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O.M.R. Serial No. | | | | | | | | |

प्रश्नपुस्तिका क्रमांक
Question Booklet No.

प्रश्नपुस्तिका सीरीज
Question Booklet Series
C

BCA (Second Semester) Examination, July-2022

BCA-201(N)

C Programming
(B.P.)

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, जिनमे 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 किसी प्रश्न का एक से अधिक उत्तर दिया जाता है, तो उसे गलत उत्तर माना जायेगा।**
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. ओ०एम०आर० 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 ओ०एम०आर० शीट 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।**

K-362

Rough Work / रफ कार्य

1. What will be the output of the following C code ?

```
#include<stdio.h>
void main()
{
  int x = 97;
  int y = sizeof(x++);
  printf("x is %d", x);
}
```

(A) x is 97

(B) x is 98

(C) x is 99

(D) Run time error

2. What will be the output of the following C code ?

```
#include<stdio.h>
int main()
{
  int c = 2^3;
  printf("%d\n", c);
}
```

(A) 1

(B) 8

(C) 9

(D) 0

3. Choose the correct difference between getc() and fgetc() :

(A) If it is not a macro, it may evaluate stream more than once

(B) If it is a macro, it may not evaluate stream more than once

(C) If it is a macro, it may evaluate stream more than once

(D) No difference between fgetc() and getc()

4. What does the following C code snippet mean ?

int ungetc(int c, FILE *stream)

(A) Pushes c back onto a stream

(B) Deletes c form the stream

(C) Reads frequency of c in stream

(D) No action is taken by the command

5. The _____ function reads atmost one less than the number of characters specified by size from the given stream and it is stored in the string str.

(A) fget()

(B) fgets()

(C) fput()

(D) fputs()

6. Which functions is declared in <errno.h> ?

(A) fseek()

(B) ftell()

(C) ferror()

(D) fsetpos()

7. Which function will return the current file position for stream ?

(A) fgetpos()

(B) fseek()

(C) ftell()

(D) fsetpos()

8. What is the function of fputs() ?

(A) Read a line from a file

(B) Read a character from a file

(C) Write a character to a file

(D) Write a line to a file

9. EOF is an integer type defined in stdio.h and has a value _____.

(A) 1

(B) 0

(C) NULL

(D) –1

10. What does tmpfile() returns when it could not create the file ?

(A) Stream and NULL

(B) Only stream

(C) Only NULL

(D) Does not return anything

11. What is the function of FILE *tmpfile(void) ?

(A) Creates a temporary file of mode “wb+”

(B) Creates a temporary file of mode “wb”

(C) Creates a temporary file of mode “w”

(D) Creates a temporary file of mode “w+”

12. _____ removes the named file, so that a subsequent attempt to open it will fail.

(A) remove(const *filename)

(B) remove(filename)

(C) remove()

(D) fclose(filename)

13. fflush(NULL) flushes all _____.

(A) input streams

(B) output streams

(C) previous contents

(D) appended text

14. If the mode includes b after the initial letter, what does it indicates ?

(A) text file

(B) big text file

(C) binary file

(D) blueprint text

15. Which is the function of the mode 'w+' ?

(A) Create text file for writing, discard previous contents if any

(B) Create text file for update, discard previous contents if any

(C) Create text file for writing, do not discard previous contents if any

(D) Create text file for update, do not discard previous contents if any

16. Which one of the following is correct syntax for opening a file ?

(A) FILE *fopen(const *filename, const char *mode)

(B) FILE *fopen(const *filename)

(C) FILE *open(const *filename, const char *mode)

(D) FILE open(const *filename)

17. Which of the following operators is used to concatenate two strings without space ?

(A) #

(B) < >

(C) **

(D) ##

18. What will be the output of the following C code ?

```
#define hello(c) #c
main(){
  printf(hello(i,am));}
```

(A) i,am

(B) iam

(C) i am

(D) error

19. What will be the output of the following C code ?

```
#define display(text) printf(#text "@")
main(){
 display(hello.);
 display(good morning!);}
```

(A) hello.@good morning!

