BRAINWARE UNIVERSITY

Term End Examination 2022
Programme – M.Sc.(ANCS)-2021
Course Name – Biometric Security
Course Code - MNCS304B
(Semester III)

Full Marks : 60 **Time : 2:30 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A
(Multiple Choice Type Question) 1 x 15=15

1. *Choose the correct alternative from the following :*

(i) In the following which one is the reason for selecting a biometric system?
a) Accuracy b) Acceptability
c) Cost effectiveness d) All of the above

(ii) In Biometric system, FNMR stands for _____
a) False Non-Matrix Rate b) False Not-Matrix Rate
c) False Non-Manipulative Rate d) None of the above

(iii) In Biometric system, FMR stands for _____
a) False Multipication Rate b) False Match Rate
c) Failure-to-Match Rate d) None of the above

(iv) Which one is not the feature of finger-print?
a) Core b) Delta
c) Bifurcation d) None of the above

(v) Which one is not the process of finger-scan verification and identification?
a) Image Processing b) Image Acquisition
c) Template Creation d) None of the above

(vi) In Biometric Security, FAR stands for _____
a) False Acquisition Rate b) False Accuracy Rate
c) False Acceptance Rate d) None of the above

(vii) What has been prevent people from enrolling twice in a system?
a) Positive Identification b) Negative Identification
c) a and b d) None of the above

(viii) Negative Identification used in _____
a) small-scale database b) large scale database
c) a and b d) None of the above

(ix) Logical access used in _____
a) for entering into a building
b) for logging into a PC
c) a and b
d) None of the above

(x) The equal error rate is the rate at which _____
a) FTE=FNMR
b) FNMR=ATV
c) FNMR=FMR
d) None of the above

(xi) Finger-scan systems comprise _____
a) image acquisition hardware
b) image processing components
c) storage components
d) All of the above

(xii) Ultrasound devices transmit inaudible acoustic _____ to the finger
a) wave
b) ray
c) a and b
d) None of the above

(xiii) Facial-scan is also deployed in select environments as a ____ verification solution for physical and logical access
a) 3::1
b) 2::1
c) 1::1
d) None of the above

(xiv) Iris-scan implemented in _____
a) ATM
b) Server room
c) bank
d) All of the above

(xv) In Iris-scan, desktop camera acquire images from the distance of _____ approximately.
a) 10 inches
b) 12 inches
c) 16 inches
d) 18 inches

Group-B
(Short Answer Type Questions) 3 x 5=15

2. Explain the criteria for selecting a biometric system. (3)
3. Explain EER and ATV? (3)
4. Write about the strengths of facial-scan technology? (3)
5. Express keystroke dynamics? (3)

OR

Express about data acquisition? (3)

6. Explain about token in biometric system? (3)

OR

Illustrate executive decision? (3)

Group-C
(Long Answer Type Questions) 5 x 6=30

7. Explain Eigenface technology. (5)
8. Illustrate the working principal of retina scan. (5)
9. Describe the features of a finger in detail. (5)
10. Describe the working principal of facial-scan technology. (5)
11. Summarize keystroke scan. (5)

OR

Summarize automated fingerprint identification system. (5)

12. Illustrate the working principal of Iris technology. (5)

OR

Differentiate hand scan and finger scan. (5)

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