

Roll No. : .....

Total No. of Questions : 16 ]

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# **SEM-3025**

**M.Sc. (IIIrd Semester) Examination, 2022**

## **CYBER SECURITY**

Paper - MCSEC-302

**(Biometric Security)**

*Time : 3 Hours ]*

*[ Maximum Marks : 40*

The question paper contains three Sections.

### **Section-A**

**(Marks : 1 × 10 = 10)**

*Note :-* Answer all the *ten* questions carries 1 mark each. The answer should not exceed 50 words.

### **Section-B**

**(Marks : 3 × 5 = 15)**

*Note :-* Answer any *five* questions by selecting at least *one* question from each Unit. Each question carries 3 marks. Answer should not exceed 200 words.

### **Section-C**

**(Marks : 5 × 3 = 15)**

*Note :-* Answer *three* questions by selecting *one* question from each Unit. Each question carries 5 marks. The answer should not exceed 500 words.

### **Section-A**

1. (i) Define Biometric.

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- (ii) Write names of any *four* types of biometric systems.
- (iii) What is DNA ? Define it.
- (iv) Write one weakness of Retina Biometric.
- (v) Give any *five* applications of biometric in our day-to-day life.
- (vi) What do you understand by Behavioural Biometric ?
- (vii) What do you understand by Keystroke ?
- (viii) Define Physiological Biometrics.
- (ix) Can voice of a person be useful as Biometric ? Explain how ?
- (x) What are the key criteria to select a Biometric method ?

### **Section-B**

#### **Unit-I**

- 2. What are the benefits of biometrics over traditional authentication system ?
- 3. What do you understand by Accuracy of Biometric System ? How one can say that a biometric system is more accurate than traditional methods ?
- 4. Write a detailed note on applications of Biometric Identification.

#### **Unit-II**

- 5. Explain strengths and weaknessess of Fingerprints Biometric systems.
- 6. Is there any difference between Iris scan and Retina vascular scan ? Explain.
- 7. Explain the usefulness of DNA Biometric.

#### **Unit-III**

- 8. Can signature of a person be a Biometric system for identification ? Explain how ?
- 9. How voice data acquisition and feature extraction can be done ? Write strength and weaknesses of voice biometric system.
- 10. Write a detailed note on Multifactor Biometrics.

## **Section–C**

### **Unit–I**

11. Explain the various biometric matching methods. How modern biometric systems are useful than traditional ones ?
12. Explain complete process of Biometric Identification.

### **Unit–II**

13. Explain Facial Scan Identification System in detail.
14. Explain hand scan biometric system in detail. Is it different from Handprint biometric system ?

### **Unit–III**

15. Explain DNA biometric, its process, advantages and disadvantages.
16. Write short notes on the following :
  - (a) Multibiometrics
  - (b) Keystroke dynamics