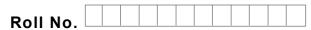


www.FirstRanker.com

www.FirstRanker.com



Total No. of Pages : 02

Total No. of Questions: 09

#### MCA (2014 Batch) (Sem.-2) DATA COMMUNICATION AND NETWORKS Subject Code : MCA-204 M.Code: 26055

Time: 3 Hrs.

Max. Marks: 100

#### **INSTRUCTION TO CANDIDATES :**

- 1. SECTIONS-A, B, C & D contains TWO questions each carrying TWENTY marks each and students has to attempt any ONE question from each SECTION.
- SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY 2. marks in all.

#### **SECTION-A**

- Q1 a) Discuss different switching techniques of data communication.
  - b) What are wireless networks? Explain the concept of Internetworks. ch 6: Net
- O2 Write a short notes on the following :
  - a) Twisted pair
  - b) Transport layer of OSI
  - c) ATM
  - d) Satellite Communication

#### **SECTION-B**

- Q3 a) What is meant by error control? Why is it required? Explain.
  - b) Discuss the services offered by IEEE 802.4 and IEEE 802.5 standards.
- Q4 What are limited contention protocols? Discuss wireless LAN in detail.

1 M-26055



www.FirstRanker.com

www.FirstRanker.com

#### **SECTION-C**

- Q5 a) Differentiate Hierarchical and shortest path routing.
  - b) What is meant by IP protocol? Explain its working in detail.
- Q6 Explain the following :
  - a) ARP
  - b) Token Bucket Algorithm
  - c) Traceroute
  - d) Ping

#### **SECTION-D**

- Q7 a) Discuss the concept of flow control at transport layer.
  - b) Discuss the working of UDP protocol in detail.
- Q8 Explain the following by taking suitable example :
  - a) Email
  - b) HTTP and HTTPS

# SECTION-E

### **Q9** Write briefly :

- a) What is World Wide Web?
- b) Name the different layers of TCP/IP model.
- c) Discuss briefly about fiber optics communication.
- d) Why is logical link layer required?
- e) Comment on "channel allocation".
- f) Describe the services offered by MAC layer.
- g) Enlist any two issues of Flooding algorithm.
- h) How is troubleshoot provided by netstat?
- i) Discuss two features of TCP.
- j) Name any two protocols at Application layer of TCP/IP model.

## 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.

**2** M-26055

#### www.FirstRanker.com