School of Computing Science and Engineering
Bachelor of Computer Applications
Semester End Examination - Jun 2024

Duration : 180 Minutes
Max Marks : 100

Sem IV - E1UA405T - E1UJ402B - E1UA401B - BCAC2201
Computer Networks
General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1)	Differentiate between a router and a gateway.	K1 (2)
2)	Explain ICMP? List all the error reporting message used in ICMP.	K2 (4)
3)	Illustrate the datagram network in detail.	K2 (6)
4)	Describe the services provided by the data link layer in detail.	K3 (9)
5)	Explain distance vector routing (DVR) with working example in detail.	K3 (9)
6)	What is an interconnecting device in internet? Explain various interconnecting devices used in internet with suitable example?	K5 (10)
7)	Identify the various fields used in the format of an email. Explain the architecture of a mailing system.	K4 (12)
8)	Classify in detail about High-level Data Link Control and the types of frames.	K5 (15)
9)	An Internet Service Provider (ISP) has the following chunk of CIDR-based IP addresses available with it: 245.248.128.0/20. The ISP wants to give half of this chunk of addresses to Organization A, and a quarter to Organization B, while retaining the remaining with itself. Give allocations.	K5 (15)
10)	An Ethernet MAC sublayer receives 1510 bytes of data from the upper layer. Can the data be encapsulated in one frame? If not, how many frames need to be sent? What is the size of the data in each frame?	K6 (18)