

Term End Examination - June, 2017
Diploma in Cyber Security
DCS-03: INFORMATION SECURITY (2016 Syllabus)

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) Mention the three important goals of Information Security.
- b) What is an antivirus? Why is it necessary?
- c) Name and explain the security attacks on Integrity.
- d) What is phishing? Give an example.
- e) What is a spyware? Give example of a spyware.
- f) Define Confidentiality. State different attacks on it?
- g) What is an Intrusion Detection System?

Group 'B'

Mark: 10 × 2 = 20

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

Q. No. 2

- a) Explain the principal components of a Public Key Cryptography.
- b) Explain the CIA Triad of Information Security.
- c) Differentiate between threats and attacks.
- d) What requirements should a digital signature scheme should satisfy?
- e) What are different ways of hacking? Explain.

Group 'C'

Mark: 20 × 3 = 60

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

- Q.No.3. What are active and passive attacks? Identify different categories of active and passive attacks. Differentiate between active and passive attacks?
- Q.No.4. Discuss the classical encryption technique 'Caesar Cipher' with an example. What are the limitations of it?
- Q.No.5. What are different types of Cyber Crimes. What are different reasons for commission of Cyber Crimes?
- Q.No.6. Discuss the major security threats on Information Security.
- Q.No.7. What is a Malware? Discuss different types of Malware.
- Q.No.8. Who is a Hacker? What are the different techniques used for hacking?