

B.E. / B.Tech. - DEGREE EXAMINATIONS, APRIL / MAY 2023

Sixth Semester

Computer Science and Business Systems
20CBPC602 – INFORMATION SECURITY

(Regulations 2020)

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

	<i>Marks, K-Level, CO</i>
1. Define Threats.	2,K1,CO1
2. What are the goals of security?	2,K1,CO1
3. List out the following rules control the way objects are labeled.	2,K1,CO2
4. Relate the concepts of formal evaluation methodology.	2,K2,CO2
5. Define autonomous agent.	2,K1,CO3
6. Recall issuance policy.	2,K1,CO3
7. What are access control file permissions?	2,K1,CO4
8. Define indirect alias.	2,K1,CO4
9. Define Database Security.	2,K1,CO5
10. What are the two violations for threatening system security?	2,K1,CO5

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11. a) (i) Explain Laws and Customs.	6,K2,CO1
(ii) Explain the process of Risk analysis.	7,K2,CO1
OR	
b) Discuss about the role of Confidentiality and Availability in Information Security.	13,K2,CO1
12. a) Explain Certification Rule and Enforcement rule in Clark-Wilson model.	13,K2,CO2
OR	
b) Outline the Life Cycle of Building Secure and Trusted Systems.	13,K2,CO2

13. a) Build an intrusion detection system which is also an automated auditing mechanism with architecture diagram. 13,K3,CO3

OR

b) Illustrate the Naming and Certificates with example. 13,K3,CO3

14. a) Classify threats with authorized and unauthorized users accessing role accounts. 13,K2,CO4

OR

b) Explain policy development with the goals of Drib's Security policy. 13,K2,CO4

15. a) Identify the analysis of security in linux / windows using admin access, automated functions, application security, flexibility and configurability. 13,K3,CO5

OR

b) Explain the concepts of operating system security. 13,K3,CO5

PART - C (1 × 15 = 15 Marks)

16. a) Explain Vulnerability classification with the goals of vulnerability analysis to develop methodologies. 15,K2,CO3

OR

b) Extend the process of covert channels with example. 15,K2,CO2