



School of Computer Science & Engineering

Previous Question Papers

R13

Code No: 115DT

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, March - 2017

COMPUTER NETWORKS
(Common to 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 the use of datalink layer ? [2]
- b) What is ARP? Explain. [3]
- c) Explain about Broadcast link. [2]
- d) Give the classification of multiple access protocols. [3]
- e) Write any two services network layer provides to transport layer. [2]
- f) Explain about datagram and virtual circuit. [3]
- g) What is internetworking? [2]
- h) List out the internetworking devices. [3]
- i) What is the role of UDP in internet transport protocol? [2]
- j) What is TELENET? [3]

PART-B

(50 Marks)

- 2. Explain about various transmission media in physical layer with a neat sketch. [10]
- OR**
- 3. Elaborate on the design issues of data link layer. [10]
- 4. Write in detail on Time-Division Multiplexing and Frequency-Division Multiplexing with an example for each. [10]
- OR**
- 5. Write and explain about various multiple access protocols. [10]
- 6. Explain the Optimality Principle with a suitable example. [10]
- OR**
- 7. Explain distance vector routing algorithm. [10]
- 8. What happens when large packet wants to travel through network with smaller maximum packet size? Explain. [10]
- OR**
- 9. Explain tree-structured numbering scheme. [10]
- 10. Explain about RPC with a neat sketch. [10]
- OR**
- 11. What is DNS? What are the services provided by DNS and explain how it works. [10]

---ooOoo---

NRCM

Your roots to success...

Your roots to success...

R13

Code No: 115DT

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech III Year I Semester Examinations, February/March - 2016

COMPUTER NETWORKS

(Common to 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 meant by protocol. [2]
- b) What is piggybacking? [3]
- c) Define bridge. [2]
- d) Describe in brief about Types of Ethernet cabling. [3]
- e) What is virtual circuit? [2]
- f) What are the issues in routing? [3]
- g) Define Tunneling. [2]
- h) List out the socket primitives for TCP. [3]
- i) Define URL. [2]
- j) List out different types of HTML Tags. [3]

Part-B

(50 Marks)

- 2.a) Write any four reasons for using layered protocols.
- b) Explain the functionality of each layer in OSI reference model. [5+5]

OR

3. Explain in brief about the design issues in the data link layer. [10]
4. Explain the functions of following devices:
 - a) Hub
 - b) Bridge
 - c) Router
 - d) Gateway [3+2+3+2]

OR

- 5.a) What are the functions of medium access control layers protocol? Explain.
- b) Explain IEEE 802.3 standard for Ethernet with the help of frame format. [5+5]
- 6.a) The major problem with distance vector algorithm is 'count to infinity'. How exchange of complete path from router to destination instead of delay, helps in solving count to infinity problem.
- b) What are the advantages of adaptive routing approach over non adaptive routing? [5+5]

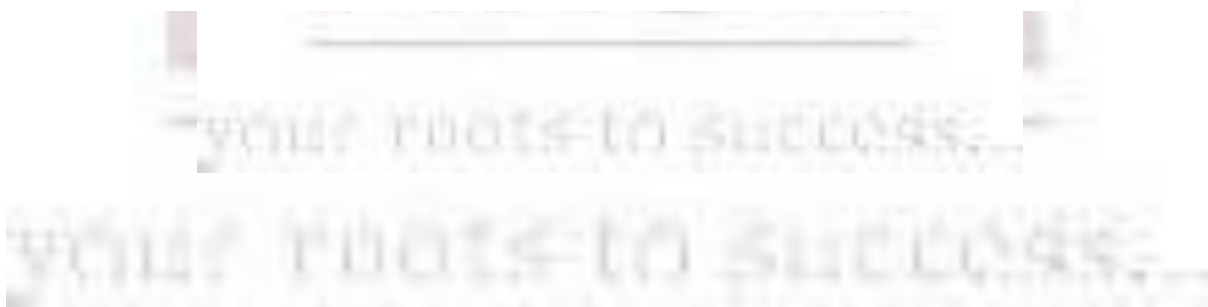
OR

7. Describe Dijkstra shortest path algorithm. Also show working of Dijkstra algorithm with the help of an example [10]

- 8.a) Explain in brief about TCP connection establishment and Release. [5+5]
b) Describe in brief about TCP segment Header. [5+5]
OR
9. Explain the elements of a Transport protocol? [10]
10. What is electronic mail? Describe in brief about sending and receiving e-mail. [10]
OR
- 11.a) Define HTML? Discuss in brief about Common HTML Tags. [5+5]
b) What is HTTP? Describe in brief about HTTP request methods. [5+5]

--ooOoo--

www.jntufastresult.com



R13

Code No: 115DT

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, November/December - 2016

COMPUTER NETWORKS

(Common to 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 Frame Relay? [2]
- b) Write about communication satellites. [3]
- c) Define time domain reflectometry. [2]
- d) Difference between Pure ALOHA and slotted ALOHA. [3]
- e) Write about Jitter control. [2]
- f) Write down the design issue of network layers. [3]
- g) Write about Tunneling. [2]
- h) What are the concepts of extension header in IPv6? [3]
- i) Compare RPC and RTP. [2]
- j) How does persistence timer is useful in TCP ? [3]

