

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.Tech. Summer 2017 - 18 Examination

Semester: 1 , 2
Subject Code: 03108102
Subject Name: Information And Communication Technology

Date: 01/06/2018
Time: 02:00PM TO 04:30PM
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Objective Type Questions - (Fill in the blanks, one word answer, MCQ-not more than Five in case (15) of MCQ) (All are compulsory) (Each of one mark)

1. Data travel in only one direction through the nodes in -----
 - a) Ring network c) Bus network
 - b) Star network d) None of the above
2. URL stands for -----
 - a) Uniform Resource Loader c) Uniform Resource Locator
 - b) Uniform Resource Line d) None of the above
3. 14.23.120.8 address lies in which class

 - a) class A c) class C
 - b) class B d) class D

4. A byte consist of how many bits
 - a) 8 bits c) 32 bits
 - b) 16 bits d) 64 bits
5. Xender is a -----
 - a) Application Software c) Firmware
 - b) System Software d) All of above
6. WWW stands for
7. What is the function of ipconfig?
8. How many optical fiber cables are required to create a mesh network of 2500 PCs?
9. Full form of CAN is
10. Which are the different types of topology?
11. What is the purpose of ALU?
12. Full form of VPN is
13. What is Intranet?
14. What is the purpose of FTP?
15. What is Algorithm?

Q.2 Answer the following questions. (Attempt any three) (15)

- A) What is client-server architecture? Explain different tiers of client server architecture in detail?
- B) Explain the different types of transmission cables available in market?

C) Describe the memory hierarchy in brief with diagram and compare and contrast each memory type in terms of its functionality, behavior and applications.

D) Select the appropriate choice (Application software/System software) for the following items.

(1)OS (2)Camera (3)BIOS (4)Whatsapp (5)Sound Driver

Q.3 A) Formulate a algorithm (07)

1) Minimum number out of 3 numbers.

2) To find out whether the number is odd or even.

B) Solve the following (08)

Decimal	Binary	Octal	Hexadecimal
302			
	1011010		
		457	
			15

OR

B) Answer the following (08)

(I)If we use class A for the given IP address 18.0.20.10, how many networks we can actually create?

(II)What do you understand by the concept of Internet? Derive the network and host addresses of the IP address 222.221.0.10?

(III)How many optical fiber cables are required to create a mesh network of 100 PCs?

(IV) If we use class C for the given IP address 134.0.20.10, how many hosts we can actually create?

Q.4 A) Describe the advantages of RISC processor over CISC processor (07)

OR

A) Explain Operation Execution Fetch Cycle in detail (07)

B) What is topology?? Explain the different types of topology along with advantages and disadvantages with applications. (08)