

VI Semester B.Voc. Examination, September 2020 (CBCS) (2018-19 and Onwards) (Repeaters) INFORMATION TECHNOLOGY

Paper – 603: Cryptography and Network Security

Time: 3 Hours

Max. Marks: 70

Instruction : Answer all the Sections.

SECTION - A

Answer any ten questions. Each question carries two marks.

 $(10 \times 2 = 20)$

1. What is steganography?

2. What is cryptography?

3. What is the block size of MD5?

BMSCW LIBRARY 4. Classify different security mechanism.

- 5. Write a brief note on access control.
- Define integrity and non-repudiation.
- 7. Define crypt analysis.
- 8. What is data integrity?
- 9. Define cipher text with an example.
- 10. What is Brute force attack?
- 11. Define S/MIME.
- 12. Define message padding.

SECTION - B

Answer **any five** guestions. **Each** guestion carries **ten** marks.

 $(5 \times 10 = 50)$

13. a) Find the GCD of (2790, 1700) using Euclidian algorithm.

5

b) Define transposition cipher, with an example.

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14.	a) With neat diagram, explain the general structure of DES.	5
	b) Compare SSL and TLS protocols.	5
15.	a) Write a note on PGP services.	5
	b) Explain Tunnel mode of IP sec.	5
16.	a) Explain the model of conventional ecosystem.	5
	b) Explain shift ROW transformation.	5
17.	a) Explain the four stages of AES algorithm.	5
	b) Draw the block diagram of DES algorithm, explain briefly.	5
18.	a) Explain RSA algorithm with an example.	5
	b) Explain Fermat's theorem of primality test.	5
19.	a) Explain cipher feedback mode	5
	b) Explain min column transformation	.
20.	 a) Explain cipher feedback mode. b) Explain min column transformation. a) Explain X 509 certificate. 	5
•	b) Write a short note on whirlpool hash function.	5