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Reg. No.	
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# VI Semester B.Voc. (IT) Degree Examination, September - 2021 INFORMATION TECHNOLOGY

## Cryptography and Network Security (CBCS Scheme)

Time: 3 Hours

Maximum Marks: 70

## Instructions to Candidates:

Answer all sections.

### **SECTION-A**

Answer any **TEN** questions.

 $(10 \times 2 = 20)$ 

- 1. State Network Security Goals.
- Write the primary functions of cryptography. 2.
- 3.
- What is one time pad?
  What are the variants of Vigenere cipher? 4.
- 5.
- 6. What is Modular Arithmetic?
- 7. Define Caesar cipher.
- 8. Define composite number. Give example.
- 9. Write the usage of change cipher spec protocol.
- 10. Draw the IPV6 ESP datagram Format in Transport mode.
- 11. Define ISAKM.
- **12.** Define steganography

#### **SECTION - B**

Answer any FIVE questions.  $(5 \times 10 = 50)$ 13. Explain the working principle of DES Algorithm with example. (10)Explain Elliptic curve cryptosystem with example? 14. (10)15. Explain Digital signatures in detail. (10)

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16.	a.	Explain PGP in detail.	(5)	
	b.	Explain IPsec protocols.	(5)	
17.	a.	Write a note on security Attacks.	(5)	
	b.	Discuss on security Engineering.	(5)	
18.	a.	Explain Rabin cryptosystem.	(5)	
	b.	Explain SHA - 512	(5)	
19.	a.	Write a note on information security services.	(5)	
	b.	Describe security Association.	(5)	
20.	a.	Write a note on key management.	(5)	
	b.	Explain Transpositional Cipher.	(5)	
		Write a note on key management.  Explain Transpositional Cipher.  Characteristics of the control		
		ABY		