

No. of Pages. 20

Code No.

Y – 3047

Register Number :

Time : 2 Hours

Name :

Max.Marks : 100

**Entrance Examination for Admission to the P.G. Courses in the
Teaching Departments, 2026**

CSS

DATA SCIENCE

GENERAL INSTRUCTIONS

1. The Question Paper is having 100 Objective Questions, each carrying one mark.
2. The answers are to be marked **only** in the “**OMR Sheet**” provided.
3. **Negative marking** : **0.25 marks** will be deducted for each wrong answer .

INSTRUCTIONS FOR FILLING THE OMR SHEET

- The OMR sheet should not be folded or crushed.
- Use only blue/black ball point pen to fill the circles.
- Use of pencil is strictly prohibited.
- Circles should be darkened completely and properly.
- Cutting and erasing on this sheet is not allowed.
- Do not leave any stray marks on the sheet.
- Do not use marker or white fluid to hide the mark.

• **WRONG METHODS**



CORRECT METHOD



30. Line of the equation $Y = a$ (a is constant) is _____
- A. Parallel to X - axis
 - B. Parallel to Y - axis
 - C. Makes an angle of 45 degree with X - axis
 - D. Makes an angle of 45 degree with Y - axis
31. The longest side of a triangle is 2 times the shortest side and the third side is 4 cm shorter than the longest side. If the perimeter of the triangle is at least 61 cm, find the minimum length of the shortest side.
- A. 7
 - B. 9
 - C. 11
 - D. None of these
32. Which one of the following is not a criterion for linearity of an equation?
- A. The dependent variable y should be of second order
 - B. The derivatives of the dependent variable should be of second order
 - C. Each coefficient does not depend on the independent variable
 - D. Each coefficient depends only on the independent variable
33. What will be the nature of the graph lines of the equations $5x - 2y + 9$ and $15x - 6y + 1$?
- A. Parallel
 - B. Coincident
 - C. Intersecting
 - D. Perpendicular to each other
34. What will be the value of k , if the lines given by $(5 + k)x - 3y + 15$ and $(k - 1)x - y + 19$ are parallel?
- A. 5
 - B. 4
 - C. 6
 - D. 7

46. Value after differentiating $\cos(\sin x)$ is _____
- A. $\sin(\sin x) \cdot \cos x$ B. $-\sin(\sin x) \cdot \cos x$
 C. $\sin(\sin x)$ D. $\sin(\cos x) \cdot \cos x$
47. How many arbitrary constants will be there in the general solution of a second order differential equation?
- A. 3 B. 4
 C. 5 D. None of these
48. What will be the maxima for the function $f(x) = x^4 - 8x^3 + 22x^2 - 24x + 8$?
- A. 0 B. 1
 C. 4 D. None of these
49. What will be the minima for the function $f(x) = x^4 - 8x^3 + 22x^2 - 24x + 8$?
- A. -1 B. 0
 C. 2 D. 3
50. A particle is projected vertically upwards with a velocity of 196 m/sec. What is the value of total time of flight?
- A. 40 sec B. 45 sec
 C. 50 sec D. 55 sec
51. A point starts with the velocity 10 cm/sec and moves along a straight line with uniform acceleration 5 cm/sec^2 . How much time it takes to describe 80 cm?
- A. 4 seconds B. 2 seconds
 C. 8 seconds D. 6 seconds

78. A computer language that is written in binary codes only is _____
- A. Machine language B. C
C. C# D. Pascal
79. The 10's complement of 455 is _____
- A. 543 B. 544
C. 545 D. 546
80. Which is decimal equivalent of binary 1011?
- A. 22 B. 9
C. 11 D. 3
81. The number of characters that can be represented in ASCII-8 are _____
- A. 128 B. 256
C. 32 D. 64
82. The result that is smaller than the smallest number obtained is referred to as
- A. NaN B. Underflow
C. Smallest D. Mantissa
83. The multiplication of $110 * 111$ is performed. What is a general term used for 111?
- A. Dividend B. Quotient
C. Multiplicand D. Multiplier

84. The symbol + in Boolean is also known as the _____ operator.
- A. AND
 - B. OR
 - C. ADD
 - D. SUMMATION
85. Which of the following loop executes at least once in C?
- A. for
 - B. while
 - C. switch
 - D. do-while
86. Functions can return enumeration constants in C?
- A. true
 - B. false
 - C. depends on the compiler
 - D. depends on the standard
87. Which of the following is not a valid C variable name?
- A. int number;
 - B. float rate;
 - C. int variable_count;
 - D. int \$main;
88. Which is a valid C expression?
- A. int my_num = 100,000;
 - B. int my_num = 100000;
 - C. int my_num = 1000;
 - D. int \$my_num = 10000;
89. Which of the following is a User-defined data type?
- A. typedef int Boolean;
 - B. typedef enum {Mon, Tue, Wed, Thu, Fri} Workdays;
 - C. struct {char name[10], int age};
 - D. all of the mentioned

90. Which of the following is the correct syntax of including a user defined header files in C++?
- A. `#include [userdefined]` B. `#include "userdefined"`
 C. `#include <userdefined.h>` D. `#inciude <userdefined>`
91. Which of the following extension is used for user-defined header file in C++?
- A. `hg` B. `cpp`
 C. `hp` D. `none of these`
92. What is virtual inheritance in C++?
- A. C++ technique to enhance multiple inheritance
 B. C++ technique to ensure that a private member of the base class can be accessed somehow
 C. C++ technique to avoid multiple inheritances of classes
 D. C++ technique to avoid multiple copies of the base class into children/derived class
93. Which of the following type is provided by C++ but not C?
- A. `double` B. `float`
 C. `int` D. `bool`
94. Which concept allows you to reuse the written code in C++?
- A. Inheritance B. Polymorphism
 C. Abstraction D. Encapsulation
95. What is the order of precedence in python?
- A. Exponential, Parentheses, Multiplication, Division, Addition, Subtraction
 B. Exponential, Parentheses, Division, Multiplication, Addition, Subtraction
 C. Parentheses, Exponential, Multiplication, Addition, Division, Subtraction
 D. Parentheses, Exponential, Multiplication, Division, Addition, Subtraction

ROUGH WORK

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