INFORMATION PRCATICES
Class 11th

Time Allowed: 3 Hours
Maximum Marks: 70

General Instructions:
1. This Question paper contains - Four sections A, B, C and D. Each section is compulsory.
2. Section A-Question 1 to 10   comprises of 10 questions of 1 mark each (MCQ's, Fill in the blanks, True/False, Assertion-Reason etc.)
3. Section B-Question 11 to 19 comprises of 09Very Short Answer (VSA)-type questions of 2 marks each.
4. Section C-Question 20 to 28 comprises of 09 Short Answer (SA)-type questions of 3 marks each.
5. Section D-Question 29 to 31 comprises of 3 Long Answer (LSA)-type questions of 5 marks each.

Section – A
(Very ShortAnswer Type Questions)   1 each

1. 5G is the next generation of _____ communications.
2. ROM stores a set of instructions called:
   - a) DRAM   c) PROM
   - b) BIOS   d) SRAM
3. Who is the mother of AI?
4. Set of instructions given to a computer is known as program.   (True / False)
5. A NAND gate is basically a combination of _____ and _____ gates.
6. Which of the following is not part of CPU?
   - a) MU   c) ALU
   - b) VDU   d) CU
7. Define GUI.
8. write the use of assignment operator in Python.
9. **PaaS** provides a platform with tools to test, develop and host applications in the same Environment.
                            (**True / False**)
10. The NOT Gate:
    - a) Has two inputs and one output
    - b) Has one input and two outputs
    - c) If input is '1' output is '1'
    - d) If input is zero (0) output is one (1)

Section – B
(Short Answer Type Questions - I)   2 each

11. Convert the Binary number $(1011010)_2$ into hexadecimal number.
12. Define any one Secondary Storage Device.
13. What is High Level Programming Language?
14. Find out the errors (if any) in the following Python code:

```
If (a>b)
    Print (a**3)
```

15. What is Cloud computing?
16. How would you create multi-line comment in Python?
17. Discuss functions of CPU.
18. Define SaaS in terms of Cloud Computing.
19. Explain two types of Booting.

Section – C
(Short Answer Type Questions - II)   3 each

20. Explain the following terms in brief:
    a) Operating System
    b) Deskjet Printer
    c) SRAM
    d) BIOS
21. Give the characteristics of Windows Operating System.
22. Draw Block diagram of a Computer.
23. Write a program in python language to swap the 2 given numbers without using the 3rd variable.
24. Differentiate between Compiler and Interpreter.
25. Write the output of the following Python code:
    ```
    X=[2, 4, 6]
    Y = [1, 2]
    X is not Y
    ```
26. What are the rules for indentation in Python?
27. What is the value of variable **Num** after the following statements are executed?
    ```
    Num=10
    Num+=2
    print (Num)
    ```
28. Explain briefly the Cloud Computing and Grid Computing.

Section – D
(Long Answer Type Questions)   5 each

29. What are Computer Languages? Discuss different types of Computer Languages.
            OR
    Discuss 5 V's characteristics of BigData in detailwith the help of examples.
30. Discuss in detail the Desktop Components of an Operating System.
            OR
    What are different Data types in Python Programming? Elaborate in detail with the help of an examples.
31. What is a Scanner? Explain different types of Scanners with examples.
            OR
    Explain the concept of Machine Learning? Discuss briefly applications of Machine Learning.