B.C.A.(First Semester) Examination, February/March-2022 BCA-1002

C Programming

Time: 1:30 Hours Maximum Marks-100

जब तक कहा न जाय, इस प्रश्नपुस्तिका को न खोलें

- निर्देश: 1. परीक्षार्थी अपने अनुक्रमांक, विषय एवं प्रश्नपुस्तिका की सीरीज का विवरण यथास्थान सही— सही भरें, अन्यथा मूल्यांकन में किसी भी प्रकार की विसंगति की दशा में उसकी जिम्मेदारी स्वयं परीक्षार्थी की होगी।
 - 2. इस प्रश्नपुस्तिका में 100 प्रश्न हैं, जिनमें से केवल 75 प्रश्नों के उत्तर परीक्षार्थियों द्वारा दिये जाने है। प्रत्येक प्रश्न के चार वैकल्पिक उत्तर प्रश्न के नीचे दिये गये हैं। इन चारों में से केवल एक ही उत्तर सही है। जिस उत्तर को आप सही या सबसे उचित समझते हैं, अपने उत्तर पत्रक (O.M.R. ANSWER SHEET)में उसके अक्षर वाले वृत्त को काले या नीले बाल प्वांइट पेन से पूरा भर दें। यदि किसी परीक्षार्थी द्वारा निर्धारित प्रश्नों से अधिक प्रश्नों के उत्तर दिये जाते हैं तो उसके द्वारा हल किये गये प्रथमतः यथा निर्दिष्ट प्रश्नोत्तरों का ही मृत्यांकन किया जायेगा।

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- 3. प्रत्येक प्रश्न के अंक समान हैं। आप के जितने उत्तर सही होंगे, उन्हीं के अनुसार अंक प्रदान किये जायेंगे।
- 4. सभी उत्तर केवल ओ०एम०आर० उत्तर पत्रक (O.M.R. ANSWER SHEET) पर ही दिये जाने हैं। उत्तर पत्रक में निर्धारित स्थान के अलावा अन्यत्र कहीं पर दिया गया उत्तर मान्य नहीं होगा।
- 5. ओ॰एम॰आर॰ उत्तर पत्रक (O.M.R. ANSWER SHEET) पर कुछ भी लिखने से पूर्व उसमें दिये गये सभी अनुदेशों को सावधानीपूर्वक पढ़ लिया जाय।
- 6. परीक्षा समाप्ति के उपरान्त परीक्षार्थी कक्ष निरीक्षक को अपनी प्रश्नपुस्तिका बुकलेट एवं ओ०एम०आर० शीट पृथक-पृथक उपलब्ध कराने के बाद ही परीक्षा कक्ष से प्रस्थान करें।
- 7. निगेटिव मार्किंग नहीं है।

महत्वपूर्ण : — प्रश्नपुस्तिका खोलने पर प्रथमतः जॉच कर देख लें कि प्रश्नपुस्तिका के सभी पृष्ठ भलीभॉति छपे हुए हैं। यदि प्रश्नपुस्तिका में कोई कमी हो, तो कक्ष निरीक्षक को दिखाकर उसी सीरीज की दूसरी प्रश्नपुस्तिका प्राप्त कर लें।

	(A)	Macros
	(B)	Conditional Compilation
	(C)	File Inclusion
	(D)	All of the above
2.	Cho	ose a C unformatted input function below:
	(A)	gets(), puts()
	(B)	getchar(), putchar()
	(C)	(A) and (B)
	(D)	None
3.	Cho	ose a C Formatted Input Output function below:
	(A)	<pre>printf(), scanf()</pre>
	(B)	<pre>sprintf(), sscanf()</pre>
	(C)	<pre>fprintf(), fscanf()</pre>
	(D)	All the above
4.	Cho	ose a valid C format specifier:
	(A)	%d prints integer constants
	(B)	%u prints unsigned integer constants
	(C)	%ld prints signed long
	(D)	All the above
5.	Wha	at is a format specifier in C language?
	(A)	A format Specifier tells compiler to treat a variable value is predefined way
	(B)	Different format specifiers are used to print different type of data
	(C)	Format specifiers are used to write data to files in a formatted way
	(D)	All the above

What are the types of C Preprocessor Directives?

1.

