

Code No:K1223

R07

Set No. 1

IV B.Tech. II Semester Regular Examinations, Apr/May 2013

BIOMETRICS
(Information Technology)

Time: 3 Hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. Compare and discuss the benefits of Biometric approach versus Traditional Authentication methods. [16]
2. a) Elaborate the finger-scan strengths and weaknesses.
b) How image is processed in finger scan technology? Explain in detail? [8+8]
3. a) What are the different features that are used for facial recognition approach? Explain.
b) Why facial scan recognition is not 100% accurate? Discuss. [8+8]
4. a) Describe about strengths and weakness of the Iris scan.
b) "Iris scan technology is having stability of characteristic over life time", Explain in detail with examples? [8+8]
5. a) Explain the different attacks on voice biometric.
b) Explain the different types of algorithms for voice interpretation. [8+8]
6. a) Explain the various features of retina scan with examples.
b) Explain how the signature scan works with an application. [8+8]
7. a) Explain the comparison of privacy factor in different biometric technologies.
b) What is Biometric Solution Matrix? Discuss. [8+8]
8. a) Explain the prominent role of Biometric for today's Network security?
b) How is the Accuracy of a Biometric system measured Explain in detail? [8+8]

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Set No.2

IV B.Tech. II Semester Regular Examinations, Apr/May 2013

BIOMETRICS

(Information Technology)

Time: 3 Hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. a) What is false match rate (FMR)? Discuss when are false matches are accepted in biometrics approach.
b) Evaluate the benefits of Biometric systems. [8+8]
2. a) What is finger-scan biometric approach? Elaborate the finger-scan weaknesses.
b) Why Finger-scan biometric approach is not 100% accurate? Discuss. [8+8]
3. a) Explain in detail about changes in physiological characteristics that reduce matching Accuracy in facial scan technology .
b) Elaborate the strengths and weakness of the facial scan. [8+8]
4. a) Distinguish between the advantages and disadvantage of iris scan biometrics approach.
b) Explain in detail about the deployment of iris recognition. [8+8]
5. a) What are different operational steps that are followed in voice-scan recognition? Explain.
b) How environment effects the voice scan recognition approach? Explain. [8+8]
6. a) What are the different features that are used in hand-scan recognition approach? Explain.
b) Describe the advantages and disadvantages of retina scan biometrics approach. [8+8]
7. What is privacy factor in biometrics? Compare the privacy factor in different biometric technologies.
8. Explain in detail on matching location and authentication server for Biometrics transaction. [16]

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Set No. 3

IV B.Tech. II Semester Regular Examinations, Apr/May 2013

BIOMETRICS

(Information Technology)

Time: 3 Hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. What is Biometric Identification and Where/How would Biometric identification be used. Explain in detail? [16]
2. a) Performance of finger-scan biometric approach deteriorates over time. Explain?
b) Explain the various finger features that can be used identification. [8+8]
3. a) Elaborate the Eigen-face facial scan technology.
b) How environment effects the facial-scan recognition approach? Discuss. [8+8]
4. a) How is Iris scan biometric approach works? Discuss.
b) "Iris scan technology is having stability of characteristic over life time", Explain in detail with examples? [8+8]
5. a) Describe the types of Algorithms used for voice interpretation.
b) What is the roll of neural networks in facial scan technology? Explain. [8+8]
6. a) Describe the various features in signature biometric with examples.
b) Explain about AFIS (Automatic Finger Print Identification Systems). [8+8]
7. a) Why no biometric approach is 100% accurate? Derive the different factors that affect the recognition performance.
b) Explain the various features of hand scan with examples. [8+8]
8. Describe the statistical measures of Biometrics and its importance. [16]

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Set No.4

IV B.Tech. II Semester Regular Examinations, Apr/May 2013

BIOMETRICS

(Information Technology)

Time: 3 Hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. a) Define the term false match rate? Distinguish between Single false match rate versus System false match rate.
b) Elaborate the basic working of Biometric Matching. [8+8]
2. a) What are the different features that are used in finger-scan biometric approach? Explain.
b) How finger scan technology works? Explain in detail. [8+8]
3. a) How facial scan technology works? Explain in detail.
b) Why facial scan recognition is not 100% accurate? Discuss. [8+8]
4. a) Describe about Iris-scan weaknesses pertaining mainly to operational issues in detail.
b) What are the different features that are used for iris scan biometrics approach? Explain in detail. [8+8]
5. a) Explain different methods of extracting the features from keystroke biometric.
b) Explain how the signature scan works with an application. [8+8]
6. a) Explain in detail the best suitable Algorithms for voice verification.
b) Elaborate the strengths and weaknesses of voice-scan recognition approach. [8+8]
7. a) What is retinal scan biometric approach? Discuss its working functionalities.
b) Elaborate the strengths and weaknesses of signature scan biometrics approach. [8+8]
8. a) How biometric approach plays prominent role in today's security related issues? Elaborate.
b) How is the Accuracy of a Biometric system measured Explain in detail? [8+8]