

# TCOM 515 Midterm Topics/Concepts

Network Addressing

IP subnetting

Autonomous System

Ping and Traceroute

IP Route table

Route table entry

Loopback Interface

Routing Algorithms

Administrative Distance

Convergence

Load Balancing

Authentication

DV and LS comparison

Distance Vector Protocol

- Updates

- Bellman-Ford algorithm

- Count to Infinity

- Routing by Rumor

- Simple Split Horizon and Split Horizon with poison reverse

Link State Protocol

- Hello Protocol

- Updates

- Neighbors

- SPF algorithm

IGP/EGP

Directly connected routes

Static routes

- Egress Interface

- Next Hop IP address

RIP

- Packet types

- Metric-hops

- Updates

- Timers

OSPF

- Packet types

- Neighbors

- Adjacency process

- LSAs – type, purpose and flooding scope

- Link State Database

- Timers

- Areas – type and purpose

- Routers – type and purpose

- Path Types

- Router ID

- Metric – Cost

- SPF Algorithm

- DR/BDR

Router Output and Configuration

- Show IP interface brief

- Show IP route

- Show IP protocol

- Show IP OSPF database

- Show IP OSPF neighbor

- Ping

- Traceroute

- Configuration Modes

- Interface configuration mode

- User Mode

- Enable Mode