- 6. What are the types of data allowed inside a structure?
 - (A) int, float, double, long double
 - (B) char, enum, union
 - (C) pointers and Same structure type members
 - (D) All of above
- 7. What is actually passed if you pass a structure variable to a function?
 - (A) Copy of structure variable
 - (B) Reference of structure variable
 - (C) Starting address of structure variable
 - (D) Ending address of structure variable
- 8. A C Structure or User defined data type is also called:
 - (A) Derived data type
 - (B) Secondary data type
 - (C) Aggregate data type
 - (D) All the above
- 9. What is the output of C program?

```
int main ()
{
   struct book
{
     int pages;
     char name [10];
}a;
    a.pages=10;
   strcpy (a. name, "Cbasics");
   printf ("%s=%d", a.name,a. pages);
   return 0;
}
(A) empty string=10
```

- (B) C=basics
- (C) Compiler error
- (D) Cbasics=10

10.	What is the size of a C structure?
	(A) C structure is always 128 bytes
	(B) Size of C structure is the total bytes of all elements of structure
	(C) Size of C structure is the size of largest element
	(D) None
11.	A C string elements are always stored in:
	(A) Random memory locations
	(B) Alternate memory locations
	(C) Sequential memory locations
	(D) None
12.	What is the ASCII value of NULL?
	(A) 1
	(B) 10
	(C) 0
	(D) None
13.	What is the Format specifier used to print a String or Character array in C Printf or
	Scanf function.
	(A) %c
	(B) %C
	(C) %d
	(D) %s
14.	What is the dimension of the C array int ary [10][5]?
	(A) 5
	(B) 1
	(C) 3
	(D) 2
15.	What is the function used to allocate memory to an array at run time without
	initializing array elements?
	(A) calloc()
	(B) malloc()
	(C) kalloc()
	(D) None

16.	What is the function used to allocate memory to an array at run time with Zero
	initial value to each?
	(A) calloc()
	(B) malloc()
	(C) kalloc()
	(D) None
17.	If an integer array pointer is incremented, how many bytes will be skipped to reach
	next element location?
	(A) 1
	(B) 2
	(C) 8
	(D) None
18.	Can we change the starting index of an array from 0 to 1 in any way?
	(A) Yes. Through pointers
	(B) Yes. Through Call by Value
	(C) Yes. Through Call by Reference
	(D) None
19.	What happens when you try to access an Array variable outside its Size?
	(A) Compiler error is thrown
	(B) Some garbage value will be returned
	(C) 0 value will be returned
	(D) 1 value will be returned
20.	What is the value of an array element which is not initialized?
	(A) By default Zero 0
	(B) Depends on Storage Class
	(C) 1
	(D) None

21. What is the output of C Program? int main () { int a[]; $a[4] = \{1,2,3,4\};$ printf ("%d",a [0]; return 0; } (A) Compiler Error (B) 1 (C) 4 (D) 2 22. An array Index starts with: (A) -1 (B) 1 (C) 0 (D) None The algorithm that will efficiently sort an array that is nearly sorted except for the 23. interchange of some adacent pairs of numbers like : {1,3,2,5,4,6} is : (A) Quick Sort (B) Bubble Sort (C) Merge Sort (D) Selection Sort

```
24.
     Which of the following has the compilation error in C?
     (A) int n=18;
     (B) char c=99;
     (C) float f=(float)99.32
     (D) # include
     What are types of Functions in C Language?
25.
     (A) Library Function
     (B) User Defined Function
     (C) Both Library and User
     (D) None of the above
     What is the output of C Program with functions?
26.
     int main ()
        show();
        printf ("BANK");
        return 0;
     void show ()
        printf ("CURRENCY");
      }
     (A) CURRENCY BANK
      (B) BANK
     (C) Compiler error
     (D) BANK CURRENCY
```

27.	A function which calls itself is called a:
	(A) Self Function
	(B) Auto Function
	(C) Recursive Function
	(D) Static Function
28.	Choose a correct C Statement regarding for loop:
	for (; ;);
	(A) for loop works exactly first time
	(B) Compiler error
	(C) for loop works infinite number of times
	(D) None of the above
29.	What is the way to suddenly come out of Quit any Loop in C Language?
	(A) Continue
	(B) Break
	(C) Quit
	(D) None of the above
30.	Choose a right statement :
	int $var = 3.5$;
	(A) $var = 3.5$
	(B) $var = 3$
	(C) $var = 0$
	(D) Compile Error