(B) error

(C) hello.good morning!@

(D) hello.@good morning!@

20. Which of the following is a stringizing operator ?

(A) < >

(B) #

(C) %

(D) ##

21. Which of the following is not a preprocessor directive ?

(A) #error

(B) #pragma

(C) #if

(D) #ifelse

22. The purpose of the preprocessor directive #error is that _____.

(A) It rectifies any error present in the code

(B) It rectifies only the first error which occurs in the code

(C) It causes the preprocessor to report a fatal error

(D) It causes the preprocessor to ignore an error

23. What will be the output of the following C code ?

```
#include<stdio.h>#define hello 10void main(){
 printf("%d", hello);
 #undef hello
 printf("%d", hello);}
```

(A) 10

(B) hello

(C) error

(D) 1010

24. The preprocessor directive which is used to remove the definition of an identifier which was previously defined with #define ?

(A) #ifdef

(B) #undef

(C) #ifndef

(D) #def

25. The preprocessor directive which checks whether a constant expression results in a zero or non-zero value _____.

(A) #if

(B) #ifdef

(C) #undef

(D) #ifndef

26. What will be the output of the following C code ?

```
#include<stdio.h>void main(){
 #ifndef max
 printf("hello");
 #endif
 printf("hi");}
```

(A) hello

(B) hellohi

(C) error

(D) hi

27. _____ is the preprocessor directive which is used to end the scope of #ifdef.

(A) #elif

(B) #ifndef

(C) #endif

(D) #if

28. The correct syntax of the attribute packed is _____.

(A) __attribute__((packed));

(B) _attribute(packed);

(C) _attribute_((packed));

(D) __attribute__(packed);

29. In the directive #pragma pack(n), if the value of 'n' is given to be 5, then what happens ?

(A) Error

(B) Warning but no error

(C) Executes the pragma statement

(D) Ignores the pragma statement and executes the program

30. Which of the following attributes is used to specify that the minimum required memory to be used to represent the types ?

(A) Packed

(B) Aligned

(C) Unused

(D) Deprecated

31. In the directive, #pragma pack(n), which of the following is not a valid value of n ?

(A) 1

(B) 2

(C) 3

(D) 4

32. The preprocessor directive used to give additional information to the compiler, beyond which is conveyed in the language _____.

(A) #include

(B) #define

(C) #pragma

(D) #elif

33. Which of the following share a similarity in syntax ?

1. Union, 2. Structure, 3. Arrays and 4. Pointers

(A) 3 and 4

(B) 1 and 2

(C) 1 and 3

(D) 1, 3 and 4

34. Members of a union are accessed as _____.

(A) union-name.member

(B) union-pointer->member

(C) Both union-name.member & union-pointer->member

(D) None of the mentioned

35. The size of a union is determined by the size of the _____.

(A) First member in the union

(B) Last member in the union

(C) Biggest member in the union

(D) Sum of the sizes of all members

36. Which of the following is a collection of different data types ?

(A) String

(B) Array

(C) Structure

(D) Files

37. Which of the following return-type cannot be used for a function in C ?

(A) An array stores only elements of same type. Accessing elements is easy

(B) A structure is preferred when different type elements are to be combined as a single entity

(C) An array implementation has performance improvements to structure

(D) All the above

38. 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

39. 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 the above

40. Which of the following cannot be a structure member ?

(A) Another structure

(B) Function

(C) Array

(D) None of the mentioned

41. Which operator connects the structure name to its member name ?

(A) –

(B) .

(C) Both (A) and (B)

(D) None of these

42. Which of the following are themselves a collection of different data types ?

(A) String

(B) structure

(C) Char

(D) All of the mentioned

43. Choose a correct statement about C structures :

(A) A structure can contain same structure type member

(B) A structure size is limited by only physical memory of that PC

(C) You can define an unlimited number of members inside a structure

(D) All the above

44. What are the uses of C Structures ?

(A) Structure is used to implement Linked Lists, Stack and Queue data structure

(B) Structures are used to Operating System functionality like Display and Input taking

