Roll No. .....

Question Booklet Number

O. M. R. Serial No.

M. A./M. Sc. (Second Semester)
(NEP) EXAMINATION, 2025-26
MATHEMATICS
(Programming in C) (Elective)

Paper Code							
B	0	3	0	8	0	7	T

Questions Booklet Series
D

Time : 1:30 Hours] [*Maximum Marks : 75*

Instructions to the Examinee :

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.

परीक्षार्थियों के लिए निर्देश :

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. Array is :

(A) Pointer

(B) Different type variables

(C) Function

(D) Collection of variable of same type

2. If condition in for loop missing, it becomes :

(A) Error

(B) Infinite loop

(C) Zero loop

(D) None of the above

3. Continue in while loop transfers control to :

(A) End of program

(B) Next iteration

(C) Exit

(D) Switch

4. Nested loop means :

(A) Loop inside loop

(B) Multiple loops

(C) Infinite loop

(D) None of the above

5. For loop structure has how many expressions ?

(A) 1

(B) 2

(C) 3

(D) 4

6. Which loop executes at least once ?

(A) while

(B) for

(C) do-while

(D) if

7. The while loop is :

(A) Exit controlled

(B) Entry controlled

(C) Infinite loop

(D) None of the above

8. Nested ternary operators are :

(A) Allowed

(B) Not Allowed

(C) Compile error

(D) Only in C++

9. In expression x ? y : z, if x is 0, the result is :

(A) z

(B) y

(C) x

(D) Error

10. Which of the following is bad programming practice ?

(A) switch

(B) if-else

(C) goto

(D) break

11. What happens if break is not used in switch ?

(A) Compilation error

(B) Fall-through to next case

(C) Program stops

(D) Nothing

12. Case labels must be :

(A) Variables

(B) String

(C) Float values

(D) Constants

13. A label in C must be followed by :

(A) ;

(B) :

(C) {}

(D) ()

14. Switch statement is preferred when :

(A) Checking ranges

(B) Looping

(C) Multiple fixed values

(D) Comparing floats

15. Goto is used for :

(A) Loop

(B) Jump statement

(C) Selection

(D) Condition

16. Break statement is used to :

(A) Exit switch

(B) Continue loop

(C) Stop program

(D) Restart

17. In else-if ladder, conditions are checked :

(A) Randomly

(B) Sequentially

(C) Reverse

(D) Parallel

18. Nested if is used for :

(A) Multiple conditions

(B) Looping

(C) Printing

(D) Declaring

19. Dangling else problem is related to :

(A) switch

(B) loop

(C) nested if

(D) goto

20. If break is not used in switch :

(A) Next case executes

(B) Errer occurs

(C) Program stops

(D) Nothing happens

21. The expression used in switch must be of type :

(A) float

(B) double

(C) int or char

(D) string

22. The conditional operator is :

(A) &&

(B) ?:

(C) ||

(D) = =

23. The else block executes when :

(A) Condition true

(B) Condition false

(C) Always

(D) Never

24. if statement executes block when condition is :

(A) 0

(B) False

(C) Negative

(D) Non-zero

25. printf("\n"); means :

(A) Print slash n

(B) New line

(C) Tab

(D) Space

26. If & is missing in scanf() :

(A) Works fine

(B) Compile error

(C) Runtime error

(D) Logical error

27. Which function prints a single character ?

(A) putchar()

(B) puts()

(C) printf()

(D) gets()

28. In a && b, if a is false :

(A) b is not evaluated

(B) b is evaluated

(C) Error occurs

(D) Both evaluated

29. Operators are used to :

(A) Store data

(B) Perform operations on operands

(C) Define variables

(D) End program

30. Operator precedence decides :

(A) Execution speed

(B) Compilation

(C) Order of evalution

(D) Output format

31. If a = 5, ++a gives :

(A) 5

(B) 6

(C) 4

(D) Error

32. Which is a compound assignment operator ?

(A) +=

(B) = =

(C) &&

(D) ||

33. Which operator has highest precedence ?

(A) +

(B) *

(C) =

(D) ++

34. How many keywords are there in C language ?

(A) 32

(B) 33

(C) 64

(D) 18

35. Relational operator for equality is :

(A) =

(B) = =

(C) = = =

(D) !=

36. 10 % 3 equals :

