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# **BSc DEGREE (CBCS) EXAMINATION, FEBRUARY 2020**

## **Fifth Semester**

B.Sc Computer Science Model III

# Core Course - CC5CRT05 - COMPUTER SECURITY

2017 Admission Onwards

### 877B8EC9

Time: 3 Hours Maximum Marks :80

#### Part A

Answer any ten questions.

Each question carries 2 marks.

- 1. Which are the critical characteristics of Information?
- 2. What are the various types of malware? How do worms differ from viruses?
- 3. What are the two general approaches to attacking a cipher?
- 4. Explain with example, keyless transposition cipher.
- 5. How do conventional and public key encryption differ?
- 6. Define IDPS.
- 7. Explain application protocol verification in NIDPS.
- 8. Compare the header fields 'Content Type' and 'Content-Transfer-Encoding' in MIME.
- 9. Why does ESP include padding field?
- 10. List any four threats which compromise the integrity on the web.
- 11. What is the purpose of dual signature.
- 12. List any three design goals of a firewall.

 $(10 \times 2 = 20)$ 



Page 1/2 Turn Over

#### Part B

#### Answer any **six** questions.

## Each question carries 5 marks.

- 13. Expain the needs of Security.
- 14. Differentiate mono alphabetic and polyalphabetic ciphers.
- 15. Use Playfair cipher with key COMPUTER to encrypt the message CRYPTOGRAPHY?
- 16. Explain the encipherment process in Vigenere cipher.
- 17. Explain the purpose of using an IDPS.
- 18. List the applications of IP Security.
- 19. Describe how AH provide authentication.
- 20. Write shortnotes on various SSL Protocols.
- 21. Write shortnotes on Packet Filtering Routers.

 $(6 \times 5 = 30)$ 

#### Part C

Answer any two questions.

Each question carries 15 marks.

- 22. State and explain the principles of public key encryption.
- 23. Explain different countermeasures for securing a password.
- 24. Explain the architecture of IPsec with a neat diagram.
- 25. Explain about SSL architecture and Transport Layer Security in details.

 $(2 \times 15 = 30)$ 

