

Total No. of printed pages = 6

END SEMESTER EXAMINATION - 2019

Semester : 3rd

Subject Code : IT-301

INFORMATION TECHNOLOGY

Full Marks - 70

Time - Three hours

The figures in the margin indicate full marks for the questions.

Instructions :

1. Questions on PART - A are compulsory.
2. Answer any *five* questions from PART - B.

PART - A

1. Fill in the blanks : 1×10=10
 - (a) _____ invented the super computer.
 - (b) A computer can be classified into _____ generations.
 - (c) UNIVAC stands for _____.
 - (d) URL stands for _____.

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- (e) Base of hexadecimal number is _____.
- (f) Moving from one website to another is called _____.
- (g) Scanner is a _____ device.
- (h) A website's front page is called _____.
- (i) World Wide Web was proposed by _____.
- (j) A set of rules that governs data communication is called _____.
2. Write true or false : $1 \times 10 = 10$
- (a) BIOS means Basic Input Output System.
- (b) The act of exploring Web is known as surfing.
- (c) The full form of ISP is Information Source Provider.
- (d) Fifth generation of computer used integrated circuits.
- (e) A PAN is a large area network.
- (f) Hypertext is also known as hyper link.



- (g) Any data or instruction entered into the memory of a computer is considered as output.
- (h) An error is also known as debug.
- (i) The 0 and 1 in the binary number system is also called the binary digit.
- (j) The type of ROM that can be erased electrically is EROM.

3. Choose the correct answer : $1 \times 5 = 5$
- (a) The basic architecture of computer was developed by
- (i) John Von Neumann
- (ii) Charles Babbage
- (iii) Blaise Pascal
- (iv) None of them
- (b) Which of the following is not a search engine ?
- (i) Bing
- (ii) Google
- (iii) Yahoo
- (iv) Windows

(c) Second generation of computer was based on which technology ?

- (i) LSI
- (ii) VLSI
- (iii) Transistor
- (iv) None of these

(d) Verification of a login name and password is known as

- (i) Configuration
- (ii) Accessibility
- (iii) Authentication
- (iv) Logging

(e) GUI stands for

- (i) Graph Use Interface
- (ii) Graph Universal Interface
- (iii) Graph Unique Interface
- (iv) Graph User Interface.

PART - B

Marks - 45

4. (a) What is data processing ? 2

(b) Differentiate between data and information. 3

(c) Write a note on digital audio. 4

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5. (a) What is an operating system ? 2

(b) Explain its functions and types. 4

(c) Draw a flowchart to find perimeter of a rectangle. 3

6. (a) Why is data compression needed in digital media ? 3

(b) Explain about Huffman coding algorithm with example. 4

(c) What is entropy ? 2

(a) Define cache memory. 2

(b) Differentiate between dynamic RAM and static RAM. 3

(c) Draw and briefly explain the memory hierarchy. 4

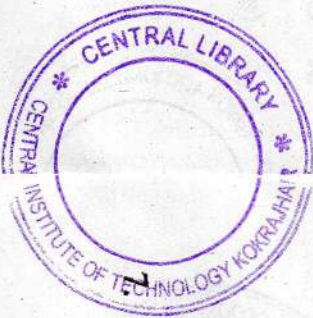
8. (a) What are BCD and ASCII codes ? 4

(b) Convert binary number 101010111001.10 to other bases. 5

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(5)

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9. (a) Write three differences between router and gateway. 3
- (b) What are communication channels in networking ? List two transmission media. 2+4=6
10. What is a program ? Explain about the each phases of a program development cycle. 2+7=9

