


Name:			
Enrolment No:			
<b>UPES</b> <b>Supplementary Examination, December 2023</b>			
<b>Course: IT Systems Security &amp; Physical Security</b> <b>Program: B. Tech (CSE+CSF)</b> <b>Course Code: CSSF 2009</b>		<b>Semester: III</b> <b>Time : 03 hrs.</b> <b>Max. Marks: 100</b>	
<b>Instructions: Draw clear diagrams wherever necessary.</b>			
<b>SECTION A</b> <b>(5Q x 4M = 20 Marks)</b>			
S. No.		Marks	CO
Q 1	Mention the steps of fire inspection process and fire suppression techniques?	4	CO1
Q 2	There is a lot of buzz around Endpoint Detection and Response. The legacy user system security market traditionally has been dominated by large anti-virus vendors. Differentiate between End Point Protection and Antivirus with examples.	4	CO1
Q 3	Physical security audit usually involves visual inspection of sites which helps to determine how well the security measures are working. As per your understanding, what are the points of concern for Physical Security Auditors?	4	CO2
Q 4	Databases store critical information which is uploaded or submitted by web users for retrieval and access. What are the main aspects involved in Database Security?	4	CO3
Q 5	The CIA Triad is a well-known, venerable model for the development of security policies used in identifying problem areas, along with necessary solutions in the arena of information security. Discuss the importance of the CIA Triad around your day-to-day work?	4	CO4
<b>SECTION B</b> <b>(4Q x 10M = 40 Marks)</b>			
Q 6	User processes performing malicious task equates to application and program level threats and attacks. Mention at least five application threats.	10	CO2

Q 7	Due to the crucial role of an Operating Systems in functioning of any computer system, the security (or lack of security) has fundamental impact to the overall security of the computer system, including application and data security within the system. Discuss the threats faced by Windows Operating Systems.	10	CO3
Q 8	System Port numbers range from 0 to 65535, however only 0 to 1023 are reserved for privileged services and designated as well-known ports. <ul style="list-style-type: none"> <li>• Explain the terms - Ports and Sockets?</li> <li>• What are the major tasks of an Operating System?</li> <li>• What are the different models of securing an OS?</li> <li>• Give examples of Windows, Linux, Mobile and Server OS.</li> </ul>	10	CO1
Q 9	Businesses are constantly at risk of theft, particularly when their physical assets aren't fully secure. The best way to keep threats and thieves at bay is to break down security into layers. Explain the layers of Physical Security.  <b>OR</b>  Servers are central repository to hold information and system programs accessed by users within the network. Web Servers and Application Servers are employed to deliver sites and deliver operations between users and back-end business applications of the organization. Compare and differentiate between Web Servers and Application Servers with examples.	10	CO1
<b>SECTION-C</b> <b>(2Q x 20M = 40 Marks)</b>			
Q 10	Secure System Development Lifecycle involves processes and procedures to enable development teams to create software and applications that can significantly reduce security risks, eliminate security vulnerabilities, and reduce costs. <ul style="list-style-type: none"> <li>• Explain all the phases of Secure System Development Lifecycle.</li> <li>• If you were the IT Head, how would you implement Security Controls for Data and IT Operations?</li> </ul>	20	CO4
Q 11	Illustrate with examples the difference between the outer and the inner layers of Physical Security as compared with IT Security.  <b>OR</b>  Discuss the security threats related to Mobile, Application and Database in today's world. What is the impact and what do these threats lead to?	20	CO5