

This question paper contains 4 printed pages]

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

P.T.O.

- (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.