

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST-2 EXAMINATION-MAY-2023

M.Tech-II Semester (ECE)

COURSE CODE (CREDITS): 21M11EC213 (3)

MAX. MARKS: 25

COURSE NAME: Network Security Protocols

COURSE INSTRUCTOR: Dr. Pardeep Garg

MAX. TIME: 1 Hour 30 Minutes

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

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**Q1.** *The security threats to networks can be because of weaknesses in network infrastructure and communication protocols. Justify this statement considering suitable example.*

[CO-2, 3.5 marks]

**Q2.** The FBI's foreign counter intelligence mission has broadly categorized the security threats into some categories. Discuss these security threat motives.

[CO-2, 3.5 marks]

**Q3.** What is meant by network system vulnerabilities? There exist various sources of system vulnerabilities. Discuss a few of these sources.

[CO-2, 1+4=5 marks]

**Q4.** Authentication plays a significant role to provide security to any network. Define the term authentication. How does it function? Discuss the basic forms of authentication.

[CO-4, 1.5+1.5=3 marks]

**Q5.** Discuss the functioning of authentication method which does not require passwords and user names.

[CO-4, 2.5 marks]

**Q6.** Discuss the basic requirements for developing an authentication policy. [CO-4, 2.5 marks]

**Q7.** Which security standard is designed by Internet Engineering task Force (IETF) to address the inherent lack of security for IP-based networks? Discuss in detail its functioning along with the protocols which are essentially required in it.

[CO-3, 2.5+2.5=5 marks]