Subject Code—2016

M.C.A. (Third Year) EXAMINATION

(Five Year Integrated Course)

INTERNET FUNDAMENTALS

MCA-304

Time : 3 Hours *Maximum Marks : 100*

Note : Attempt any *Five* questions. All questions carry equal marks.

1. Write short notes on the following :

   (a) Search Engine

   (b) Future of IP

   (c) IP Encapsulation

   (d) Fragmentation **20**

2. What is DNS ? Why is it required ? Explain the significance of DNS server. When a DNS server receives a request, what are the possible actions it can take ? **20**

3. (a) What is purpose of FTP ? Discuss the FTP connection mechanism between the client and server. **10**

   (b) How does a web browser work ? Describe the steps involved when a web browser requests for and obtains a web page from a web server. **10**

4. What is the need for dynamic web page ? List the steps involved in retrieval of dynamic web page. Discuss how CGI works at the conceptual level and what is the biggest disadvantage of CGI. **20**

5. (a) Differentiate port and socket with the help of example. **5**

   (b) Describe the broad level features of TCP. What factors make TCP reliable ? **15**

6. (a) Describe the kinds of risks involved in data communication over a network. **10**

   (b) Explain the growth of computer networking and internet in detail. **10**

7. (a) Describe the various layers in TCP/IP in brief. **10**

(b) Explain WAN technologies and routing in detail. **10**

8. Write short notes on the following :

(a) Telnet

(b) Firewall

(c) PING and Tracing a route. **20**