

Roll No.

Question Booklet Number

O. M. R. Serial No.

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Question Booklet Number

B. C. A. (Second Semester) (B.P.)

EXAMINATION, 2022-23

C PROGRAMMING

Paper Code						
B	C	A	2	0	1	N

Questions Booklet Series
A

Time : 1:30 Hours]

[Maximum Marks : 75

Instructions to the Examinee :

परीक्षार्थियों के लिए निर्देश :

1. Do not open the booklet unless you are asked to do so.
 2. The booklet contains 100 questions. Examinee is required to answer 75 questions in the OMR Answer-Sheet provided and not in the question booklet. All questions carry equal marks.
 3. Examine the Booklet and the OMR Answer-Sheet very carefully before you proceed. Faulty question booklet due to missing or duplicate pages/questions or having any other discrepancy should be got immediately replaced.
1. प्रश्न-पुस्तिका को तब तक न खोलें जब तक आपसे कहा न जाए।
 2. प्रश्न-पुस्तिका में 100 प्रश्न हैं। परीक्षार्थी को 75 प्रश्नों को केवल दी गई OMR आन्सर-शीट पर ही हल करना है, प्रश्न-पुस्तिका पर नहीं। सभी प्रश्नों के अंक समान हैं।
 3. प्रश्नों के उत्तर अंकित करने से पूर्व प्रश्न-पुस्तिका तथा OMR आन्सर-शीट को सावधानीपूर्वक देख लें। दोषपूर्ण प्रश्न-पुस्तिका जिसमें कुछ भाग छपने से छूट गए हों या प्रश्न एक से अधिक बार छप गए हों या उसमें किसी अन्य प्रकार की कमी हो, तो उसे तुरन्त बदल लें।

(Remaining instructions on the last page)

(शेष निर्देश अन्तिम पृष्ठ पर)

(Only for Rough Work)

1. An array of similar data types which themselves are a collection of dissimilar data type are
 - (A) Linked Lists
 - (B) Trees
 - (C) Array of Structure
 - (D) All of the mentioned

2. Comment on an array of the void data type
 - (A) It can store any data type
 - (B) It only stores element of similar data type to first element
 - (C) It acquires the data type with the highest precision in it
 - (D) You cannot have an array of void data type

3. Which of the following is not possible statically in C language ?
 - (A) Jagged Array
 - (B) Rectangular Array
 - (C) Cuboidal Array
 - (D) Multidimensional Array

4. 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

5. In C language, FILE is of which data type ?
 - (A) int
 - (B) char *
 - (C) struct
 - (D) None of the mentioned

6. Which option should be selected to work the following C expression ?


```
stnng p = "HELLO";
```

 - (A) typedef char [] string;
 - (B) typedef char *string;
 - (C) typedef char [] string; and typedef char *sfrjng;
 - (D) such expression cannot be generated in C

7. What are the elements present in the array of the following C code ?


```
int array[5] = {5};
```

 - (A) 5, 5, 5, 5, 5
 - (B) 5, 0, 0, 0, 0
 - (C) 5, (garbage), (garbage), (garbage), (garbage)
 - (D) (garbage), (garbage), (garbage), (garbage), 5

8. Comment on the following C statement :

```
const int *ptr;
```

- (A) You cannot change the value pointed by ptr
- (B) You cannot change the pointer ptr itself
- (C) You may or may not change the value pointed by ptr
- (D) You can change the pointer as well as the value pointed by it

9. How many characters can a string hold when declared as follows ?

```
char name [20];
```

- (A) 18
- (B) 19
- (C) 20
- (D) None of the above

10. Which of the following will copy the null-terminated string that is in array src into array dest ?

- (A) dest = src;
- (B) dest == src;
- (C) strcpy(dest, src);
- (D) strcpy(src, dest);

11. What will the result of len variable after execution of the following statements ?

```
int len;
```

```
char str1 [] = {"39 march road"};
```

```
len = strlen(str1);
```

- (A) 11
- (B) 12
- (C) 13
- (D) 14

12. Which one is the correct description for the variable balance declared below ?

```
int ** balance;
```

- (A) Balance is a point to an integer.
- (B) Balance is a pointer to a pointer to an integer.
- (C) Balance is a pointer to a pointer to a pointer to an integer.
- (D) Balance is an array of integer.

13. Study the following array definition :

```
int num [10] = {3,3,3};
```

Which of the following statements is correct ?

