

University of Mumbai  
Program: Computer Engineering  
Curriculum Scheme: Rev2016  
Examination: FinalYear Semester: VII

Course Code: CSDLO7031  
Time: 2 hours 30 mins

Course Name :Adv. System Security and Digital Forensics  
Max. Marks: 80

Q1. All questions compulsory 2 marks each (20 Marks)

Q1.	User works in a company and the company decides how data should be shared is _____ type of access control mechanism
Option A:	MACs (Mandatory Access Control)
Option B:	RBACs (Role Based Access Control)
Option C:	LBACs (List Based Access Control)
Option D:	DACs (Discretionary Access Control)
Q2.	What is the Strong Star Property Rule in Bell-La –Padula (BLP) model?
Option A:	The subject with the same clearance as the object can read and write to the object.
Option B:	The object with the same clearance level as the subject can write to the subject.
Option C:	The subject cannot read to the object.
Option D:	The object cannot read or write to the subject
Q3.	This is not level in classification in BIBA/ BLP model
Option A:	Top Secret
Option B:	Secret
Option C:	Confidential
Option D:	Classified
Q4.	A type of the attack where state or condition is changed between the time the security was checked and the access of the resource is known as
Option A:	Linearization attack
Option B:	Covert Channel

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Option C:	Race Conditions
Option D:	Salami Attack
Q5.	A type of the virus which changes its type and signature.
Option A:	Non-resident virus
Option B:	Boot Sector Virus
Option C:	Polymorphic Virus
Option D:	Memory Virus
Q6.	Which of the following is not example of a web service security (WS-Sec) token
Option A:	A Kerberos ticket
Option B:	A signature algorithm
Option C:	A username and password
Option D:	An X.509 certificate
Q7.	This is not the type of the file permission in Unix/ Linux system.
Option A:	Owner Permission
Option B:	Group Permission
Option C:	Other permissions
Option D:	User
Q8.	Which types of VPNs are used for creating a virtual tunnel between an employee's device and the company's network?
Option A:	Remote access VPNs
Option B:	Site-to-site VPNs
Option C:	Peer-to-Peer VPNs

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Option D:	Country-to-country VPNs
Q9.	The MAC computed in UMTS is used to
Option A:	Authenticate the base station to the SIM card
Option B:	Authenticate the SIM card to the base station
Option C:	Authenticate the MSC/HLR to the SIM card
Option D:	Authenticate the SIM card to the MSC/HLR
Q10.	What is called as the process of creation of a duplicate of digital media for purpose of examining it?
Option A:	Acquisition
Option B:	Steganography
Option C:	Live analysis
Option D:	Hashing.

Q2. (20 Marks)	Solve any Two Questions out of Three	10 marks each
A	a. Explain access control policies in detail. b. Describe the concepts of covert channel in detail.	05 marks 05 marks
B	Describe session hijacking in detail.	
C	Explain salami attack and linearization attack	

Q3. (20 Marks)	Solve any Two Questions out of Three	10 marks each
A	Explain bell-La Padula model with a neat diagram.	
B	Write a short note on program and Operating System security.	

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C	Explain possible attacks on wireless LAN in detail.
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Q4. (20 Marks)	Solve any Two Questions out of Three	10 marks each
A	Explain incident response methodology with diagrams.	
B	Explain in details wireless security offered by 802.11 with neat diagram	
C	Describe copyrights and intellectual property in detail.	