

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA – SEMESTER – 5 • EXAMINATION – SUMMER 2018

Subject Code: 2650010

Date: 09-May-2018

Subject Name: Advanced Networking (AN)

Time: 10.30 am to 1.00 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Explain: ARP Message Format with proper diagram. **07**
(b) Explain: Universal Identifiers with proper examples. **07**
- Q.2** (a) Explain: IPv4 Datagram Format with proper descriptions. **07**
(b) Explain following terms: **07**
a) PADDING field in IPv4 b) TIME TO LIVE field in IPv4
c) Extension Header in IPv6
- OR**
- (b) General form of IPv6 Datagram Format with explanation **07**
- Q.3** (a) Explain: Next Hop Forwarding and its advantages. **07**
(b) Explain: DHCP Address Acquisition States. **07**
- OR**
- Q.3** (a) Draw and Explain Format of Echo Request and Echo Reply **07**
(b) Explain: ICMP Message Delivery **07**
- Q.4** (a) Explain: Error Reporting v/s Error Correction **07**
(b) Explain: UDP Message Format **07**
- OR**
- Q.4** (a) Explain: UDP Encapsulation and UDP Pseudo Header. **07**
(b) Explain following terms: **07**
a) UDP Multiplexing b) Acknowledgement
c) Retransmission d) Timer Backoff
e) Private Network f) NAT
g) 32 bit Address
- Q.5** (a) Write a short note on SMTP. **07**
(b) Explain MIME Extension for Non-ASCII Data **07**
- OR**
- Q.5** (a) Explain Following Terms: (Any 7) **07**
a) Post Office Protocol
b) Privacy of Confidentiality
c) Real Time Control Protocol
d) Traffic Engineering
e) Data Integrity
f) Intra pipe line communication
g) Firewall
- (b) Explain: Importance of Communication **07**
