

# Fifth Semester B.E. Degree Examination, Aug./Sept. 2020 **Computer Networks**

Time: 3 hrs.

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Max. Marks: 80

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Note: Answer any FIVE full questions, choosing ONE full question from each module.

## Module-1

- Explain now interaction occurs between web browser and web server using HTTP message. a. Explain HTTP request message format. (06 Marks)
  - Give the importance of SMTP in the internet mail system. b. (05 Marks)
  - Explain how client requesting object through web cache. (05 Marks) c.

#### OR

- How FTP moves files between local and remote file system? List the commands used in a. FTP. (06 Marks)
  - Explain POP3 (Post Office Protocol Version 3). (04 Marks) b.
  - Explain the steps involved in interaction of various DNS servers. (06 Marks) c.

#### **Module-2**

Explain stop wait protocol with FSM representation rdt 2.0. 3 a. (06 Marks) Explain TCP segment structure. (06 Marks) b. With a neat diagram, explain GO – BACK – N protocol. (04 Marks) c.

#### OR

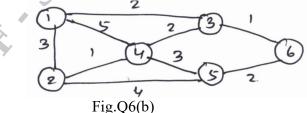
Explain the steps involved in TCP connection establishment using three way hand shaving. 4 a. (06 Marks) What do you mean by congestion control? Explain slow start mechanism. b. (05 Marks) Define flow control. Explain how flow is controlled by receiver window and receiver buffer. c. (05 Marks) Module-3

Define routing. What are the goals of routing algorithm? a. b. A host in an organization has an IP address 200.45.34.56 and subnet address mask

- 200.455.240.0. What is subnet address?
- Explain the format of IPv6 headers. c.

#### OR

Explain OSPF. a. Find shortest path from noole1 using link state algorithm. b.



Explain RIP(Routing Information Protocol) with its message format. c.

(05 Marks)

- (04 Marks)
- (07 Marks)

(06 Marks)



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### Module-4

7	a.	Explain 3G cellular data network.		(06 Marks)
	b.	Write a note on mobile IP.	<u> </u>	(06 Marks)
	c.	Explain in brief how mobility is managed in cellular networks.		(04 Marks)
			$\checkmark$	

### OR

3	a.	What is handoffs? I	Explain	steps involved	when a	a base	station d	oes decide t	to handoff a
		mobile user.		àV			Ċ		(06 Marks)
	b.	With neat diagram, e	explain a	gent advertisem	nent and	l mobil	e IP regist	tration.	(05 Marks)

c. Write a note on indirect routing to mobile node.

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## Module-5

9 a. Give the classification of multimedia application. Explain in brief. (04 Marks)

- b. Explain Content Distribution Networks (CDN) and its operation. (06 Marks)
- c. Explain how interaction takes place between client and server for HTTP streaming.

(06 Marks)

(05 Marks)

#### OR

10	a.	Define policing. Mention 3 imp	portant policing criterias.	(05 Marks)
	b.	Explain weighted fair queuing.		(05 Marks)
	c.	Write a note on Diffserv.		(06 Marks)