

Enrolment No:

**KADI SARVA VISHWAVIDYALAYA'S  
LDRP INSTITUTE OF TECHNOLOGY AND RESEARCH, GANDHINAGAR  
DEPARTMENT OF ELECTRONICS AND COMMUNICATION  
B.E. 6<sup>th</sup> SEMESTER  
MID SEMESTER EXAMINATION MARCH-2015**

Subject Code: EC-606

Subject: Data Communication and Networking

Date: 05/03/2015

Branch: EC

Total Marks: 30

Time: 12.00 to 01.30 PM

---

**Instructions:** - All questions are compulsory.  
- Figures to the right indicate full marks.  
- Make suitable assumption, wherever necessary.

---

**Q.1 (A) Draw the TCP/IP and OSI Reference Model. Explain Comparison between TCP/IP and OSI Reference model. (05)**

**Q.1 (B) Difference between datagram subnet and virtual circuit. (05)**  
**OR**  
**What is Routing algorithm? Explain Properties and types of Routing algorithms**

**Q.2 (A) List the Data Link Layer design issues. What is framing? List all methods used for framing and explain any two methods used for framing in detail. (05)**  
**OR**  
**Explain ATM Reference Model in detail.**

**Q.2 (B) Explain Dijkstra Algorithms. (05)**  
**OR**  
**Explain Hierarchical Routing Algorithms**

**Q.3 (A) Explain the terms: LAN, MAN, WAN, Internet. (05)**  
**OR**  
**Write a short note on Error correcting and detecting codes.**

**Q.3 (B) Explain Congestion Prevention polices. (05)**  
**OR**  
**Explain Comparison between Optical Fiber and Copper wire cable.**

**\*\*\*\*\*All the Best\*\*\*\*\***