(A) 3

(B) 1

(C) 0

(D) 10

37. Symbolic constant is defined using :

(A) const

(B) #define

(C) int

(D) static

38. Static variable retains value.

(A) Yes

(B) No

(C) Sometimes

(D) Error

39. Value of uninitialized local variable is :

(A) 0

(B) NULL

(C) 1

(D) Garbafe value

40. Multiple variables can be declared as :

(A) int a b;

(B) int a, b;

(C) int a :b;

(D) int a & b;

41. Variable names cannot start with :

(A) Letter

(B) Number

(C) Underscore

(D) Alphabet

42. Format specifier for integer :

(A) %f

(B) %c

(C) %d

(D) %s

43. Which is correct variable declaration ?

(A) int a;

(B) integer a;

(C) a int;

(D) num a;

44. Multi-line comments are written using :

(A) //

(B) ##

(C) /* */

(D) – –

45. Which header file is required for printf() ?

(A) stdlib.h

(B) conio.h

(C) math.in

(D) stdio.h

46. Which symbol is used to end a statement in C ?

(A) .

(B) ,

(C) ;

(D) :

47. C programming supports :

(A) Structured programming

(B) Object-oriented programming

(C) Functional programming

(D) Logic programming

48. C language is derived from :

(A) A language

(B) B language

(C) BCPL

(D) Both B and BCPL

49. C is a :

(A) Low level language

(B) High level language

(C) Middle level language

(D) Machine language

50. C language was developed by :

(A) Dennis Ritchie

(B) James Gosling

(C) Bjarne Stroustrup

(D) Guido van Rossum

51. Which function returns the current position of file pointer ?

(A) fseek()

(B) ftell()

(C) rewind()

(D) tell()

52. Which function is used to check end of file ?

(A) end()

(B) feof()

(C) eof()

(D) fileend()

53. Which function is used to read a character from a file ?

(A) getchar()

(B) fgetc()

(C) getc()

(D) Both (B) and (C)

54. What happens if we open a file in "w" mode and the file already exists ?

(A) File is appended

(B) File is deleted

(C) File is overwritten

(D) Error occurs

55. Which header file is required for file handling in C ?

(A) conio.h

(B) stdlib.h

(C) stdio.h

(D) string.h

56. What is the correct syntax to declare a file pointer ?

(A) file *fp;

(B) FILE fp;

(C) FILE *fp;

(D) file fp;

57. * (a + 2) equals :

(A) a[2]

(B) a[0]

(C) Address

(D) Error

58. void *p; is called :

(A) Null pointer

(B) Generic pointer

(C) Wild pointer

(D) File pointer

59. Wild pointer means :

(A) Initialized pointer

(B) NULL pointer

(C) Uninitialized pointer

(D) File pointer

60. int* p, q; means :

(A) Both pointers

(B) Only p pointer

(C) Only q pointer

(D) Error

61. Which is invalid ?

(A) int *p;

(B) char c;

(C) float p;

(D) double *d;

62. Correct declaration for float pointer is :

(A) float p;

(B) float *p;

(C) *float p;

(D) pointer float p;

63. Pointer arithmetic increases address by :

(A) 1 byte

(B) 4 always

(C) 8 always

(D) Size of data type

64. %p is used to print :

(A) Value

(B) Address

(C) Float

(D) Char

65. If int *p=NULL; then *p causes :

(A) 0

(B) Garbage safe

(C) 1

(D) Segmentation fault

66. Size of pointer depends on :

(A) Data type

(B) Compiler

(C) System architecture

(D) Variable value

67. Which is correct pointer declaration ?

(A) int p;

(B) int *p;

(C) *int p;

(D) pointer p;

