Roll No. ☐☐☐☐☐☐☐☐☐☐☐   **Total No. of Pages : 02**

Total No. of Questions : 18

B.Tech. (ECE)   (Sem.–5)
ROUTING AND SWITCHING
Subject Code : BTEC-905A-18
M.Code : 78707

Time : 3 Hrs.   **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :
1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

Write briefly :

1)   Define autonomous systems.

2)   What is the difference between router and switch?

3)   What is Generic VLAN Registration Protocol?

4)   What is ADSL Internet service?

5)   Define DHCP.

6)   What are the services offered by network layer?

7)   What is distance vector Routing?

8)   What is the difference between dynamic IP and static IP addressing?

9)   Explain the addressing used in data link layer.

10) What is OSPF?

SECTION-B

11) Briefly explain the various fields of IPV6 address format.

12) Explain the term Authentication, Authorization and Accounting (AAA) used in network security.

13) What is DSL and ADSL? Explain the principle of establishing DSL/ADSL networks with PPPoE.

14) What is network address translation? Explain translation method in brief.

15) What is Generic Routing Encapsulation? How does it work?

SECTION-C

16) What is the difference between link state and distance vector routing protocol? Explain the steps involved in both types of routing protocol.

17) What are the services provided by application layer? Explain FTP and SMTP application layer protocol in detail.

18) Write a short notes on the following :

   a) VRP operating system image management.

   b) Bridging Enterprise Networks with Serial WAN Technology.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.