PART - B

(50 Marks)

2. Explain and demonstrate Selective repeat sliding window Protocol with an example. [10]
- OR**
- 3.a) Write short notes on Wireless Transmission. [3]
- b) Describe in detail about Lightwave transmission. [7]
4. What is the purpose of CSMA CD? And Explain it. [10]
- OR**
5. Explain about the following:
a) Spanning Tree Bridge
b) Remote bridge. [5+5]
6. Write briefly about Congestion control in datagram subnets. [10]
- OR**
7. Write an example, demonstrate how to make routing table using distance vector routing. And list down the limitation. [10]
8. How would you describe the operation of Address resolution protocol? [10]
- OR**
9. Explain in detail about crash recovery. [10]
10. How would you summarize the concepts of E-mail, its architecture and services? [10]
- OR**
11. Describe in detail about TCP segment header and connection Establishment. [10]

---ooOoo---

NIRUM

YOUR FUTURE IS OUR BUSINESS

--	--	--	--	--	--	--	--	--	--

Q.P Code: CS3103PC

Hall Ticket No.:

**NARSIMHA REDDY ENGINEERING COLLEGE
(UGC AUTONOMOUS)**

MODEL QUESTION PAPER

III B.TechI Semester (NR10) Regular Examination, January 2023

COMPUTER NETWORKS

Time:3 hours

Maximum marks:75

- Note:**
- This question paper contains two parts A and B
 - Part A is compulsory which carries 25 marks (1st 5 sub questions are one from each unit carry 2 Marks each & Next 5 sub questions are one from each unit carry 3 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 sub questions

Q.No		Question	M	CO	BL	PO
1)	a.	List the difference between logical, physical and port address.	2	CO1	L1	PO 1
	b.	Data link protocols almost always put the CRC in a trailer, rather than in a header. Why?	2	CO2	L4	PO 2
	c.	How congestion avoidance is different from congestion control.	2	CO3	L2	PO 2
	d.	Explain UDP	2	CO4	L1	PO 1
	e.	Explain about HTTP.	2	CO5	L1	PO 1
	f.	State three difference between OSI and TCP/IP model	3	CO1	L3	PO 2
	g.	What is ARQ and explain its importance.	3	CO2	L1	PO 1
	h.	Explain Flooding	3	CO3	L1	PO 1
	i.	What is the difference between network layer delivery and the transport layer delivery?	3	CO4	L3	PO 2
	J	Write down the three types of WWW documents	3	CO5	L1	PO 1

Part-B(50 Marks) Answer any five questions

Q.No	Question	M	CO	BL	PO
UNIT-I					
2)	a. Explain about different topologies.	5	CO1	L1	PO1
	b. Explain the difference between TCP/IP and OSI Model.	5	CO1	L1	PO1
OR					
3)	a. Explain about TCP/IP reference Model.	5	CO1	L1	PO2
	b. Explain the hardware layers in OSI layers.	5	CO1	L1	PO1
UNIT-II					
4)	a. Explain about Error detection and Error Correction	5	CO2	L1	PO1
	b. Explain CSMA/CD and CSMA/CA in detail	5	CO2	L1	PO1
OR					
5)	a. Briefly discuss about data link layer design issues	5	CO2	L3	PO1
	b. Explain Go-Back-N with a neat sketch	5	CO2	L1	PO1
UNIT-III					
6)	a. Explain design issues of Network Layer	5	CO3	L1	PO1
	b. Explain distance vector routing in detail.	5	CO3	L1	PO1
OR					
7)	a. Explain store and forward packet switching.	5	CO3	L1	PO1
	b. Difference between Broadcasting and Multicasting	5	CO3	L3	PO1
UNIT-IV					
8)	a. Explain the duties of transport layer.	5	CO4	L1	PO1

	b.	Explain the operation of TCP with neat sketch.	5	CO4	L1	PO1
OR						
9)	a.	Write short notes on performance issues of transport layer	5	CO5	L1	PO1
	b.	Write short notes on User Datagram Protocol (UDP).	5	CO4	L1	PO1
UNIT– V						
10)	a.	Explain how security is provided in interact operations indetail	5	CO5	L1	PO2
	b.	Write briefly about World wide web	5	CO5	L2	PO1
OR						
11)	a.	Explain briefly simple network management protocol	5	CO5	L3	PO1
	b.	Discuss the File transfer Protocol (FTP)with a neat diagram.	5	CO5	L1	PO2

M – Marks **CO** – Course Outcomes **PO** – Program Outcomes

BL – Bloom’s Taxonomy Levels (**L1**–Remembering, **L2**–Understanding, **L3**–Applying,**L4**–Analyzing, **L5**–

NIRCM

YOUR FOCUS IS OUR SUCCESS