M.Sc. (CS) (Sem-II)

July-2023

Computer Science: Paper III - Elective I- Cyber & Information Security (Network Security).

(2 ½ Hours) [Total Marks: 60]

- **N.B:** (1) All questions are compulsory.
 - (2) Figures to the right indicate full marks.
 - (3) Assume additional data if necessary but state the same clearly.
 - (4) Symbols have their usual meanings and tables have their usual standard design unless stated otherwise.
 - (5) Use of calculators and statistical tables are allowed. / If required keep it.

Q.1	Attempt <u>any two</u> of the following	(12)
a)	What is Threat? Explain its type	6
b)	Give the security goals of computer security.	6
c)	Write a short note on Access Control List (ACL).	6
d)	What are monitors? Explain different types of monitor.	6
Q.2	Attempt any two of the following	(12)
a)	Write short note on Packet Filter firewall.	6
b) _	Write a short note on Web Server Security.	6
c) _^×	What is IPS? Give its type.	6
d)	Write a short note on Kerberos.	6
Q.3	Attempt any two of the following	(12)
a) 🥥	Write a short note on OS-Level Virtualization.	6
b)	Explain ESX file system security.	6
c)	What do you mean by user authentication in Cloud?	6
d)	Write a short note on Access control in cloud.	6
Q.4	Attempt any two of the following	(12)
a) 6	Explain GSM Architecture.	6
b)	What are different Vulnerabilities in Cellular Services?	6
c)	Explain the security mechanism used in Wireless Networking.	6
d)	Give different types of attack against ZigBee.	6
Q.5	Attempt any two of the following	(12)
a)	How the Database security is implemented?	6
b)	Explain the concept of Secure Electronic Transaction (SET).	6
c)	Enlist the security risk associated in cloud computing.	6
d)	State the features of UMTS security.	6