68. Dereferencing operator is :

(A) &

(B) %

(C) *

(D) –>

69. Address-of operator in C is :

(A) *

(B) &

(C) %

(D) #

70. A pointer stores :

(A) Data value

(B) Data type

(C) Address of variable

(D) Operator

71. Static variable inside function retains value.

(A) Yes

(B) No

(C) Sometimes

(D) Never

72. Is function inside function allowed in C ?

(A) Yes

(B) No

(C) Only once

(D) Only in main

73. A Function Calling itself is called :

(A) Loop

(B) Recursion

(C) Nesting

(D) Prototype

74. Which allows modification of actual variable ?

(A) Call by reference

(B) Call by value

(C) Void function

(D) Main function

75. Which of the following is the default passing mechanism in C ?

(A) Call by reference

(B) Call by pointer

(C) Call by value

(D) Call by loop

76. Calling a function transfers control to :

(A) Loop

(B) Function body

(C) Prototype

(D) Compiler

77. Which of the following is the example of Function with arguments and return value ?

(A) void f()

(B) int f(int,int)

(C) void f(int)

(D) int f(void)

78. Return statement is used to :

(A) End program

(B) Cal main

(C) Start loop

(D) Send value back

79. Function Prototype specifies :

(A) Function body

(B) Loop type

(C) Variable values

(D) Return type and parameters

80. If prototype is missing, compiler may :

(A) Produce warning/error

(B) Ignore function

(C) Skip execution

(D) Stop main()

81. Which function is mandatory in every C program ?

(A) start()

(B) main()

(C) begin()

(D) run()

82. Modular programming means :

(A) Single large function

(B) Dividing program into small functions

(C) Avoiding functions

(D) Using only main()

83. Why are user-defined functions used in C ?

(A) To increase program length

(B) To divide program into modules

(C) To reduce variables

(D) To avoid loops

84. What happens if index exceeds ?

(A) Compile error

(B) Runtime error

(C) Undefined behavior

(D) 0

85. Array name represents :

(A) Value

(B) Size

(C) Index

(D) Base address

86. Which function finds substring ?

(A) strchr

(B) strstr

(C) strcmp

(D) strcpy

87. strcmp(“abc”, “abc”) returns :

(A) 1

(B) 0

(C) –1

(D) Undefined

88. What does strlen (“ABC”) return ?

(A) 5

(B) 4

(C) 3

(D) 0

89. What will be the output of the following C programming code ?

```
int x=3;
switch(x)
{
case 1: printf(“A”) ;
case 2: printf(“B”) ;
default: printf(“C”);
}
```

(A) C

(B) ABC

(C) Error

(D) Nothing

90. What will be the output of the following C programming code ?

```
int x=10;
if (x=5)
    printf(“Yes”);
else
    printf(“No”);
```

(A) Yes

(B) No

(C) Error

(D) Nothing

91. In C programming String ends with :

(A) 0

(B) '\0’

(C) NULL

(D) End

92. Correct declaration of 2D array is :

(A) int a[3][4];

(B) int a(3) (4) ;

(C) array a[3][4];

(D) int[3][4] a;

93. What is function overloading ?

(A) Process of multiple functions

(B) Multiple functions with the same name

(C) Looping functions

(D) All of the above

94. What is the size of int a[5]; (int=4 bytes) ?

(A) 5

(B) 10

(C) 20

(D) 4

95. Array index starts from :

(A) 1

(B) 0

(C) -1

(D) Depends on compiler.

96. What will be the output of the following C programming code ?

```
char s[]="Hello";
printf("%d", sizeof(s));
```

(A) 5

(B) 3

(C) 4

(D) 6

97. What will be the output of the following C programming code ?

```
int i=0;
while(i<5) ;
{
{
        printf("%d", i) ;
        printf("%d", i) ;
        printf("%d", i) ;
        i++;
}
```

(A) 0 1 2 3 4

(B) Infinite loop

(C) 0

(D) Compilation error

98. Array size must be :

(A) Variable

(B) Float

(C) Constant

(D) Character

99. Dynamic array created using :

(A) malloc()

(B) printf()

(C) scanf()

(D) sizeof()

100. Two dimensional array example :

(A) int a[5];

(B) int a[3][4];

(C) int a;

(D) int a() ;

(Only for Rough Work)

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 छाँटना 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।