MANIPAL INSTITUTE OF TECHNOLOGY

MANIPAL

A Constituent unit of MAHE, Manipal

VI SEMESTER B.TECH. (COMPUTER SCIENCE & ENGINEERING)

END SEM EXAMINATIONS,APRIL/ MAY 2019

SUBJECT: ADVANCED COMPUTER NETWORKS[CSE 4013]

REVISED CREDIT SYSTEM
(30/04/2019)

Time: 3 Hours   MAX. MARKS: 50

Instructions to Candidates:

❖ Answer **ALL** the questions.

❖ Missing data may be suitable assumed.

1A.With diagram explain five types link state advertisements used in OSPF.	5M
1B. Describe different approaches to assign VLAN membership.	3M
1C. Why BGP uses the services of TCP instead of UDP?	2M
2A.With a diagram explain how network virtualization helps in hosting virtual machines from different network zones within a host.	4M
2B.Discuss the different benefits of Application virtualization for an organization.	4M
2C.Compare the following methods which could be used to upgrade the computational facility in one of your computing lab. i) Replace old computers with new ones. ii) Desktop virtualization.	2M
3A.With a diagram explain Internet server farm that support application environments in a typical data center.	5M
3B.With a diagram explain multiple tier application environment in a datacenter.	3M
3C.Explain different challenges presented by DNS round robin based load balancer.	2M
4A.Briefly explain different types of RTCP packets.	5M
4B. Discuss the role of mixers and translators in handling multiple RTP media streams.	3M
4C.Explain how round trip time is calculated in RTCP.	2M
5A.With diagram explain SIP proxy and SIP redirect operations.	5M
5B. Discuss the different possible layer 2 attacks in a data center.	3M
5C. Explain the Layer-4 load balancing technique.	2M