31. What is the output of the program? # include<studio.h> int main () { printf("Hello"); (A) Hello (B) No Output (C) Runtime Error (D) Compile Error Which among the following is a Global Variable? 32. (A) Static (B) Register (C) Extern (D) Auto 33. Variables of type auto, static and extern are all stored in: (A) RAM (B) ROM (C) CPU (D) None of these What is the default C Storage Class for a variable? 34. (A) Static (B) Register (C) Extern (D) Auto Every C Variable must have: 35. (A) Type (B) Storage class (C) Both Type and Storage Class (D) Either Type or Storage Class

- 36. What is a C Storage Class?
 - (A) C Storage decides where to or which memory store the variable
 - (B) C Storage Class decides what is the Scope and Life of a variable
 - (C) C Storage Class decides what is the default value of a variable
 - (D) All of the above
- 37. Size of float, double and long double in Bytes are :
 - (A) 4,8,16
 - (B) 4,8,10
 - (C) 2,4,6
 - (D) 4,6,8
- 38. Find the output of the following program?

```
# include<studio.h>
int main ()
{
    int k;
    k=1,2,3,4,5;
    printf ("%d\n",k);
    return 0;
}
```

- (A) 1
- (B) 2
- (C) 5
- (D) 4

```
39.
      Find the output of the following program:
      # include<studio.h>
      int main ()
         if (printf ("ABC"))
            printf ("True");
         else
            printf ("False");
      return 0;
      (A) Error
      (B) True
      (C) ABC True
      (D) ABC
      Find the output of the following program?
40.
      # include<studio.h>
      int main ()
         float a = 0.3;
         if (0.3 > a)
      printf ("True\n");
         else
            printf ("False\n")
         return 0;
      (A) False
      (B) True
      (C) True False
      (D) Error
```

```
41.
      Find the output of the following program:
      # include<studio.h>
      int main ()
      {
            int a = 0, b=1, c=2;
           *((a+1 == 1)? \&b : \&a) = a?b : c;
           printf ("%d,%d,%d\n",a,b,c);
           return 0;
      (A) 1,2,3
      (B) 0,1,2
      (C) 0,2,2
      (D) 2,2,2
42.
      Find the output of the following program:
      # include<studio.h>
      int main ()
         int x=10;
         float y = 10.0;
         if (x==y)
           printf ("x and y are equal");
         else
           printf("x and y are not equal)
         return 0;
      (A) x and y are equal
      (B) x and y are not equal
      (C) Compile Error
      (D) Syntax Error
```

```
43.
      Find the output of the following program:
      # include<stdio.h>
      int main()
      {
         int a=100, b=200, c=300;
      if (!a > = 500)
         b = 300;
         c = 400;
         printf ("%d,%d,%d",a,b,c);
         return 0;
      }
      (A) 100,200,300
      (B) 100,300,300
      (C) 100,200,400
      (D) 100,300,400
      Find the output of the following program:
44.
      # include<stdio.h>
      int main ()
      {
           char str[]="Smaller";
           int a = 100;
           printf (a>10? "Greater": "%s", str);
           return 0;
      }
      (A) Greater
      (B) 100
      (C) Compile Error
      (D) Smaller
45.
      Find a Floating Point constant:
      (A) 12.3E5
      (B) 12e34
      (C) 125.34857
      (D) All of the above
```

Find an integer constant:
(A) 3.14
(B) 34
(C) "123"
(D) None
What is an Identifier in C Language?
(A) Name of a Function or Variable
(B) Name of a Macros
(C) Name of Structure or Union
(D) All the above
An uninitialized pointer in C is called:
(A) Constructor
(B) Destructor
(C) dangling pointer
(D) Wild Pointer
Far pointer can access:
(A) Single memory location
(B) All memory location
(C) First and Last Memory Address
(D) No memory location
Name the loop that executes at least once :
(A) for
(B) if
(C) do-while
(D) while

51.	A Link is:
	(A) A compiler
	(B) An active debugger
	(C) A C interpreter
	(D) An analyzing tool in C
52.	Which of the following header file is required for strcpy() function?
	(A) string.h
	(B) strings.h
	(C) files.h
	(D) strcsspy()
53.	C programming language was developed by :
	(A) Dennis Ritchie
	(B) Ken Thompson
	(C) Bill Gates
	(D) Peter Norton
54.	In C, a Union is:
	(A) Memory location
	(B) Memory store
	(C) Memory screen
	(D) None of these
55.	When the main function is called, it is called with the arguments?
	(A) argv
	(B) argc
	(C) None of these
	(D) Both (A) and (B)

