

18U168

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Name:

Reg. No.....

FIRST SEMESTER B.Voc. DEGREE EXAMINATION, NOVEMBER 2018

(CUCBCSS-UG)

**CC18U SDC1 PP02 – PYTHON PROGRAMMING, BASIC ELECTRONICS,
INTRODUCTION TO IOT**

(Core Course)

(Information Technology)

(2018 Admission Regular)

Time : Three Hours

Maximum : 80 Marks

PART A

Answer *all* questions. Each question carries 1 mark.

1. The *p*-side of the diode is always positive terminal for forward bias and is termed the _____
2. In Boolean algebra $A + AB =$ _____
3. The symbols used in an assembly language are _____
4. _____ is a connectionless protocol.
5. The process of calling the function itself is called _____
6. The access method used for magnetic tape is _____
7. The registers are located inside the _____
8. In Python, modules can be imported using the _____ keyword.
9. A function written inside a class is called _____
10. The _____ module in Python contains several functions which are useful to perform various mathematical calculations.

(10 x 1 = 10 Marks)

PART B

Answer any *ten* questions. Each question carries 2 marks.

11. Differentiate classes and objects in Python.
12. Define Self Parameters.
13. Define DC load line.
14. Define M2M.
15. Define flowchart.
16. Define the applications of IoT in home automation.

17. Define Publish-Subscribe model.
18. What is half adder?
19. Describe the two categories of system software.
20. Define principle of duality.
21. List the symbols used for flowchart.
22. What is NOR gate?

(10 x 2 = 20 Marks)

PART C

Answer any *five* questions. Each question carries 6 marks.

23. What is RAM? Explain different types of RAM.
24. With the help of a neat diagram, explain the functional units of a computer.
25. Define IoT. What are the different characteristics of IoT?
26. Define Lists in Python. What are the different operations performed on lists?
27. Explain Opening and closing of files in Python with example.
28. Define a microprogrammed control unit.
29. Find the decimal equivalent of following numbers:
a) 111.01_2 b) 1001.011_2 c) 247.65_8 d) $2B.D4_{16}$
30. Compare conventional network architecture and Software-Defined Networking (SDN).

(5 x 6 = 30 Marks)

PART D

Answer any *two* questions. Each question carries 10 marks.

31. What is an operating system? Describe in detail the main functions of operating system?
32. Explain different operators in Python.
33. Define string. Explain Operations on string.
34. (a) Explain with neat diagram the functional blocks of IoT.
(b) Explain IoT communication Models.

(2 x 10 = 20 Marks)
