

Register No.: Name:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

FIRST SEMESTER M.C.A DEGREE EXAMINATION (S), FEBRUARY 2023**(2021 SCHEME)****Course Code: 21CA104****Course Name: Advanced Computer Networks****Max. Marks: 60****Duration: 3 Hours****PART A*****(Answer all questions. Each question carries 3 marks)***

1. Explain protocol layers and service models.
2. Illustrate P2P file sharing with example and proper diagrams.
3. What are the principles of reliable data transfer?
4. Explain the functionalities of transport layer.
5. Write short note on RIP.
6. Comment the approaches to congestion control.
7. Explain IEEE 802.3 ethernet with its access protocol.
8. Distinguish between switches and bridges.
9. Explain Wi-Fi architecture.
10. What do you mean by VPN? Explain.

PART B***(Answer one full question from each module, each question carries 6 marks)*****MODULE I**

11. How does e-mail message delivery work with? Explain the protocols used with suitable diagrams. (6)

OR

12. a) Explain the working of DNS. (3)
b) Write short note on DNS records and messages. (3)

MODULE II

13. Explain connection oriented and connectionless multiplexing and demultiplexing. (6)

OR

14. Explain GBN. Compare selective repeat (SR) protocols with GBN. (6)

MODULE III

15. What is routing? Explain link state routing and distance vector routing. (6)

OR

16. Describe the format of IPv4 datagram with the help of a diagram. Point out the significance of each field. (6)

MODULE IV

17. Demonstrate any two error detection techniques with proper examples. (6)

OR

18. Compare collision based multiple access protocols and token based multiple access protocols. (6)

MODULE V

19. Explain the features of bluetooth and its architecture. (6)

OR

20. Which are the areas of network management? Explain. (6)
