

**MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL**

Paper Code : PEC-CS702E Cyber Security

Time Allotted : 3 Hours

Full Marks :70

The Figures in the margin indicate full marks.

Candidate are required to give their answers in their own words as far as practicable

Group-A (Very Short Answer Type Question)

1. Answer any ten of the following :

[1 x 10 = 10]

- (I) "Cyberspace" was coined by _____.
- (II) Which is the oldest techniques used by hackers for phone hacking to make free calls?
- (III) An attempt to steal, spy, damage or destroy computer systems, networks, or their associated information is known as _____.
- (IV) The Code Red is a sort of a _____.
- (V) Give an example of physical hacking.
- (VI) What is the existence of weakness in a system or network is known as?
- (VII) Which independent type of malicious program does not require any host program?
- (VIII) What are Trojan-Horse programs?
- (IX) When there is an excessive amount of data flow, which the system cannot handle, _____ attack takes place.
- (X) A _____ can be a hardware device or a software program that filters all the packets of data that comes through a network, the internet, etc.
- (XI) The Hacker who did break the SIPRNET system is _____.
- (XII) A cyber-criminal or penetration tester uses the additional data that stores certain special instructions in the memory for activities to break the system. Name the type of attack.

Group-B (Short Answer Type Question)

Answer any three of the following

[5 x 3 = 15]

1. Discuss Security Architecture. [5]
2. Mention the difference between symmetric and asymmetric encryption. [5]
3. Write the steps to analyze the E-Mail Application's security vulnerabilities. [5]
4. What is a response code? List them. [5]
5. Discuss matrix mining. [5]

Group-C (Long Answer Type Question)

Answer any three of the following

[15 x 3 = 45]

7. With a diagram, explain handshake protocol action. Explain SSL protocol stack. [10+5]
8. Discuss security policy database. With a neat diagram, explain IP traffic processing. [5+10]
9. Explain the different Threats to Information System? What do you mean by Information Assurance ? [10+5]
10. What do you mean by packet filtering in Firewall? Explain Firewall and working of Firewall? Explain the need to take Backup? [4+5+6]
11. Elaborate: "Cyber crime play a vital role against person, property and govt. to protect all valuable information and rights". [15]

*** END OF PAPER ***