

2123  
B.E.(Information Technology), First Semester  
ITC-101: Introduction to Information Technology

Time allowed: 3 Hours

Max. Marks: 50

*NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Section*  
x-x-x

Q1 Answer the following:

- (a) Differentiate between IPv6 and IPv4.
- (b) What do mean by compilation?
- (c) Explain usage of ALU.
- (d) What do you mean by SQL?
- (e) Discuss the concept of distributed operating system.

(5\*2=10)

**SECTION-A**

Q2 a) Compare the flowchart and pseudo code with suitable example? 5

b) Write an algorithm to print first n Prime numbers and also print their sum. 5

Q3 For a digital computer, explain its block diagram in details. Also list best possible configuration of the laptop. (7+3)

Q4. Covert the following 10

- a)  $(C5B)_{16} = ( ? )_2$
- b)  $(AC)_{16} = ( ? )_{10}$
- c)  $(34.65)_{10} = ( ? )_2$
- d)  $(10110001)_2 = ( ? )_{10}$
- e)  $(40.75)_{10} = ( ? )_{16}$

**SECTION-B**

Q5 What do you mean by Relational Database Management System? Explain different types of DBMS users. (6+4)

Q6 Describe TCP/IP network model in details and also compare with OSI network model. (6+4)

Q7. What is an operating system and also explain its different features? Differentiate between WINDOWS and UNIX operating systems. (6+4)

x-x-x