22	P340 (Pages: 2)	Name:
44	(1 ages. 2)	
Reg.No:		
THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2023 (CBCSS - PG)		
(Regular/Supplementary/Improvement)		
CC19P CSS3 E02c - CRYPTOGRAPHY AND NETWORK SECURITY		
(Computer Science)		
(2019 Admission onwards)		
Tim	e: 3 Hours	Maximum: 30 Weightage
Part-A		
Answer any four questions. Each question carries 2 weightage.		
1.	Explain the Triple DES algorithm.	
2.	Explain encryption with private key and public key.	
3.	Describe Public-Key Certificates.	
4.	Describe Federated Identity Management.	
5.	Explain TLS Alert Codes.	
6.	Discuss the different classes of intruders.	
7.	Explain Digital Immune System.	
		$(4 \times 2 = 8 \text{ Weightage})$
Part-B		
Answer any <i>four</i> questions. Each question carries 3 weightage.		
8.	Describe security attacks with neat figures.	
9.	Illustrate Fiestel cipher structure.	
10.	Illustrate One -Way hash function.	
11.	Explain Diffie-Hellman Key Exchange.	
12.	Explain applications, services and benefits of IPsec.	
13.	Describe Top-Level format and Substructure of payload used in ESP.	
14.	Discuss the need and characteristics of firewalls. Also Explain packet filt	ering firewall.

Part-C

 $(4 \times 3 = 12 \text{ Weightage})$

Answer any two questions. Each question carries 5 weightage.

15. Discuss Cipher Block modes of operation.

- 16. Discuss Kerberos version 4 in detail.
- 17. Describe SSL Protocol Stack and Handshake Protocol with figure.
- 18. Discuss DMZ and VPN.

 $(2 \times 5 = 10 \text{ Weightage})$
