



ST. JOSEPH'S COLLEGE, PRAYAGRAJ
SECOND UNIT TEST - 2023
COMPUTER APPLICATIONS

Class-9

Max. Mks: 30

(Max Time; 90 minutes)

This Paper is divided into two Sections.

Attempt all questions from Section A and any ~~four~~^{two} questions from Section B.

The intended marks for questions or parts of questions are given in brackets [].

Section A

(Attempt all questions from this Section.)

Question 1.

[6]

- i. A Patent registered in India is valid for a period of _____.
 - a) 10
 - b) 20
 - c) 25
 - d) 15
- ii. Predict the output of `Math.ceil(-5.634)`;
 - a) -6.0
 - b) Both (a) and (c)
 - c) -5.0
 - d) None of these
- iii. _____ is the technique used in business organizations and firms to protect IT assets.
 - a) Ethical hacking
 - b) Internal data breach
 - c) Fixing bugs
 - d) All of these
- iv. What is the return type of `Math.log()`?
 - a) float
 - b) long
 - c) short
 - d) double
- v. DoS is abbreviated as _____.
 - a) Denial of server
 - b) Distribution of service
 - c) Distribution of software
 - d) Denial of service
- vi. Predict the output of `Math.sqrt(Math.ceil(15.3)+Math.pow(3,2))`;
 - a) 4.0
 - b) 5.0
 - c) Syntax error
 - d) None of these

Question 2.

[12]

- i. Describe *Intellectual Property Rights*? [2]
- ii. Distinguish between `Math.ceil()` and `Math.floor()`. Give two points [2]
- iii. Explain *Copyright* in detail. [2]
- iv. Define *Software Piracy*. Explain any two types of *Software piracy*. [2]
- v. Write a short note on *Keyloggers*. [2]
- vi. What is *Cybercrime*? Give two examples of different types of *Cybercrime*. [2]



Section B

(Attempt any two questions from this Section.)

The answers in this section should consist of the programs in either BlueJ environment or any program environment with java as the base.

Each program should be written using variable description so that the logic of the program is clearly depicted.

Flowcharts and algorithms are not required.

Question 3.

[6]

Write a program to compute and display the value of expression: $\sqrt[4]{(1/LC) - (R^2/4C^2)}$ where the value of L, C and R to be entered by the user using *Scanner class*.

NOTE: Display the result with proper message.

Question 4.

[6]

Write a program to compute and display the following operations in a single program:

- Positive value of the -273
- Store the value 89.99 in a variable and convert it into its closest integer that is greater than or equal to 89.99
- Store and print the smallest of -96 and -97.4
- Random numbers between 0 (zero) and 1 (one)

NOTE: Display the result with proper message.

Question 5.

[6]

Write a program to compute and display the value of expression: $1/x^2 + 1/y^3 + 1/z^4$ where, the values of x, y and z are entered by the user using *Scanner class*.

NOTE: Display the result with proper message.

*****ALL THE BEST*****