

B.E. Computer Science & Engineering (Model Curriculum) Semester-VII  
**BE101CS - TCP / IP and Internet**

P. Pages : 2

Time : Three Hours



**GUG/W/23/14231**

Max. Marks : 80

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- Notes :
1. All questions are compulsory.
  2. Due credit will be given to neatness and adequate dimensions.
  3. Assume suitable data wherever necessary.
  4. Illustrate your answers wherever necessary with the help of neat sketches.
  5. All questions are compulsory.

1. a) Explain the TCP/IP protocol suite in detail. 8
- b) What is ICMP? Explain the error reporting messages of ICMP any two. 8

**OR**

2. a) Explain the IP datagram format and explain its different fields. 8
- b) Explain classless and classful addressing of IP. 8
3. a) Differentiate between Dynamic routing and static routing. 8
- b) Write short notes on **any two**. 8
- i) CBT
  - ii) IGMP
  - iii) MOSPF

**OR**

4. a) Explain with example Distance vector routing algorithm. 8
- b) Explain the routing Information protocol (RIP) in detail. 8
5. a) Explain the TCP header format in detail. 8
- b) Explain the transition from IPv4 to IPv6. 8

**OR**

6. a) Explain the 3-way handshake used for connection establishment in TCP. 8
- b) Write short notes on **any two**. 8
- i) ICMPv6.
  - ii) SCTP
  - iii) UDP
7. a) What is DNS? Explain in detail the use of DNS. 8
- b) What is Electronic Mail? Explain IMAP and POP3 protocols. 8

**OR**

- 8.** a) What is Remote File Access? Explain FTP and TFTP protocols. **8**
- b) Write short notes on **any two**. **8**
- i) WWW
  - ii) Socket Interface
  - iii) Client server paradigm
- 9.** a) Explain in detail the RTP packet format. **8**
- b) Explain VOIP. Also explain audio and video compression technique. **8**

**OR**

- 10.** Write short note on **any four**. **16**
- i) RTCP
  - ii) Multimedia communication systems
  - iii) Digital audio
  - iv) Media gateway control protocols.
  - v) Video on Demand.

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