2017-18
M.TECH. AUTUMN (III SEMESTER) EXAMINATION
COMPUTER SCIENCE & ENGINEERING
INTERNET TECHNOLOGIES
CO-607

Maximum Marks: 60
Credits: 04
Duration: Two Hours

Answer all the questions.
Assume suitable data if missing.
Notations used have their usual meaning.

Q.No.  Question                                         M.M.
1(a)   How does audio and video streaming impact network usage? For the newer wireline   [08]
       and wireless networks which networks are best suited for such applications?
1(b)   What are the different types of network topologies? Differentiate among them. What  [07]
       is the difference between a PAN, HAN and SAN? Draw suitable network diagrams
       to support your answer.

OR

1(b')  What is the difference between an ISP and an Internet Data Centre (IDC)? Explain in  [07]
       detail the working of a Content Delivery Network (CDN).
2(a)   Explain about HTTP and its variants in detail. Explain the Listen, Server, Doc Root,
       Concurrency, Home Page, Virtual Hosting, Virtual Mail Hosting options in the
       configuration file.
2(b)   What are the different types of servers used in the Internet/corporate network/ ISP/
       IDC/ IXP? How do they interact with each in a network environment?

OR
2(b') Discuss in detail about TFTP, SMTP, FTP, DNS, telnet, NNTP servers. What port numbers do they operate on? Where are they placed on the internet?

3(a) Discuss in detail about content display on browsers. What are plugins and helper applications?

3(b) How is a regular firewall different from an application layer firewall? Differentiate among L3, L4, and L5-7 firewalls. Cite examples for the same. If you want to block a website or a video file what kind of firewall will be used, explain.

OR

3(b') Compare the different type of browsers: Chrome, Firefox, Internet Explorer, Safari, Netscape, Opera, and Torch. How they are different from text based browsers. Name a text based browser.

4(a) Explain electronic payment systems. What do the terminology B2B, B2C and C2C mean. Explain NEFT, RTGS and IMPS. What are the different type of credit cards issued by banks?

4(b) What do you understand by watermarking? Explain watermarks in digital documents.

OR

4(b') Explain in detail about encryption and decryption. Name a few algorithms for the same. How is it different from steganography?