

## Quarterly Examination - Model Question Paper 1- 2018-19

STD XI Computer Science

Time : 2.30 Hrs

Marks :70

Choose the Best Answer

15 x 1 = 15

1. Which is a raw fact about an entity?  
a) Information      b) processed data      c) data      d) record
2. Deep Learning Neural Networks is a sub-field of .....  
a) AI      b) Hardware enhancement      c) AI      d) none of these
3. The simplest method to represent negative binary number is called .....  
a) Signed magnitude      b) sign bit or parity bit      c) binary      d) decimal
4. Which is a basic electronic circuit which operates on one or more signals?  
a) Logic Gates      b) Fundamental Gates      c) Derived Gates      d) Boolean algebra
5. Which of the following is used to measure the wave frequency?  
a) Internal memory      b) RAM      c) ALU      d) Hertz
6. The speed at which the microprocessor executes the instructions is called.....  
a) Word size      b) instruction set      c) clock speed      d) control flow
7. A computer consists of a collection of processes classified into how many categories?  
a) 2      b) 4      c) 3      d) 5
8. Which of the following is not an algorithm?  
a) FIFO      b) SJF      c) NTFS      d) RR
9. Which is a default browser for UBUNTU?  
a) Internet Explorer      b) Chrome      c) FireFox      d) Thunderbird
10. Which of the functional keys brings the focus on the first menu of the menu bar?  
a) F5      b) F8      c) F10      d) F11
11. Ensuring the input-output relation is :  
a) The responsibility of the algorithm and the right of the user  
b) The responsibility of the user and the right of the algorithm  
c) The responsibility of the algorithm but not the right of the user  
d) The responsibility of both the algorithm and the user
12. Which are the named boxes for storing the data?  
a) Process      b) Programme      c) Variables      d) functions
13. If c1 is true and c2 is true, the compound statement  
    If c1  
        S1  
    Else  
    If c2  
        S2  
    Else  
        S3  
    Executes  
a) S1      b) S2      c) S3      d) S1 and S2
14. Which of the following statement is true  
a) Algorithm cannot be expressed in pseudo code  
b) Algorithm are written only for specific programming language  
c) Pseudo code can be executed by a computer directly  
d) Pseudo code cannot be executed by computer directly
15. If  $m \times a + n \times b$  is an invariant for the assignment  $a := a + 8, b := b + 7$ , the values of m and n are

a)  $m = 8, n = 7$

b)  $m = 7, n = -8$

c)  $m = 7, n = 8$

d)  $m = 8, n = -7$

**Answer any six of the following . Question No 20 is Compulsory****6 X 2 = 12**

16. State the functions of a memory
17. Define a track ball
18. What is a truth table?
19. How would you delete a table and delete the contents of a table?
20. Define Word Size
21. List the different memory management techniques
22. Distinguish between an algorithm and a process
23. Define a flow chart
24. What is an invariant?

**Answer any six of the following . Question No 28 is Compulsory****6 X 3 = 18**

25. What is the difference between warm booting and cold booting
26. Explain any two input devices other than keyboard and mouse
27. Do the following
  - a) convert the decimal number 0.25 into its binary
  - b) convert the decimal number 165 into its hexa decimal
28. What are the three main units of a microprocessor?
29. State the significance of Cortana
30. How is a conditional control flow represented in a flow chart?
31. What is case analysis?
32. What is meant by decomposition?
33. What is recursive problem solving?

**Answer the following questions****5 X 5 = 25**

34. Write a note on the pointing devices

**(OR)**

Discuss the various generations of a computer

35. Perform the following binary computations.

- a)  $-12 + 5$
- b) Convert the hexa decimal number into its binary - 9BCA
- c) Give the truth table for XNOR gate
- d) Find the 2'S complement for  $-97$
- e) Subtract  $11010111 - 110101$

**(OR)**

Explain the Ports and Interfaces of a computer

36. Explain in detail the various types of storage device

**(OR)**

Explain the Process Management Algorithms

37. Draw and compare the Icons which are equivalent in Windows and Ubuntu

**(OR)**

Explain about the various indicators in the menu bar of Linux – Ubuntu operating system

38. There are seven tumblers on a table, all standing upside down. You are allowed to turn any 2 tumblers simultaneously in move. Is it possible to reach a situation where all the tumblers are right side up.?? Explain

**(OR)****Write a recursive algorithm to find the factorial of a given number**