

Term End Examination – December, 2017
Program Title: Diploma in Cyber Security
Course Title: INFORMATION SECURITY
Course Code: DCS-03
(Session 2016-17)

Time - 3 Hours

Full Mark - 100

*Answer any **four** questions from Group - 'A', any **two** questions from Group - 'B' and any **three** questions from Group - 'C'.*

Group 'A'

Mark: 5 × 4 = 20

*(Answer any **four** questions each within 100 words)*

Q. No. 1

- a) Define Information Security. Mention its three goals.
- b) Define the term Integrity. What are the attacks on Integrity?
- c) Identify different types of active attacks.
- d) What do you mean by snooping? Give an example.
- e) Differentiate between a threat and an attack.
- f) What is email spoofing? Explain its effects.
- g) What is a phishing attack? Give an example of it.
- h) Define the terms plain text and cipher text.

Group 'B'

Mark: 10 × 2 = 20

*(Answer any **two** questions each within 250 words)*

Q. No. 2

- a) Define Cryptanalysis. List different Cryptanalytic attacks.
- b) Differentiate between Public-Key Cryptography and Private – Key Cryptography.
- c) Differentiate between Threat, vulnerabilities and risks with an example of each.
- d) List and briefly explain the categories of security services.
- e) Explain RSA algorithm with the help of an example.

Group 'C'

Mark: 20 × 3 = 60

*(Answer any **three** questions each within 500 words)*

Q.No.3. Define active and passive Attacks? Classify the types of active and passive attacks. Why are they difficult to detect? Name some passive attacks.

Q.No.4. Discuss the encryption using Play-Fair technique with an example. What are the limitations of it?

Q.No.5. What do you mean by Cyber Crime? Discuss different kinds of Cyber Crimes?

Q.No.6. What is hacking? Who is a Hacker? What are the different types of Hackers?

Q.No.7. Discuss the types of attacks on principal security goals.

Q.No.8. What is an Antivirus Software? Discuss the methods of detection of virus that the antivirus software uses.
