

# CBCS SCHEME



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17CS52

## Fifth Semester B.E. Degree Examination, Aug./Sept.2020 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. Compare client-server and peer-to-peer architecture. (06 Marks)
- b. What are the different types of transport services provided by the internet? (08 Marks)
- c. With a general format, explain the HTTP Request and HTTP Response messages. (06 Marks)

OR

- 2 a. Explain FTP commands and replies. (08 Marks)
- b. What are the services provided by DNS? (04 Marks)
- c. Write a short note on : (08 Marks)
  - i) Web caching
  - ii) SMTP.

### Module-2

- 3 a. Explain UDP segment structure. (06 Marks)
- b. With the help of FSM, describe the sender side and receiver side of rdt 2.0. (08 Marks)
- c. Explain Selective Repeat Protocol. (06 Marks)

OR

- 4 a. With a neat diagram, explain TCP segment structure and its fields. (08 Marks)
- b. Explain the way handshake and closing a TCP connection. (08 Marks)
- c. Define the following : (04 Marks)
  - i) Multiplexing
  - ii) Demultiplexing
  - iii) TCP
  - iv) UDP.

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### Module-3

- 5 a. List and explain three switching techniques with a neat diagram. (10 Marks)
- b. With the help of FSM, describe the sender side and receiver side of rdt 2.0. (10 Marks)

OR

- 6 a. Write the algorithm for the following : (08 Marks)
  - i) Link-state
  - ii) Distance vector.
- b. Write a short note on : (12 Marks)
  - i) Broadcast routing
  - ii) Multicast routing.

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

**Module-4**

- 7 a. Explain 3G system architecture. (08 Marks)  
b. Explain the two different routing approaches to mobile node. (12 Marks)

**OR**

- 8 a. Define handoff. List the steps involved when a base station does decide to handoff a mobile user. (10 Marks)  
b. Write a short note on :  
i) Agent discovery in mobile IP  
ii) Registration with the home agent in mobile IP. (10 Marks)

**Module-5**

- 9 a. List and explain the types of multimedia networking application. (10 Marks)  
b. Briefly explain the following :  
i) RTP  
ii) SIP. (10 Marks)

**OR**

- 10 Write a short note on:  
a. FIFO scheduling mechanism  
b. Priority queueing scheduling mechanism  
c. Round robin and weighted fair queueing scheduling mechanism. (20 Marks)

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