R16

Code No: 136FT

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year II Semester Examinations, May - 2019
PRINCIPLES OF COMPUTER COMMUNICATIONS AND NETWORKS
(Common to CE, EEE, ME, CSE, IT)

Time: 3 hours   Max. Marks: 75

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A

(25 Marks)

1.a)	What is computer communication system?	[2]
b)	List the uses of computer in communication.	[3]
c)	What are the advantages of multiplexing?	[2]
d)	Give a note on application layer protocol.	[3]
e)	How are analog signals transmitted?	[2]
f)	What is analog signal in data communication?	[3]
g)	Write the main functions of the data link layer.	[2]
h)	List the different types of wireless communication with applications.	[3]
i)	What are connectors?	[2]
j)	Draw the bridge protocol architecture.	[3]

PART - B

(50 Marks)

2.a)	List and explain the types of computer networks.	
b)	Explain the telephone system and data communications.	[5+5]
	OR	
3.a)	Give a brief note on network standards.	
b)	Describe the applications of networks.	[5+5]
4.	List and explain the OSI References models in detail.	[10]
	OR	
5.a)	Explain the communication service methods and data transmission modes.	
b)	Discuss the analog and digital communications.	[5+5]
6.	List and explain the characteristics of analog signals.	[10]
	OR	
7.a)	Why are digital signals better than analog signals? Explain.	
b)	How do you convert analog signal to digital signal? Discuss.	[5+5]

8. Explain the physical and electrical characteristics of wire.   [10]

OR

9. Draw and explain the fiber optic media.   [10]

10.a) Compare and contrast Switches Vs Routers.
   b) Give a brief note on repeaters.   [5+5]

OR

11. List and explain the types of In-Device and Inter-Device Connectors.   [10]

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