BCA-101

B.C.A. (I Year) Science EXAMINATION, 2018

Paper I

(Introduction to Information Technology)

Time allowed : Three Hours

Maximum Marks : 100

| Part A | [Marks : 20] |

Answer all questions (**50 words each**).
All questions carry equal marks.

| Part B | [Marks : 50] |

Answer five questions (**250 words each**),
selecting **one** question from each Unit.
All questions carry equal marks.

| Part C | [Marks : 30] |

Answer any two questions (**300 words each**).
All questions carry equal marks.

Part A

1. (a) Convert the following from decimal to hexadecimal

    system :

    (i)   54977

    (ii) 41819

(b) What is the difference between supercomputer and mainframe computer ?

(c) Define seek time and latency time in a hard disk access.

(d) What is asynchronous and synchronous transmission ?

(e) Why is virtual memory used in operating system ?

(f) What is ring topology in LAN ?

(g) Multiprogramming increases CPU utilization. Explain.

(h) What is Hexadecimal and Binary Number System ?

(i) Define Search Engine.

(j) What is DBMS ?

Part B

1. Explain the components of a computer using block diagram.

2. What is Algorithm ? How to construct an Algorithm ?

3. Explain the construction and working of floppy disk drive.

4. Explain primary memory in detail.

5. Explain Interconnection of units.

6. Explain types of programming language.

7. Write a note on 4th generation computer.

8. What is Moore's Law ?

9. Describe how LAN works ?

10. What is Cyber Law ? Also define its requirement.

Part C

1 Explain different types of Error-Detecting Codes.

2. What is instruction set ? Describe in detail.

3. What is interrupt structure ? Differentiate between RISC and CISC.

4. What is Operating system ? Describe its functions. Write any *two* examples of Operating System.

5. Write short notes on :

- OSI/TCP Model.

- Difference between Internet and Intranet.

- URL and IP Address

- Types of Network.