56.	A ty	pecast is used to:
	(A)	None of these
	(B)	Define a new data type
	(C)	Rename an old type
	(D)	Force a value to be a particular variable type
57.	Whi	ch is more appropriate for reading in a multi-word string?
	(A)	gets()
	(B)	Printf()
	(C)	scanf()
	(D)	puts ()
58.	Wha	at is used as a terminator in C?
	(A)	;
	(B)	:
	(C)	?
	(D)	None
59.	Whi	ch function necessary to exist in each and every program?
	(A)	Void
	(B)	Sum
	(C)	None
	(D)	Main
60.	Max	imum number of elements in the array declaration int a[5][8] is
	(A)	28
	(B)	32
	(C)	35
	(D)	40

61.	Which among the following is an unconditional control structure?
	(A) do-while
	(B) if-else
	(C) for
	(D) goto
62.	Explicity type conversion is known as:
	(A) Casting
	(B) Conversion
	(C) Disjunction
	(D) Separation
63.	Operators have precedence. Precedence determines which operator is:
	(A) faster
	(B) takes less memory
	(C) evaluated first
	(D) takes no arguments
64.	The operator & is used for:
	(A) Bitwise AND
	(B) Bitwise OR
	(C) Logical AND
	(D) Logical OR
65.	What will be the maximum size of a float variable?
	(A) 4 bytes
	(B) 1 byte
	(C) 2 bytes
	(D) 8 bytes

66.	Character constants should be enclosed between:
	(A) Single quotes
	(B) Double quotes
	(C) Both (A) and (B)
	(D) None of these
67.	What is the valid range of numbers for int type data?
	(A) 0 to 256
	(B) -32768 to +32767
	(C) -65536 to +65536
	(D) No specific range
68.	Which is the valid range of numbers for int type of data?
	(A) Keywords
	(B) Variables
	(C) Constants
	(D) All of the above
69.	Which of the following is a Scalar Date type?
	(A) Float
	(B) Union
	(C) Array
	(D) Pointer
70.	What number system is not understood by language compiler directly?
	(A) Binary
	(B) Decimal
	(C) Octal
	(D) Hex Decimal

71.	Right Shift operation is equivalent to:
	(A) Division by 2
	(B) Multiplying by 2
	(C) Adding 2
	(D) Subtracting 2
72.	Lift Shift operation is equivalent to:
	(A) Division by 2
	(B) Multiplying by 2
	(C) Adding 2
	(D) Subtracting 2
73.	What is Single Operand Operator below?
	(A) &
	(B)
	(C) ^
	(D) none
74.	What is the result of 0110 & 1100?
	(A) 1000
	(B) 0001
	(C) 0100
	(D) 1010
75.	What are Nibble, Word and Byte in computer language?
	(A) Byte = 8 bits, Word= 4 Bytes, Nibble= 8 Bytes
	(B) Byte = 8 bits, Word=2 Bytes, Nibble=4 Bytes
	(C) Bytes = 8 bits, Word=12 bits, Nibble=32 Bits
	(D) Byte = 8 bits, Word=24 bits, Nibble=40 Bits

76. What is the C function used to move current pointer to the beginning of file? FILE *fp; (A) rev(fp) (B) rewind(fp) (C) rew(fp) (D) wind(fp) 77. What are the C functions used to read or write a file in Binary Mode? (A) fprintf(), fscanf() (B) fread(), fwrite() (C) fprint(), fscan() (D) read(), write() 78. What are the C functions used to read or write a file in Text Mode? (A) fprintf(), fscanf() (B) fread(), fwrite() (C) fprint(), fscan() (D) read(), write() 79. What is the syntax for writing a file in C using binary mode? FILE *fp; (A) fp=fopen("abc.txt","wr"); (B) fp=fopen("abc.txt","wb"); (C) fp=fopen("abc.txt","wbin"); (D) fp=fopen("abc.txt","b"); What is the need for closing a file in C language? 80. (A) fclose(fp) closes a file to release the memory used in opening a file (B) Closing a file clears Buffer contents form RAM on memory. (C) Unclosed file occupy memory and PC hangs when on low memory.

