17CS52

Fifth Semester B.E. Degree Examination, July/August 2022 **Computer Networks**

Max. Marks: 100 Time: 3 hrs.

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N	ote: Answer any FIVE full questions, choosing ONE full question from each ma	odule.
	Module-1	
a.	Describe HTTP with persistent and non-persistent connections.	(10 Marks)
b.	Compare client server and Peer-to-Peer architecture.	(05 Marks)
c.	Explain the working of Bit Torrent for file distribution.	(05 Marks)
	OR	
a.	Describe in detail the services provided by DNS and explain the DNS message for	
		(10 Marks)
b.	Define a Socket. Describe the socket programming with a help of diagram for TC	P.
		(10 Marks)
		.1.
a.	·	
		(07 Marks)
		(06 Marks)
C.	Draw TCP segment structure and explain its fields.	(07 Marks)
	OR	
a.	Explain in brief, TCP congestion control mechanisms.	(10 Marks)
b.	Explain the concept of transport layer multiplexing and demultiplexing.	(10 Marks)
	Module-3	
a.		(10 Marks)
b.		(10 Marks)
а		(10 Marks)
	Explain the spanning tree algorithm and give its advantages and disadvantages.	(10 Marks)
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		(08 Marks)
		(12 Marks)
υ.		(12 //11/13)
		(40.37 1)
a.		(10 Marks)
		(05 Marks)
C.	Explain Agent Discovery with diagram.	(05 Marks)
	Module-5	
a.		(10 Marks)
b.	Describe the DiffServ Internet Architecture.	(05 Marks)
	a. b. c. a. b. a. b. a. b. c. a. b. a. b. a. b. a. b. c. a. b. a. b. c. a. b. c. a. b. c. a. b. c. a. b. b. c. a. b. c.	a. Describe HTTP with persistent and non-persistent connections. Compare client server and Peer-to-Peer architecture. Explain the working of Bit Torrent for file distribution. OR a. Describe in detail the services provided by DNS and explain the DNS message for the socket. Describe the socket programming with a help of diagram for TO to the side rdt2.0. Module-2 a. With the help of FSM, describe the two states of the sender side and one state of side rdt2.0. b. Explain selective repeat ARQ protocol. C. Draw TCP segment structure and explain its fields. OR a. Explain in brief, TCP congestion control mechanisms. b. Explain the concept of transport layer multiplexing and demultiplexing. Module-3 a. What is routing? Explain the structure of a router with a neat diagram. b. Explain Dijkstra's algorithm with example. OR a. Explain IPV6 datagram format with neat diagram. DOR Explain the spanning tree algorithm and give its advantages and disadvantages. Module-4 a. Explain 3G system architecture. b. Explain the two different routing approaches to mobile node. OR a. What is hand off? What are the steps in accomplishing hand off? b. Compare mobile IP and GSM mobility. c. Explain Agent Discovery with diagram. Module-5 a. List and explain the types of multimedia networking application.

(05 Marks)

Explain CDN operation.

OR

Write a short notes on: (i) Netflix video streaming platform. 10 a.

VOIP with skype. (ii)

(10 Marks)

Explain briefly the QoS Guarantees Resource reservation and call admission process with (10 Marks) neat diagram.

2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42-8 = 50, will be treated as malpractice. Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.