- (A) num[9] is the last element of the array num.
- (B) The value of num[8] is 3.
- (C) The value of num[3] is 3.
- (D) None of the above

14. Array is a data structure.
- (A) Non-linear
 - (B) Primary
 - (C) Linear
 - (D) Data type
15. Which of the following statements is correct about the array ?
- (A) In the array, users can only allocate the memory at the runtime.
 - (B) In the array, users can only allocate the memory at the compile time.
 - (C) The array is a primitive and non-linear data structure that only stores a similar data type.
 - (D) All of the these
16. Which of the following operations cannot be performed in file handling ?
- (A) Open the file
 - (B) Read the file
 - (C) To write a file
 - (D) None of the these
17. Which of the following functions is used to write the integer in a file ?
- (A) getw()
 - (B) putw()
 - (C) int value
 - (D) f_int()
18. Which of the following statements is correct about the ftell() function ?
- (A) It returns the current position.
 - (B) It sets the file pointer to the given position.
 - (C) It sets the file pointer at the beginning of the file.
 - (D) It reads a character from the file.
19. In which of the following modes, the user can read and write the file ?
- (A) r
 - (B) w
 - (C) r+
 - (D) b+
20. Which of the following declarations is invalid in C language ?
- (A) char *str = "javatpoint is the best platform for learn";
 - (B) char str[] = "javatpoint is the best platform for learn";
 - (C) char str[20] = "javatpoint is the best platform for learn";
 - (D) char[] str = "javatpoint is the best platform for learn";
21. Which function will you choose to join two words ?
- (A) strcpy()
 - (B) strcat()
 - (C) strncon()
 - (D) memcon()

22. Which among the following is copying function ?
- (A) memcpy()
 - (B) strcpy()
 - (C) memcopy()
 - (D) strxcpy()
23. The function appends not more than n characters.
- (A) strcat()
 - (B) strcon()
 - (C) strncat()
 - (D) memcat()
24. What will strcmp() function do ?
- (A) compares the first n characters of the object
 - (B) undefined function
 - (C) copies the string
 - (D) compares the string
25. What is a string in C Language ?
- (A) String is a new Data Type in C.
 - (B) String is an array of Characters with null character as the last element of array.
 - (C) String is an array of Characters with null character as the first element of array.
 - (D) String is an array of Integers with 0 as the last element of array.
26. Choose a correct statement about C String :
- char ary [] = "Hello....!";
- (A) Character array, ary is a string.
 - (B) Ary has no Null character at the end.
 - (C) String size is not mentioned.
 - (D) String can not contain special characters.
27. What is the Format specifier used to print a String or Character array in C Printf or Scanf function ?
- (A) %c
 - (B) %C
 - (C) %s
 - (D) %w
28. 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)
29. What is the function of strcoll() ?
- (A) copies the string, result is dependent on the LC_COLLATE
 - (B) compares the string, result is not dependent on the LC_COLLATE
 - (C) compares the string, result is dependent on the LC_COLLATE
 - (D) copies the string, result is not dependent on the LC_COLLATE

30. Which of the following is the variable type defined in header string.h ?
- (A) sizet
 - (B) size
 - (C) size_t
 - (D) size-t
31. What is the maximum length of a C String ?
- (A) 32 characters
 - (B) 64 characters
 - (C) 256 characters
 - (D) None of the above
32. How do you accept a Multi Word Input in C Language ?
- (A) SCANF
 - (B) GETS
 - (C) GETC
 - (D) FINDS
33. Choose a correct C statement about Strings :
- (A) PRINTF is capable of printing a multiword string.
 - (B) PUTS is capable of printing a multiword string.
 - (C) GETS is capable of accepting a multiword string from console or command prompt
 - (D) All of the above
34. A character constant is enclosed by :
- (A) Left Single Quotes
 - (B) Right Single Quotes
 - (C) Double Quotes
 - (D) None of the above
35. Choose a correct statement about C String :
- (A) A string is a group of characters enclosed by double quotes.
 - (B) If a string is defined with double quotes, NULL is automatically added at the end.
 - (C) Size of a string is without counting NULL character at the end.
 - (D) All of the above
36. A C string elements are always stored in :
- (A) Random memory locations
 - (B) Alternate memory locations
 - (C) Sequential memory locations
 - (D) None of the above
37. What is the maximum number of dimensions an array in C may have ?
- (A) 2
 - (B) 3
 - (C) 12
 - (D) No limit

