

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATIONS-2022

M.Tech-II Semester (ECE)

COURSE CODE (CREDITS): 21M11EC213 (3)

MAX. MARKS: 25

COURSE NAME: Network Security Protocols

COURSE INSTRUCTORS: Dr. Sunil Datt Sharma

MAX. TIME: 1 Hour 30 Min

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*Note: All questions are compulsory. Marks are indicated against each question in square brackets.*

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Q1. A cryptographic system, which is being increasingly used to fight off this massive invasion of individual privacy and security, guarantee data integrity and confidentiality, and to bring trust in global e-commerce. Explain the four essential components of this system. (04)

Q2. Write and discuss the steps which are useful to form the digital signature with help of the combination of public-key encryption and a one-way secure hash function. (05)

Q3. Define the tool which is used to protect the private network from bad network. Also, write its two basic security functions and commonly used security policies (06)

Q4. Write the five limitations of firewall which are going to be responsible for the obsolete of this technology and the development of IPSec technology. (05)

Q5. What do you understand by vulnerability and system vulnerability? Discuss four sources of system vulnerabilities. (05)