ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE-27
M.Sc COMPUTER SCIENCE - I SEMESTER
SEMESTER EXAMINATION: OCTOBER 2018
CS7418: ADVANCED COMPUTER NETWORKS AND NETWORK SECURITY

Time- 2 1/2 hrs   **Max Marks-70**

This paper contains __1_printed pages

Answer any SEVEN questions   **7x10=70**

1. Discuss in detail about the Architecture of TCP/IP.
2. a)What are the various classes of IPv4 addresses?   (7+3)
   b) What is the significant of DNS?
3. a) What is default subnet addressing for different classes?   (5+5)
   b) Explain Bootstrap protocol.
4. a) Explain in detail Mapping Internet Address to Physical Address.   (5+5)
   b) what is the use of ICMP?
5. a) Explain any one routing algorithm in detail.   (5+5)
   b)Explain User datagram protocol.
6. a) Explain Polyalphabetic Substitution method.   (5+5)
   b)Explain Hill Cipher method.
7. What is Asymmetric key cryptography? Discuss RSA algorithm with an example.(2+8)
8. a) Explain Virtual Private Networks.   (5+5)
   b) Write the characteristics of firewalls.
9. Explain Data Encryption Standard.