38. Which of the given functions is used to return a pointer to the located character ?
- (A) strchr()
 (B) strxfrm()
 (C) memchar()
 (D) strchar()
39. A pointer is a :
- (A) variable that stores address of an instruction
 (B) variable that stores address of other variable
 (C) keyword used to create variables
 (D) None of the above
40. The reason for using pointers in a C program is :
- (A) Pointers allow different functions to share and modify their local variables
 (B) To pass large structures so that complete copy of the structure can be avoided
 (C) Pointers enable complex linked data structures like linked lists and binary trees
 (D) All of the above
41. How can you write a $[i][j][k][l]$ in equivalent pointer expression ?
- (A) $((***(a+i) +j) +k) +l$
 (B) $((**(* (a+i) +j) +k) +l)$
 (C) $(*(*(* (a+i) +j) +k) +l)$
 (D) $*(*(*(* (a+i) +j) +k) +l)$
42. The address operator &, cannot act on :
- (A) R-values
 (B) Arithmetic expressions
 (C) Both of the above
 (D) Local variables
43. What is wild pointer ?
- (A) Pointer which is wild in nature.
 (B) Pointer which has no value.
 (C) Pointer which is not initialized.
 (D) None of the above
44. In order to fetch the address of the variable we write preceding sign before variable name.
- (A) Percent(%)
 (B) Comma(,)
 (C) Ampersand(&)
 (D) Asterisk(*)

45. Address stored in the pointer variable is of type
- (A) Integer
 - (B) Float
 - (C) Array
 - (D) Character
46. Comment on this `const int *ptr; :`
- (A) You cannot change the value pointed by ptr
 - (B) You cannot change the pointer ptr itself
 - (C) Both (A) and (B)
 - (D) You can change the pointer as well as the value pointed by it
47. The operator `>` and `<` are meaningful when used with pointers, if :
- (A) The pointers point to data of similar type
 - (B) The pointers point to structure of similar data type
 - (C) The pointers point to elements of the same array
 - (D) None of the above
48. Which of the following is the correct way of declaring a float pointer ?
- (A) `float ptr;`
 - (B) `float *ptr;`
 - (C) `*float pfr;`
 - (D) None of the above
49. Prior to using a pointer variable it should be :
- (A) initialized
 - (B) declared
 - (C) Both (A) and (B)
 - (D) None of the above
50. A pointer variable can be :
- (A) passed to a function
 - (B) changed within a function
 - (C) returned by a function
 - (D) assigned an integer value
51. What are the types of C Preprocessor Directives ?
- (A) Macros
 - (B) Conditional Compilation
 - (C) File Inclusion
 - (D) All of the above
52. Processor Directive in C language starts with :
- (A) \$ symbol (DOLLAR)
 - (B) @ symbol (At The Rate)
 - (C) & symbol (Ampersand)
 - (D) # symbol (HASH)

53. The preprocessor in C language works on :
- (A) DOTC file (.c)
 - (B) DOTEXE file (.exe)
 - (C) DOTH file (.h)
 - (D) DOTCP file (.cp)
54. What is the another name for .C file ?
- (A) Executable Code
 - (B) Source Code
 - (C) Distributable Code
 - (D) Macro Code
55. What is the keyword used to define a C macro ?
- (A) def
 - (B) definition
 - (C) define
 - (D) defy
56. is the Preprocessor directive which is used to end the scope of #ifdef.
- (A) #elif
 - (B) #ifndef
 - (C) #endif
 - (D) #if
57. 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
58. 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
59. How do you safeguard your .C file code from copying by outside developers 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
60. How do you separate a multiline macro in C language ?
- (A) Using * operator
 - (B) Using % operator
 - (C) Using \ operator
 - (D) Using + operator

61. What is the file extension of expanded source code of .C file after preprocessing ?
- (A) .e file
 - (B) .h file
 - (C) .1 file
 - (D) .p file
62. #include is called :
- (A) Preprocessor directive
 - (B) Inclusion directive
 - (C) File inclusion directive
 - (D) None of the mentioned
63. Macro is generally written in :
- (A) lower case letters
 - (B) upper case letters
 - (C) camel case letters
 - (D) Any of the above
64. 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 of the above
65. At what stage of building a C program does Pragma work ?
- (A) Before Compilation
 - (B) After Compilation
 - (C) After Linking
 - (D) None of the above
66. Which of the following is not true about preprocessor directives ?
- (A) They begin with a hash symbol.
 - (B) They are processed by a preprocessor.
 - (C) They form an integral part of the code.
 - (D) They have to end with a semicolon.
67. 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
68. What is a structure in C language ?
- (A) A structure is a collection of elements that can be of same data type.
 - (B) A structure is a collection of elements that can be of different data type.
 - (C) Elements of a structure are called members.
 - (D) All of the above