(C) Structure are used to exchange information with peripherals of PC

(D) All the above

45. A C structure or User defined datatype is also called _____.

(A) Derived data type

(B) Secondary data type

(C) Aggregate data type

(D) All the above

46. Choose a correct statement about C structure elements ?

(A) Structure elements are stored on random free memory locations

(B) Structure elements are stored in register memory locations

(C) Structure elements are stored in contiguous memory locations

(D) None of the above

47. 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 elements

(D) None of the above

48. What is a structure in C language ?

(A) A structure is a collection of elements that can be of same datatype

(B) A structure is a collection of elements that can be of different datatype

(C) Elements of a structure are called members

(D) All of these

49. Which of the following return-type cannot be used for a function in C ?

(A) char*

(B) struct

(C) void

(D) None of the mentioned

50. Which option is not possible for the following function call ?

(A) Compiler can access entire structure from the function

(B) Individual member's address can be displayed in structure

(C) Individual member can be passed by reference in a function

(D) None of the mentioned

51. Which of the following is an incorrect syntax to pass by reference a member of a structure in a function ?

(Assume : struct temp{int a;}s;)

(A) func(&s.a);

(B) func(&(s).a);

(C) func(&(s.a));

(D) None of the mentioned

52. What is the correct syntax to declare a function foo() which receives an array of structure in function ?

(A) void foo(struct *var);

(B) void foo(struct *var[]);

(C) void foo(struct var);

(D) None of the mentioned

53. Which of the following uses structure ?

(A) Array of structures

(B) Linked lists

(C) Binary tree

(D) All of the mentioned

54. Which of the following cannot be a structure member ?

(A) Another structure

(B) Function

(C) Array

(D) None of the mentioned

55. Which operator connects the structure name to its member name ?

(A) –

(B) <-

(C) .

(D) Both <- and .

56. User-defined data type can be derived by _____.

(A) struct

(B) enum

(C) typedef

(D) All of the mentioned

57. Which of the following are themselves a collection of different data types?

(A) string

(B) structures

(C) char

(D) All of the mentioned

58. Presence of code like "s.t.b = 10" indicates _____.

(A) Syntax Error

(B) Structure

(C) Double data type

(D) An ordinary variable name

59. Which of the following operation is illegal in structures ?

(A) Typecasting of structure

(B) Pointer to a variable of the same structure

(C) Dynamic allocation of memory for structure

(D) All of the mentioned

60. Which of the following is not possible under any scenario ?

(A) s1 = &s2;

(B) s1 = s2;

(C) (*s1).number = 10;

(D) None of the mentioned

61. Use _____ to determine the null-terminated message string that corresponds to the error code errcode.

(A) strerror()

(B) strstr()

(C) strxfrm()

(D) memset()

62. The _____ function returns the number of characters that are present before the terminating null character.

(A) strlength()

(B) strlen()

(C) strlent()

(D) strchr()

63. Which of the given function is used to return a pointer to the located character ?

(A) strrchr()

(B) strxfrm()

(C) memchar()

(D) strchar()

64. Which of the following function returns a pointer to the located string or a null pointer if string is not found ?

(A) strtok()

(B) strstr()

(C) strspn()

(D) strrchr()

65. The _____ function returns a pointer to the first character of a token.

(A) strstr()

(B) strcpy()

(C) strspn()

(D) strtok()

66. What is the return value of strxfrm() ?

(A) Length of the transformed string, not including the terminating null-character

(B) Length of the transformed string, including the terminating null-character

(C) Display the transformed string, not including the terminating null-character

(D) Display the transformed string, including the terminating null-character

67. Which of the following is the variable type defined in header string.h ?

(A) sizet

(B) size

(C) size_t

(D) size-t

68. What is the function of strcoll() ?

(A) Compares the string, result is dependent on the LC_COLLATE

(B) Copies the string, result is dependent on the LC_COLLATE

(C) Compares the string, result is not dependent on the LC_COLLATE

(D) Copies the string, result is not dependent on the LC_COLLATE

69. What is the prototype of strcoll() function ?

(A) int strcoll(const char *s1, const char *s2)

(B) int strcoll(const char *s1)

(C) int strcoll(const *s1, const *s2)

(D) int strcoll(const *s1)

70. What will strcmp() function do ?

(A) Compares the first n characters of the object

(B) Compares the string

(C) Undefined function

(D) Copies the string

71. The _____ function appends not more than n characters.

(A) strcat()

(B) strcon()

(C) strncat()

(D) memcat()

72. Which function will you choose to join two words ?

(A) strcpy()

(B) strcat()

(C) strncon()

(D) memcon()

73. Which among the following is Copying function ?

(A) memcpy()

(B) strcopy()

(C) memcopy()

(D) strxcpy()

