22U372　　　　　　(Pages: 2)　　　　　　Name………………………

Reg. No……………………

THIRD SEMESTER B.Voc. DEGREE EXAMINATION, NOVEMBER 2023

(CBCSS-UG)

(Regular/Supplementary/Improvement)

CC21U SDC3 CN09 - COMPUTER NETWORK FOR IOT

(Information Technology)

(2021 Admission onwards)

Time: 2.5 Hours　　　　　　　　　　　　　　　　　　　　　　　Maximum: 80 Marks

Credit: 4

PART A (Short Answer Type)

Answer *all* questions. Each question carries 2 marks.

1. Why is topology control necessary for WSN?

2. Describe Zigbee Protocol.

3. Explain the characteristics of networking?

4. What is the primary purpose of a relay in a network?

5. What is IP-Address?

6. Define router.

7. What are the metrics used in determining the best path for a routing protocol?

8. What are the responsibilities of Transport Layer?

9. Define Z-wave Protocol.

10. Write a note on Transport layer and list its protocols.

11. Differences between Wireless Adhoc Network and Wireless Sensor Network.

12. Define network congestion. What is Token Bus?

13. What are the securities of Wireless Sensor Networks?

14. What is handoff and roaming?

15. What is the difference congestion and flow control?

(Ceiling: 25 Marks)

PART B (Paragraph Type Questions)

Answer *all* questions. Each question carries 5 marks.

16. What are the important topologies for networks?

17. Define various types of Internet connections.

18. Briefly explain the basic principle of FDDI.

19. Explain DHCP briefly.

20. Explain the comparison between IP Version 4 & IP Version 6 Protocol.

21. Explain handoff and roaming.

22. Explain the general principles of closed loop congestion control.

23. Explain the Hardware design of Sensor node.

(Ceiling: 35 Marks)

PART C (Essay Type Question)

Answer any *two* questions. Each question carries 10 marks.

24. What is OSI Model? Explain the functions and protocols and services of each layer?

25. Explain about the different types of transmission Medias in computer networks.

26. Describe how these layers can be leveraged to establish secure communication and handle data formats.

27. (A) Describe XMPP Protocol.

(B) Describe MQTT Protocol for M2M/IOT Connectivity.

(2 × 10 = 20 Marks)

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