

Reg. No. : .....

Code No. : 30175 E      Sub. Code : GMCS 62/  
GMSE 62

B.Sc. (CBCS) DEGREE EXAMINATION,  
APRIL 2020.

Sixth Semester

Computer Science/Software Engineering

COMPUTER NETWORKS AND DATA  
COMMUNICATIONS

(For those who joined in July 2012-2015 only)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL the questions.

Choose the correct answer :

1. Which is an open wireless technology standard for exchanging data over short distance using short wavelength radio transmissions?
  - (a) Ethernet
  - (b) Sattelite
  - (c) E.mail
  - (d) Blue tooth
  
2. Transmission made are \_\_\_\_\_, \_\_\_\_\_
  - (a) Parallel , serial
  - (b) Bluetooth, WIFI
  - (c) E mail , WIFI
  - (d) WIFI, telnet

3. Sending a message to such a group is called \_\_\_\_\_  
(a) subnet (b) multi casting  
(c) internet (d) none
4. Which is not a guided media  
(a) coanial cable (b) twisted pair cable  
(c) radio wave (d) fibre optic cable
5. ASCII stands for \_\_\_\_\_  
(a) American Standard Code for Information Interchange  
(b) American Struggle code Information Exchange  
(c) Architecture Surface Council of Information Instructions  
(d) None of these
6. Sending a message to such a group is called \_\_\_\_\_  
(a) multi casting (b) subset  
(c) telenet (d) none
7. One particular state is designated as \_\_\_\_\_  
(a) initial state (b) end state  
(c) middle state (d) none
8. GSM stands for \_\_\_\_\_.  
(a) Geographic Symmetric Message  
(b) Global System for Mobile Communication  
(c) Geo Synchronized Message  
(d) Geo Satellite Message
9. ICMP stands for \_\_\_\_\_.  
(a) Inter Communicate Message Processor  
(b) Internet Control Message Protocol  
(c) Information Control Message Processor  
(d) Internet Communicate Message Protocol

10. A digital signature in
- (a) Scanned Signature
  - (b) Signature in binary
  - (c) Enerypt signature
  - (d) Hand written signature

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) Explain the issues related to transmission impairment with example.

Or

- (b) Discuss different transmission modes.

12. (a) Write a note on forward error correction method.

Or

- (b) What are the data transfer modes?

13. (a) Write a note on internal organisation of network layer.

Or

- (b) Explain presentation layer.

14. (a) Mention the functions of MAC and LLC layers.

Or

- (b) How we can managing mobility in cellular networks?

15. (a) Discuss in detail about ISDN protocol architecture.

Or

(b) What is network security? Explain in detail.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

16. (a) Explain Unipolar and Bipolar line codes.

Or

(b) Explain with different types of data representation.

17. (a) Elucidate the various Ethernet specification in wired LAN technology.

Or

(b) Write briefly about the architecture of LAN.

18. (a) Explain briefly about any three topologies in networks.

Or

(b) Explain the architecture of WAP gateway.

19. (a) Explain about WIFI technology.

Or

(b) Explain about error detection and correction techniques.

20. (a) Explain in detail about firewall.

Or

(b) Explain with example of RSA algorithm.