69. 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
70. 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
71. 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 of the above
72. What are the uses of C structures ?
- (A) Structure is used to implement linked lists, stack and queue data structures.
 - (B) Structures are used in operating system functionality like display and input taking.
 - (C) Structure are used to exchange information with peripherals of PC.
 - (D) All of the above
73. What is (void*) ?
- (A) ERROR
 - (B) Representation of void pointer
 - (C) Representation of NULL pointer
 - (D) None of the above
74. 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
75. Which of the following operations 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

76. Presence of code like “s.t.b = 10” indicates
- (A) Syntax error
 - (B) Structure
 - (C) Double data type
 - (D) An ordinary variable name
77. Which operator connects the structure name to its member name ?
- (A) –
 - (B) .
 - (C) Both (B) and (C)
 - (D) None of the above
78. Which of the following cannot be a structure member ?
- (A) Another structure
 - (B) Function
 - (C) Array
 - (D) None of the mentioned
79. 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
80. Which properly declares a variable of struct foo ?
- (A) struct foo;
 - (B) struct foo var;
 - (C) foo;
 - (D) int foo;
81. In which numbering system can the binary number 1011011111000101 be easily converted to ?
- (A) Decimal system
 - (B) Hexadecimal system
 - (C) Octal system
 - (D) No need to convert
82. Which bitwise operator is suitable for turning off a particular bit in a number ?
- (A) && operator
 - (B) & operator
 - (C) || operator
 - (D) ! operator
83. Which bitwise operator is suitable for turning on a particular bit in a number ?
- (A) && operator
 - (B) & operator
 - (C) || operator
 - (D) | operator

84. Which bitwise operator is suitable for checking whether a particular bit is on or off ?
- (A) && operator
 - (B) & operator
 - (C) || operator
 - (D) ! operator
85. The typecast operator is :
- (A) (type)
 - (B) cast()
 - (C) (::)
 - (D) // ” ”
86. Header files in C contain :
- (A) Compiler commands
 - (B) Library functions
 - (C) Header information of C programs
 - (D) Operators for files
87. Which pair of functions below are used for single character I/O ?
- (A) getchar() and putchar()
 - (B) scanf() and printf()
 - (C) input() and output()
 - (D) None of the above
88. Identify the wrong statement :
- (A) putchar(65)
 - (B) putchar('x')
 - (C) putchar("x")
 - (D) putchar('\n')
89. A pointer to a pointer is a form of :
- (A) multiple indirections
 - (B) a chain of pointers
 - (C) Both (A) and (B)
 - (D) None of the above
90. Maximum number of elements in the array declaration `int a[5][8]` is :
- (A) 28
 - (B) 32
 - (C) 35
 - (D) 40
91. Array subscripts in C always start at :
- (A) -1
 - (B) 1
 - (C) 0
 - (D) Value provided by the user
92. Which is the correct way to declare a pointer ?
- (A) `int_ptr;`
 - (B) `int *ptr;`
 - (C) `*int ptr;`
 - (D) None of the above

93. If you want to exchange two rows in a two-dimensional array, the fastest way is to :
- (A) Exchange the elements of the 2 rows
 - (B) Exchange the address of each element in the two-row
 - (C) Silence the address of the rows in an array of the pointer and exchange the pointer
 - (D) None of the above
94. If you don't initialize a static array, what will be the element set to ?
- (A) Zero
 - (B) A floating-point
 - (C) An undetermined value
 - (D) None of the above
95. Besides the file pointers which we explicitly open by calling fopen, there are also predefined streams.
- (A) two
 - (B) three
 - (C) one
 - (D) four
96. clears the error and EOF indicators for the stream.
- (A) clearer
 - (B) feof
 - (C) ferror
 - (D) perror
97. The statement `#include <math.h>` is written at the top of a program to indicate :
- (A) the beginning of the program.
 - (B) the program does the heavy mathematical calculation.
 - (C) That certain information about mathematical library functions is to be included at the beginning of the program.
 - (D) None of the above
98. Which of the following is character oriented console I/O function ?
- (A) `getchar()` and `putchar()`
 - (B) `gets()` and `puts()`
 - (C) `scanf()` and `printf()`
 - (D) `fgets()` and `fputs()`
99. An is a collection of variables of the same type. And they are declared like this :
- (A) Array, `int height (10)`
 - (B) Structure, `struct height`
 - (C) Enumerated, `enum height (2)`
 - (D) Classes, `class height`
100. allows the programs to interact with the screen, keyboard and file system of your computer.
- (A) `# include (stdio.h)`
 - (B) `#include <file.h>`
 - (C) `#include <conio.h>`
 - (D) `#include <math.h>`