(D) All the above

81.	Where is a file temporarily stored before read or write operation in C language?	
	(A) RAM	
	(B) Hard disk	
	(C) Buffer	
	(D) Extra Directories	
82.	What is a C FILE data type?	
	(A) FILE is like a Structure only	
	(B) FILE is like a Union only	
	(C) FILE is like a user define int data type	
	(D) None of the above	
83.	What is the keyword used to declare a C file pointer?	
	(A) file	
	(B) FILE	
	(C) FILEEP	
	(D) filefp	
84.	What is the need for a File when you can store anything in memory?	
	(A) Memory (RAM) is limited in any computer	
	(B) A file is stored on Hard Disk which can store Gigabytes of data	
	(C) File stored on Hard Disk is safe even if PC is switched off. But Memory of	or
	RAM contents are cleared when PC is off	
	(D) All the above	
85.	Choose a correct statement about C program output file?	
	(A) Output file .exe is machine dependent. Exe is windows suitable file	
	(B) Exe file does not work in Linux or Unix machines. So different type of output	ut
	is created on different machines	
	(C) Linker produces a suitable output file for each maching	
	(D) All the above	

86.	Expanded Source code is the output of which C program building process :
	(A) Assembler
	(B) Preprocessor
	(C) Linker
	(D) Compiler
87.	What is the output of C Compiler compiling?
	(A) An assembly language code
	(B) Class file code
	(C) Object Code
	(D) None
88.	What is the next step to Assembling in C program build process?
	(A) Preprocessing
	(B) Compiling
	(C) Linking
	(D) None
89.	What is the first step in C program building process?
	(A) Preprocessing
	(B) Compiling
	(C) Linking
	(D) Assembling
90.	What is the input file in a C program building process?
	(A) filename.c
	(B) filename.k
	(C) filename.cpp
	(D) filename.p

91.	In Turbo C, Search Path of Directories for #Include is mentioned under the option :
	(A) Include Directories
	(B) Exclude Directories
	(C) Add Directories
	(D) Extra Directories
92.	Choose a correct C statement about #include"
	(A) A file named stdio.h will be searched in all directories and included if found
	(B) A file named stdio.h will be searched in current directory and preconfigured
	list of directories in search path and included if found
	(C) A file named stdio.h will be searched in current directory and included if
	found
	(D) None
93.	What is the abbreviation of C STDIO in stdio.h?
	(A) Standard Input Output
	(B) String Terminating Operations Input Output
	(C) Store Input Output
	(D) None
94.	What is the C Preprocessor directive to be used to add a header file or any file to
	existing C program?
	(A) #add
	(B) #present
	(C) #include
	(D) \$include

95.	How do you safeguard your .C file code form copying by outside developeers or
	world?
	(A) Encrypt a C file and share
	(B) Obfuscate a C file and share
	(C) Scramble a C file and share
	(D) Convert to Exe and share.
96.	What is the output file generated after processing a .C file?
	(A) .h file
	(B) .exe file
	(C) .bak file
	(D) None
97.	What is the C keyword used to create global Constants?
	(A) definition
	(B) def
	(C) constant
	(D) define
98.	What is the keyword used to define a C macro?
	(A) definition
	(B) def
	(C) define
	(D) None
99.	What is the another name for .C file?
	(A) Executable code
	(B) Distributable Code
	(C) Marco code
	(D) Source Code

- 100. Processor Directive in C language starts with:
 - (A) \$ symbol (DOLLAR)
 - (B) At The Rate
 - (C) & symbol (Ampersand)
 - (D) # symbol (HASH)

Rough Work / रफ कार्य

DO NOT OPEN THE QUESTION BOOKLET UNTIL ASKED TO DO SO

- 1. Examinee should enter his / her roll number, subject and Question Booklet Series correctly in the O.M.R. sheet, the examinee will be responsible for the error he / she has made.
- 2. This Question Booklet contains 100 questions, out of which only 75 Question are to be Answered by the examinee. Every question has 4 options and only one of them is correct. The answer which seems correct to you, darken that option number in your Answer Booklet (O.M.R ANSWER SHEET) completely with black or blue ball point pen. If any examinee will mark more than one answer of a particular question, then the first most option will be considered valid.
- 3. Every question has same marks. Every question you attempt correctly, marks will be given according to that.
- 4. Every answer should be marked only on Answer Booklet (O.M.R ANSWER SHEET). Answer marked anywhere else other than the determined place will not be considered valid.
- 5. Please read all the instructions carefully before attempting anything on Answer Booklet(O.M.R ANSWER SHEET).
- 6. After completion of examination please hand over the Answer Booklet (O.M.R ANSWER SHEET) to the Examiner before leaving the examination room.
- 7. There is no negative marking.

Note: On opening the question booklet, first check that all the pages of the question booklet are printed properly in case there is an issue please ask the examiner to change the booklet of same series and get another one.