2018-19
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. C.O.
1(a) Differentiate among HTML, DHTML, VRML, SGML, XML, KML and other [08] 3,4
     markup languages. How do they assist in content preparation?
1(b) What are the different types of Broadband Networks? Discuss the DOCSIS network [07] 1,5
     in detail. What is the difference between DOCSIS and euro-DOCSIS frequencies?

OR

1(b') Draw a suitable Service Provider network and an Enterprise Network. Explain [07] 1
     internetworking between these two networks. What do you understand by
     Autonomous System (AS)?
2(a) What are Content Delivery Networks (CDN)? Explain in detail with the help of [08] 2,5
     suitable network diagrams.
2(b) How does a search engine function? Name a few of the search engines. Differentiate [07] 1,5
     between a regular search engine and a clustering search engine.

OR

2(b') Propose a server farm design for an ISP with the following servers; [07] 1

Cont'd...
HTTP, SMTP, FTP, DNS, DHCP and RADIUS

3(a) What is DNS load balancing? How does it assist in content delivery? [08] 5

3(b) What are browser plugins? How do they assist in the webpages? How are they different from helper applications? [07] 3.4

OR

3(b') Differentiate among 3G, 4G and 5G mobile communication technologies. How is data delivered on these networks to the end user? What are the different frequencies on which these technologies operate? Kindly elaborate. [07] 5

4(a) Discuss in detail online payment systems. What is the difference among credit card, debit card, netbanking, online wallet and UPI payment systems? Who are the entities Visa, MasterCard, American Express and Diners’ Club? [08] 1.5

4(b) With the help of a suitable network diagram discuss in detail the working of a firewall. How are they classified? At what layer of the OSI layer do firewalls operate? [07] 2.5

OR

4(b') What is performance benchmarking the Web? [07] 3.5