

**ANURAG Engineering College**

(An Autonomous Institution)

III B.Tech II Semester Supplementary Examinations, Dec–2023/Jan-2024

**COMPUTER NETWORKS**

(ELECTRONICS AND COMMUNICATION ENGINEERING)

**Time: 3 Hours****Max.Marks:75****Section – A (Short Answer type questions)****(25 Marks)****Answer All Questions**

	Course Outcome	B.T Level	Marks
1. Define the terms distributed system and computer networks.	CO1	L1	2M
2. Give the differences between guided and unguided transmission medium.	CO1	L2	3M
3. Distinguish between forward error correction versus error correction by retransmission.	CO2	L2	2M
4. Give the flow diagram of stop and wait protocol.	CO2	L1	3M
5. Illustrate the importance of IEEE standards for wireless LANs.	CO3	L2	2M
6. Discuss the five categories of connecting devices.	CO3	L1	3M
7. Explain the mechanism of process-to-process delivery.	CO4	L1	2M
8. Compare the features of different routing protocols.	CO4	L2	3M
9. Explain the role of domain name space messages.	CO5	L1	2M
10. Write short notes on world wide web.	CO5	L2	3M

**Section B (Essay Questions)****Answer all questions, each question carries equal marks.****(5 X 10M = 50M)**

11. A) Illustrate the basic functionality of ISO/OSI model and compare it with TCP/IP model.	CO1	L2	10M
<b>OR</b>			
B) Explain the necessity of layered architecture-based peer to peer process and write short notes on addressing	CO1	L3	10M
12. A) Discuss in detail the operation of sliding window, go-back <i>N</i> and selective repeat protocols with necessary diagrams.	CO2	L3	10M
<b>OR</b>			
B) Elaborate the discussion on use of CSMA/CD and CSMA/CA in collision detection and avoidance.	CO2	L2	10M
13. A) Illustrate the Ethernet evolution through four generations and compare the same with reference to different parameters.	CO3	L3	10M
<b>OR</b>			
B) Explain the MAC and LLC layer format of IEEE 802.11 wireless LAN standards.	CO3	L3	10M
14. A) Elaborate the discussion on use of unicasting and multicasting routing protocols.	CO4	L2	10M
<b>OR</b>			
B) Illustrate in detail the addressing format of IPv6 and compare it with IPv4 format.	CO4	L3	10M
15. A) What is DNS? What are the different services provided by DNS?	CO5	L3	10M
<b>OR</b>			
B) Explain the basic functionalities of e-mail service.	CO5	L3	10M