74. Which of the following function duplicates a string ?

(A) strnset

(B) strstr

(C) strdup

(D) stricmp

75. Which string method helps find length of string ?

(A) stringLength()

(B) strlen

(C) strdup

(D) Both (A) & (B)

76. What will be the output of the following C code ?

```
#include<stdio.h>
int main()
{
  int a = 2;
  if (a>>1)
     printf("%d\n", a);
}
```

(A) 0

(B) 1

(C) 2

(D) No output

77. To receive multi-word string from keyboard which of the function is more appropriate ?

(A) scanf

(B) gets()

(C) Both

(D) None of the above

78. Which of the following is format specification for printing String in printf() ?

(A) %d

(B) %c

(C) %f

(D) %s

79. Any function working with String knowns the String has ended when it encounters :

(A) Null character

(B) Empty space

(C) "\1"

(D) Pointer

80. A string constant in C terminated by :

(A) '\0'

(B) '\\0'

(C) "

(D) " "

81. A string in C is :

(A) 1-D Array of character

(B) 2-D Array of character

(C) Any of (A) & (B)

(D) None of the above

82. Which of the following is an example of static memory allocation ?

(A) Linked list

(B) Stack

(C) Queue

(D) Array

83. Which of the following is an example for non linear data type ?

(A) Tree

(B) Array

(C) Linked list

(D) Queue

84. Which of the following header files must necessarily be included to use dynamic memory allocation functions ?

(A) stdlib.h

(B) stdio.h

(C) memory.h

(D) dos.h

85. Choose the statement which is incorrect with respect to dynamic memory allocation:

(A) Memory is allocated in a less structured area of memory, known as heap

(B) Used for unpredictable memory requirements

(C) Execution of the program is faster than that of static memory allocation

(D) Allocated memory can be changed during the run time of the program based on the requirement of the program

86. Local variables are stored in an area called _____.

(A) Heap

(B) Permanent storage area

(C) Free memory

(D) Stack

87. Which of the following is the correct syntax to send an array as a parameter to function ?

(A) func(&array);

(B) func(#array);

(C) func(*array);

(D) func(array[size]);

88. Which of the following declaration will result in run-time error ?

(A) int **c = &c;

(B) int **c = &*c;

(C) int **c = **c;

(D) None of the mentioned

89. Which of the following is not possible in C ?

(A) Array of function pointer

(B) Returning a function pointer

(C) Comparison of function pointer

(D) None of the mentioned

90. Which of the following is a correct syntax to pass a function Pointer as an argument?

(A) void pass(int(*fptr)(int, float, char)){}

(B) void pass(*fptr(int, float, char)){}

(C) void pass(int(*fptr)){}

(D) void pass(*fptr)){}

91. How to call a function without using the function name to send parameters ?

(A) typedefs

(B) Function pointer

(C) Both typedefs and function pointer

(D) None of the mentioned

92. Which of the following does not initialize ptr to null (assuming variable declaration of a as int a = 0;) ?

(A) int *ptr = &a;

(B) int *ptr = &a – &a;

(C) int *ptr = a – a;

(D) All of the mentioned

93. Which is an indirection operator among the following ?

(A) &

(B) *

(C) ->

(D) .

94. Elements in an array are accessed _____.

(A) Randomly

(B) Sequentially

(C) Exponentially

(D) logarithmically

95. In general, the index of the first element in an array is _____.

(A) 0

(B) -1

(C) 2

(D) 1

96. Assuming int is of 4 bytes, what is the size of int arr[15]; ?

(A) 15

(B) 19

(C) 11

(D) 60

97. What are the advantages of arrays ?

(A) Objects of mixed data types can be stored

(B) Elements in an array cannot be sorted

(C) Index of first element of an array is 1

(D) Easier to store elements of same data type

98. Which of the following concepts make extensive use of arrays ?

(A) Binary trees

(B) Scheduling of processes

(C) Caching

(D) Spatial locality

99. How do you initialize an array in C ?

(A) int arr[3] = (1,2,3);

(B) int arr(3) = {1,2,3};

(C) int arr[3] = {1,2,3};

(D) int arr(3) = (1,2,3);

100. Which of these best describes an array ?

(A) A data structure that shows a hierarchical behavior

(B) Container of objects of similar types

(C) Arrays are immutable once initialized

(D) Array is not a data structure

******

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