AH-1548 CV19

M.A./M.Sc. (Final)
Term End Examination, 2019-20
MATHEMATICS
Paper-IV

Fundamental of Computer Science and Data Structure

Time: Three Hours   **[Maximum Marks: 100]**

Note : Answer any five questions. All questions carry equal marks.

1. Explain number System Convert:

     i. $(10101)_2 = (?)_{10}$

     ii. $(20)_{10} = (?)_2$

2. Explain function of INPUT device? Describe various types of input devices.

3. Differentiate between RAM and ROM? What is meant by Primary & Secondary Memory? Explain.

4. Explain Error Detection and correction codes.

5. Define operating system? Describe functions of operating system. What is meant by online and real time systems?

6. What is meant by computer network? Write the Difference between LAN, WAN & MAN. What do You understand by gateway and router?

7. Explain communication protocols?

8. Define ARRAY. Write the difference between STACK and QUEUE?

9. Differentiate between LINEAR Search and Binary search along with suitable example.

10. Why do we use Sorting? Explain Bubble sorting with suitable example.