

**2019***Time : 3 hours**Full Marks : 80*

*Candidates are required to give their answers in their own words as far as practicable.*

*The questions are of equal value.*

*Answer any five questions in which Q. No. 1 is compulsory.*

1. Choose the correct alternative of the following :
  - (a) The right most bit in a data word is called :
    - (i) Most Significant bit
    - (ii) Least Significant bit
    - (iii) Dirty bit
    - (iv) Access bit
  - (b) Magnetic tape is an example of :
    - (i) Sequential access
    - (ii) Random access
    - (iii) Both (i) and (ii)
    - (iv) None of these

- (c) ALU works on the instruction and data held in the :
- (i) Notebook
  - (ii) ROM
  - (iii) Register
  - (iv) I/O device
- (d) The fastest access memory is :
- (i) Cache memory
  - (ii) Register
  - (iii) Main memory
  - (iv) None of these
- (e) Which one is convert Hight Level Language into Low level Language ?
- (i) Assembler
  - (ii) Compiler
  - (iii) Interpreter
  - (iv) Both (ii) and (iii)
- (f) Which topology requires a multipoint connection ?
- (i) Mesh
  - (ii) Star
  - (iii) Bus
  - (iv) Ring

- (g) A inked ribbon exists between Hammer and Paper is called :
- (i) Non-impact Printer
  - (ii) Laser Printer
  - (iii) Ink Jet Printer
  - (iv) None of these
- (h) Which one is a Single User Operating System ?
- (i) Novel Netware
  - (ii) Unix
  - (iii) Window XT
  - (iv) CP/M

2. What are binary numbers ? What is the base of Decimal and Binary number ? Explain the advantages of using (0.1) notation in the Binary System.
3. What are the difference between Primary and Secondary Memory Unit ? Explain the different types of Secondary Memory Unit.
4. What do you mean by Central Processing Unit ? Describe, in details, the various units of CPU with diagram.

5. What is Programming Language ? Describe the different generation of Programming Language.
6. What is an Operating System ? List and briefly define the different types of Operating System.
7. Discuss the various Generation of Computer along with the key characteristics of the computers of each generation.
8. What is Network Topology ? Explain various Network Topologies with their advantages and disadvantages.
9. Write short notes on any two of the following :
  - (i) Classification of Computers
  - (ii) Parallel Computers
  - (iii) Time Sharing Operating System
  - (iv) Communication Channel
  - (v) Communication Protocols