4. Four alternative answers are mentioned for each question as—A, B, C & D in the booklet. The candidate has to choose the correct answer and mark the same in the OMR Answer-Sheet as per the direction :

Example :

Question :

Q. 1 (A) ● (C) (D)

Q. 2 (A) (B) ● (D)

Q. 3 (A) ● (C) (D)

Illegible answers with cutting and over-writing or half filled circle will be cancelled.

5. Each question carries equal marks. Marks will be awarded according to the number of correct answers you have.
6. All answers are to be given on OMR Answer sheet only. Answers given anywhere other than the place specified in the answer sheet will not be considered valid.
7. Before writing anything on the OMR Answer Sheet, all the instructions given in it should be read carefully.
8. After the completion of the examination candidates should leave the examination hall only after providing their OMR Answer Sheet to the invigilator. Candidate can carry their Question Booklet.
9. There will be no negative marking.
10. Rough work, if any, should be done on the blank pages provided for the purpose in the booklet.
11. To bring and use of log-book, calculator, pager and cellular phone in examination hall is prohibited.
12. In case of any difference found in English and Hindi version of the question, the English version of the question will be held authentic.

Impt. : On opening the question booklet, first check that all the pages of the question booklet are printed properly. If there is any discrepancy in the question Booklet, then after showing it to the invigilator, get another question Booklet of the same series.

4. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार सम्भावित उत्तर—A, B, C एवं D हैं। परीक्षार्थी को उन चारों विकल्पों में से सही उत्तर छँटना है। उत्तर को OMR आन्सर-शीट में सम्बन्धित प्रश्न संख्या में निम्न प्रकार भरना है :

उदाहरण :

प्रश्न :

प्रश्न 1 (A) ● (C) (D)

प्रश्न 2 (A) (B) ● (D)

प्रश्न 3 (A) ● (C) (D)

अपठनीय उत्तर या ऐसे उत्तर जिन्हें काटा या बदला गया है, या गोले में आधा भरकर दिया गया, उन्हें निरस्त कर दिया जाएगा।

5. प्रत्येक प्रश्न के अंक समान हैं। आपके जितने उत्तर सही होंगे, उन्हीं के अनुसार अंक प्रदान किये जायेंगे।
6. सभी उत्तर केवल ओ. एम. आर. उत्तर-पत्रक (OMR Answer Sheet) पर ही दिये जाने हैं। उत्तर-पत्रक में निर्धारित स्थान के अलावा अन्यत्र कहीं पर दिया गया उत्तर मान्य नहीं होगा।
7. ओ. एम. आर. उत्तर-पत्रक (OMR Answer Sheet) पर कुछ भी लिखने से पूर्व उसमें दिये गये सभी अनुदेशों को सावधानीपूर्वक पढ़ लिया जाये।
8. परीक्षा समाप्ति के उपरान्त परीक्षार्थी कक्ष निरीक्षक को अपनी OMR Answer Sheet उपलब्ध कराने के बाद ही परीक्षा कक्ष से प्रस्थान करें। परीक्षार्थी अपने साथ प्रश्न-पुस्तिका ले जा सकते हैं।
9. निगेटिव मार्किंग नहीं है।
10. कोई भी रफ कार्य, प्रश्न-पुस्तिका के अन्त में, रफ-कार्य के लिए दिए खाली पेज पर ही किया जाना चाहिए।
11. परीक्षा-कक्ष में लॉग-बुक, कैलकुलेटर, पेजर तथा सेल्युलर फोन ले जाना तथा उसका उपयोग करना वर्जित है।
12. प्रश्न के हिन्दी एवं अंग्रेजी रूपान्तरण में भिन्नता होने की दशा में प्रश्न का अंग्रेजी रूपान्तरण ही मान्य होगा।

महत्वपूर्ण : प्रश्नपुस्तिका खोलने पर प्रथमतः जाँच कर देख लें कि प्रश्न-पुस्तिका के सभी पृष्ठ भलीभाँति छपे हुए हैं। यदि प्रश्नपुस्तिका में कोई कमी हो, तो कक्षनिरीक्षक को दिखाकर उसी सिरीज की दूसरी प्रश्न-पुस्तिका प्राप्त कर लें।