    (C) strrev( )   (D) strcpy( )

(5) Array is a collection of elements of _____ type under same identifier.

    (A) Different   (B) Same

    (C) Unique   (D) int

(6) _____ symbol is used to separate structure name with member name.

    (A) ; (semi colon)

    (B) : (colon)

    (C) . (dot)

    (D) *

(7) In _____ looping statement, the body of loop would execute minimum once.

    (A) break   (B) while

    (C) for   (D) do...........while

(8) NULL character is represented by _____

    (A) 0   (B) space

    (C) null   (D) \0

(9) main( ) contain at least one _____ .

   (A) declaration statement

   (B) Initialization statement

   (C) executable statement

   (D) None of these

(10) main( ) is a _____

   (A) inbuilt function

   (B) user define function

   (C) static function

   (D) constant function

(11) Static storage variable's by default value is _____

   (A) Garbej value   (B) 1

   (C) 0   (D) NULL

(12) _____ is not a escape sequence

   (A) \a   (B) \b

   (C) \\   (D) \J

(13) String constant always represent in a pair of _____

   (A) double quotes   (B) single quotes

   (C) braces   (D) parenthesis

(14) _____ data type occupy 10 bytes in size in memory.

   (A) long int   (B) float

   (C) long double   (D) double

(15) _____ is called multi-branching statement.

   (A) switch   (B) for

   (C) goto   (D) do .... while

(16) fopen( ) return NULL when _____

   (A) file stream open successfully

   (B) file stream close automatic

   (C) file stream not open successfully

   (D) None of Above

(17) _____ is not keyword in C.

   (A) break   (B) if

   (C) go to   (D) typedef

(18) atol( ) function belongs to _____ header file

   (A) dos.h   (B) stdio.h

   (C) ctype.h   (D) stdlib.h

(19) printf("%c",100); return

    (A) a   (B) D

    (C) b   (D) None of these

(20) _____ is not data type in C.

    (A) void   (B) int

    (C) long int   (D) number

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

        (1) Explain C character set.

        (2) What is variable ? Why it is useful in programming language ?

        (3) Explain break statement.

        (4) Explain C constants.

        (5) What is Pointer ?

        (6) What is Union ?

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

        (1) Explain Dry-run and its usage.

        (2) Explain any three maths function.

        (3) Explain goto label.

        (4) Explain pre-processors directive in C.

        (5) Explain any three date function.

        (6) Explain modf( ), exp( ), isgraph( )

(c) Explain the following : (any two) **10**

    (1) Explain basic structure of C application.

    (2) Explain data type supported by C.

    (3) What is Operator ? Explain types of operator supported by C.

    (4) Explain for, while loop with suitable example.

    (5) Explain Storage classes in C.

3 (a) Explain the following (any three) **6**

    (1) Explain Hierarchy of operators.

    (2) What is Recursion ?

    (3) What is structure ?

    (4) Explain pointer to pointer.

    (5) Explain type casting.

    (6) Explain fopen( ) and fclose( ) function.

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

    (1) Differentiate & v/s &&

    (2) Differentiate Entry control loop v/s Exit control loop

    (3) Explain command line argument with example.

    (4) What is algorithm why it is useful ?

    (5) Explain switch case statement.

    (6) Explain goto label.

(c) Explain the following (any two)   **10**

  (1) Explain nested looping statement with example.

  (2) What is array ? Explain two dimensional array memory management.

  (3) What is pointer ? Why it is useful ? Explain features of pointer.

  (4) Explain pointer to structure with suitable example.

  (5) Explain memory allocation function in detail.

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