

Roll No.....

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BCA-101

B.C.A. First Year Science Examination, 2017

Paper-I

(Introduction to Information Technology)

Time Allowed : Three Hours

Maximum Marks : 100

PART-A (खण्ड-अ) [Marks : 20

Answer all questions (50 words each).

All questions carry equal marks.

सभी प्रश्न अनिवार्य हैं। प्रत्येक प्रश्न का उत्तर 50 शब्दों से अधिक न हो।

सभी प्रश्नों के अंक समान हैं।

PART-B (खण्ड-ब) [Marks : 50

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

प्रत्येक इकाई में से एक-एक प्रश्न चुनते हुए, कुल पाँच प्रश्न कीजिए। प्रत्येक प्रश्न का उत्तर 250 शब्दों से अधिक न हो।

सभी प्रश्नों के अंक समान हैं।

Answer any two questions (300 words each).

All questions carry equal marks.

कोई दो प्रश्न कीजिए। प्रत्येक प्रश्न का उत्तर 300 शब्दों से अधिक न हो।
सभी प्रश्नों के अंक समान हैं।

PART-A

1. Answer the following questions :

- (i) What is Algorithm?
- (ii) Describe basic model of Computer.
- (iii) What is Instruction set?
- (iv) What is RAM?
- (v) What is meant by term "level" in high level language or low level language?
- (vi) Explain types of Software.
- (vii) Difference between multiprocessing and time sharing operating system?
- (viii) What is Moore's Law?
- (ix) What is Cyber Laws?
- (x) Describe LAN technology.

PART-B

UNIT-I

2. Describe Error-detecting codes with example.
3. Describe input and output units.

UNIT-II

4. Difference between RISC and CISC.
5. Write short notes on the following :
 - (i) Floppy Disk.
 - (ii) Interface of Hard Disk.
 - (iii) ROM.
 - (iv) Memory Cell.

UNIT-III

6. Describe interconnection between processor to memory and I/O to processor communication.
7. What is Interrupt structure? Draw the flowchart of interrupt cycle.

UNIT-IV

8. On what characteristics, can you evaluate a Operating system?
9. Difference between Distributed and Parallel computers.

UNIT-V

10. How LAN works? Describe active and passive LAN components.
11. Describe following terms :
 - (i) Hypertext
 - (ii) World Wide Web
 - (iii) URL.

PART-C

12. Convert the following :
 - (i) $(1011001)_2 = (?)_{10}$
 - (ii) $(ABCD)_{16} = (?)_{10}$
 - (iii) $(567)_8 = (?)_2$
 - (iv) $(101.101)_2 = (?)_{10}$
 - (v) $(12233)_{10} = (?)_8$.
13. Explain storage devices Hierarchy. Difference between Magnetic tape and Magnetic disk.
14. What is Virtual Memory? How does it work?
15. What is DBMS? Describe various data models?
16. Write short notes on any **three** of the following :
 - (i) ISP
 - (ii) Cyber crime
 - (iii) IP address
 - (iv) TCP/IP.
