



<b>Name:</b>			
<b>Enrolment No:</b>			
<b>UPES</b> <b>End Semester Examination, Dec. 2023</b>			
<b>Course: Information Security Fundamentals</b>		<b>Semester : V</b>	
<b>Program: B.Tech- CSE (H + NH) All Specializations</b>		<b>Time : 03 hrs.</b>	
<b>Course Code: CSSF 3018P</b>		<b>Max. Marks: 100</b>	
<b>Instructions: All Questions are compulsory. Please attempt the questions in a serial order.</b>			
<b>SECTION A</b> <b>(5Qx4M=20Marks)</b>			
<b>S. No.</b>		<b>Marks</b>	<b>CO</b>
Q 1	Discuss the CIA triad using a suitable example.	4	CO1
Q2	List down the various components of information security with a brief description of each of them.	4	CO1
Q3	What do you understand by Digital Signatures? Write down benefits of Digital Signatures.	4	CO2
Q4	Draw the physical security model while narrating its purpose(s) and objective(s).	4	CO3
Q5	List down the critical characteristics of information.	4	CO2
<b>SECTION B</b> <b>(4Qx10M= 40 Marks)</b>			
Q6	Distinguish among the Preventing, Averting, Damage Reducing, and Recovering.	10	CO2
Q7	State the purpose of steganography. Briefly describe each of its types.	10	CO2
Q8	Discuss the various threats at network layer.	10	CO3
Q9	Elaborate the essential firewall characteristic and vulnerabilities with suitable examples.  OR Explain the host hardening.	10	CO4
<b>SECTION-C</b> <b>(2Qx20M=40 Marks)</b>			
Q10	Illustrate the working of the DES algorithm through an example of your own choice.  OR Describe AES algorithm using a suitable example.	20	CO2

Q11	Write short notes on the following: a) Log Generation and Storage b) Governance, Risk & Compliance c) Data aggregation and reduction d) Information Security Audit Process	<b>5 x 4 = 20</b>	<b>CO5</b>
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