MAHATMA GANDHI UNIVERSITY
MCA   DEGREE EXAMINATION
MODEL QUESTION PAPER
(2011 Revised Syllabi)
Fifth Semester
MCA 502 Internet Technology and Distributed Applications
Time : Three hours   Maximum : 75 Marks
Part A
Answer any ten questions.
Each question carries 3 marks.

1.   What is classless addressing?
2.   What is subnetting?
3.   Discuss on ARP
4.   What is interior routing protocol?
5.   What is BOOTP?
6.   What is NAT?
7.   Mention TCP services.
8.   Mention various TCP timers.
9.   Briefly explain DNS.
10.   Briefly explain FTP.
11.   Briefly explain SMTP.
12.   What is RTP?

(**10 x 3 = 30 marks**)

Part B

All questions carry equal marks.

13.   A. With the help of a header format explain each field of Internet protocol version 4.
                              OR
        B. Explain various ICMP messages.
14.   A. Explain RIP.
                              OR
        B. Explain DHCP.

15.   A. With the help of a header format explain each field of TCP.
                              OR
        B. Explain TCP connection management and connection termination.

16.   A. Describe the purpose of DNS protocol in the internet.
                              OR
        B. (i)   Explain the role of SMTP as a mail transfer agent.
           (ii) Discuss the idea of web-based e-mail.

17.   A. (i) Explain how audio and video signals are digitized.
           (ii) Discuss how audio files are compressed.
                              OR
        B. Discuss on Jitter that can be created on a packet switched network when
            transmitting real-time data.   (**5 X 9 = 45 marks**)