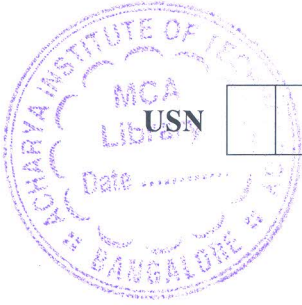## CBCS SCHEME

USN | | | | | | | | | |

17CS52

Fifth Semester B.E. Degree Examination, June/July 2023
Computer Networks

Time: 3 hrs.

Max. Marks: 100

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

Module-1

1	a.	Explain the transport services available to applications.	(05 Marks)
	b.	Explain the HTTP message formats with an example.	(10 Marks)
	c.	Explain the FTP commands and replies.	(05 Marks)

OR

2	a.	What are the services provided by DNS?	(05 Marks)
	b.	Explain in detail DNS hierarchical database.	(07 Marks)
	c.	Explain the file distribution time in P2P and client server architecture.	(08 Marks)

Module-2

3	a.	Explain Go back N protocol.	(10 Marks)
	b.	Explain TCP segment structure.	(10 Marks)

OR

4	a.	Explain TCP connection management.	(06 Marks)
	b.	Explain the approaches to congestion control.	(04 Marks)
	c.	Explain the 3 phases of TCP congestion control.	(10 Marks)

Module-3

5	a.	Explain the Router architecture in detail.	(10 Marks)
	b.	Explain IPV4 and IPV6 header.	(10 Marks)

OR

6	a.	What are the features of link state algorithm? Explain the algorithm with an example.	(10 Marks)
	b.	What are the two approaches adopted for determining multicast tree? Explain with an example.	(10 Marks)

Module-4

7	a.	Explain in details the cellular network architecture.	(05 Marks)
	b.	Explain on to 4G : LTE.	(07 Marks)
	c.	Explain the agent registration in Mobile IP.	(08 Marks)

OR

8 a. Explain in detail 3G cellular architecture. **(05 Marks)**
   b. What are the reasons for handoff in GSM? Explain with neat diagram the handoff process in GSM. **(10 Marks)**
   c. Explain direct routing to a Mobile user. **(05 Marks)**

Module-5

9 a. What are the different types of multimedia network applications? Explain. **(08 Marks)**
   b. What are the different server placement philosophies? Explain. **(05 Marks)**
   c. Explain CDN operation in detail. **(07 Marks)**

OR

10 a. Write short notes on the following:
      i) UDP streaming   ii) DASH. **(10 Marks)**
   b. Explain Resource Reservation and call admission. **(05 Marks)**
   c. Explain the three network level approaches to support multimedia applications. **(05 Marks)**

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