

P P SAVANI UNIVERSITY

Second Semester of M.Sc. CS. Examination

June 2020

SSCS7051 Cyber Security

15.06.2020, Monday

Time: 10:00 a.m. To 12:30 p.m.

Maximum Marks: 60

Instructions:

1. The question paper comprises of two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

SECTION - I

- Q - 1 Answer the following (Any Five) [05]**
- (i) Explain the term Cyber Security in one statement.
 - (ii) What is the full form of DoS and DDoS?
 - (iii) A network of zombies is called _____
 - (iv) Virus multiply themselves. State true or false.
 - (v) What is cyber hooliganism?
 - (vi) What do you mean by shoulder surfing and dumpster diving?
 - (vii) Write one example of active and passive attacks.
- Q - 2 (a) After increasing demands of security, along with availability of resources – why is security still not a priority? Justify [05]**
- Q - 2 (b) What is the difference between corporate cybersecurity and national cybersecurity? [05]**

OR

- Q - 2 (a) Explain the importance of C.I.A triangle. [05]**
- Q - 2 (b) What are the components of information system breach? [05]**
- Q - 3 (a) What is access vs. security balance? How access and security are provided? [05]**
- Q - 3 (b) Write a short note on public key, private key and quantum cryptography. [05]**
- ### OR
- Q - 3 (a) What do you mean by the terms Hacktivism and cyber espionage? [05]**
- Q - 3 (b) What are the differences between virus, worms, trojans and bot. [05]**
- Q - 4 What are the types of cyber-attacks? Explain each in detail. [05]**

SECTION - II

- Q - 1 Answer the following (Any Five) [05]**
- (i) What is the full form of IDS?
 - (ii) What is the full form of CTI?
 - (iii) What is the full form of SSL?
 - (iv) False Positive gives the correct result. State true or false.
 - (v) Passive intrusion detection systems are more efficient than active. State true or false.
 - (vi) What is vulnerability?
 - (vii) What does R in IRT stands for?
- Q - 2 (a) What are honeypots? How are they useful? [05]**
- Q - 2 (b) What are passive and active intrusion detection system? [05]**
- ### OR
- Q - 2 (a) What is the difference between signature and anomaly-based intrusion detection system? [05]**
- Q - 2 (b) What is true positive, true negative, false positive and false negative? [05]**
- Q - 3 (a) What is the use of digital certificates? Name one organization that issues digital certificates? [05]**

Q - 3 (b) 'We could do encryption without integrity protection but that would be wrong, that's for sure' – Justify. [05]

OR

Q - 3 (a) Explain the three scenarios of IPsec with diagrams. [05]

Q - 3 (b) What are the objectives of cyber law [05]

Q - 4 What are the web service security elements? Explain any one in detail. [05]
