Reg. No

24U351

B.C.A DEGREE END SEMESTER EXAMINATION - OCTOBER 2024 SEMESTER 3 : MOBILE APPLICATIONS AND CLOUD TECHNOLOGY

COURSE : 19U3CRBCA10 : COMPUTER NETWORKS

(For Regular 2023 Admission and Improvement/Supplementary 2022/2021/2020/2019 Admissions)

Time : Three Hours

Max. Marks: 75

PART A Answer All (1 mark each)

- 1. What is CIA triad in computer security?
- 2. What is routing?
- 3. Define networking.
- 4. What is full duplex mode?
- 5. What are the major elements of VSAT?
- 6. What is the size of the Host ID in Class A?
- 7. List any six operating system in the family of Microsoft Windows.
- 8. What are the specification of 802.11g standard?
- 9. What is the TCP port number for LOGIN?
- 10. Which layer is responsible to ensure that data received at the receiver's end in line and error free manner?

 $(1 \times 10 = 10)$

PART B Answer any 8 (2 marks each)

- 11. What is the significance of Ports in computer networks?
- 12. Write short note on variable size framing.
- 13. Define the functions of a network switch.
- 14. What are the advantages and disadvantages of infrastructure mode wireless networks?
- 15. Differentiate active hub and passive hub.
- 16. Explain check sum method with an example.
- 17. How to use ping command to troubleshoot network issues?
- 18. Describe Infrastructure mode wireless networks.
- 19. Describe the classification of firewalls.
- 20. Describe briefly about FTP?

PART C

Answer any 5 (5 marks each)

- 21. Explain any 6 network utilities commands in detail.
- 22. Define bridge and its functions in networking.
- 23. Explain Windows NT domain models.
- 24. Describe unguided transmission media.
- 25. Explain leaky bucket algorithm with a diagram.
- 26. Describe IPV6 addressing.
- 27. Describe WiFi Protected Access (WPA) wireless security protocol.

(5 x 5 = 25)

 $(2 \times 8 = 16)$

PART D Answer any 2 (12 marks each)

- 28. Explain the wierless security protocols in detail.
- 29. Elaborate and explain with suitable diagram of TDM, FDM, WDM.
- 30. Describe in detail about LINUX operating system.
- 31. Define ISO/OSI model with functions of each layer. Compare it with TCP/IP model.

(12 x 2 = 24)