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(Following Paper ID and Roll No. to be filled in your Answer Book)

Paper ID : 113754 Roll No.

B.Tech

(SEM. VII) THEORY EXAMINATION. 2015-16

IT IN FORENSIC SCIENCE

[Time:3 hours] [Total Marks:100]

Note : Attempt questions from all sections as per directions.

SECTION-A

1. Attempt **all** parts. Answer in brief. (10x2=20)

   (a) Discuss briefly the basic design specifications of biometric systems.

   (b) Describe the speaker recognition and their applications.

   (c) How biometric smaples are matched? Explain.

   (d) What is biometrics and what are the important properties of biometric identification.

   (e) Describe the benefits of biometrics over traditional authentication system.

(f) Justify the stages of biometric system.

(g) Write a short note on Iris recognition.

(h) What is access control system? What services are offered by any access control system?

(i) What do you understand by secure authentication protocol? Discuss the various secure authentication protocol.

(j) Discuss the fingerprint recognition with minutiae.

SECTION-B

Attempt **any five** questions from this sections. (5x10=50)

2. (a) What is the important of information hiding? Explain.

   (b) Discuss the technical steganography and Linguistic steganography.

3. Describe Laplace filtering. How Laplace filtering provide the strong evidence to prove the existence of secret information in noisy data?

4. (a) Discuss briefly the framework for secret communication.

   (b) Justify the theorem "There exists perfect secure steganography system".

5. Explain the information hiding in binary image. How is information encoded in formatted text using distortion technique?

6. What are the applications of watermarking? Whate are different requirements and algorithmic design issues of watermarking? Explain.

7. What is the purpose of using Fourier transformation in watermarking? Also discuss the Discrete Cosine Transformation(DCT) in watermarking.

8. What is the data recovery process? What are the obstacles to baking up applications? What are the common factors that affect back-up on data recovery?

9. What is computer forensics? What are the phases of computer forensics? What is a chain of custody?

SECTION-C

Attempt **any two** questions from this section. (2x15=30)

10. What are the reasons to collect the electronic evidence in the first place? What are the type? of evidence? What are the rules of collecting evidence?

11. (a) Discuss the LSB coding method for information hiding.

(b) What are cover generation techniques? Discuss.

12. What general properties are identified for real world robust watermarking systems that are shared by all proposed systems? Discuss.

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