



23104394

QP CODE: 23104394

Reg No :

Name :

**B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE
EXAMINATIONS, JANUARY 2023**

Third Semester

B.Sc Computer Science Model III

**COMPLEMENTARY COURSE - EL3CMT08 - ELECTRONICS - NETWORKING
FUNDAMENTALS**

2017 Admission Onwards

6A3C9235

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. List the functions performed by a bridge.
2. What are the similarities about a router and gateway?
3. What is port address?
4. Which are the three parameters required for error code design?
5. What arithmetic is used to add items in checksum calculation?
6. What is the bandwidth delay product?
7. Explain the fields of unicast addressing.
8. Explain the default method.
9. Draw and explain the control field of TCP segment.
10. What is backpressure?
11. What is leaky bucket?
12. Define root server.





(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. What are the various advantages of a Computer Network?
14. Give an account of various criteria that a network should meet. How can they be measured?
15. What is the advantage of a layered network architecture?
16. What type of errors are not detected by CRC?
17. Write in detail about address space and notation of IPv4.
18. Explain logical to Physical address mapping using ARP.
19. Give an account of routing protocol, discuss multicast link state routing.
20. Explain the uses of UDP.
21. Write a note on different request types available in HTTP.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Explain the various network topologies. Mention the advantages and disadvantages of each.
23. Illustrate the principle of error detection and correction. Explain any two error detection technique with suitable example.
24. Define Framing. Explain Fixed-Size Framing and Variable-Size Framing in detail.
25. Explain in detail the types of routing tables.

(2×15=30)

