



BOWEN UNIVERSITY IWO, OSUN STATE
COLLEGE OF COMPUTING AND COMMUNICATION STUDIES
SOFTWARE ENGINEERING PROGRAMME
B.SC. DEGREE FIRST SEMESTER EXAMINATION SESSION: 2023/2024
COURSE TITLE: BIOMETRIC SECURITY
COURSE CODE: CYB 305 COURSE CREDIT: 3 UNITS TIME ALLOWED: 2 HOURS
INSTRUCTION: Answer any 4 questions

QUESTION One

1. Describe the following five possible scenarios that can provide multiple sources of biometric information:
 - a. Multi-sensor systems
 - b. Multi-algorithm systems
 - c. Multi-instance systems
 - d. Multi-sample system
 - e. Multimodal systems

15marks
2. Explain the two types of identity management functionalities provided by biometric system

10marks

QUESTION Two

1. Discuss the application of Biometric system for authentication of an individual in the following places: Airport security, Government applications and Commercial applications

9marks
2. Explain the four basic building blocks of a biometric system

16marks

QUESTION Three

1. Describe the divisions of the matching performance evaluation of a biometric system stages:

9marks
2. Itemised some of the factors required for designing appropriate sensors to acquire the chosen biometric trait

6marks
3. Discuss any five commonly used biometric characteristics

10marks

QUESTION Four

1. Expatiate on multibiometric system

6marks
2. Describe the four major aspects to be considered in information security

10marks
3. Describe the three main groups of categorizes of Biometric applications:

9marks

QUESTION Five

1. Highlight any 6 factors must be considered to determine the suitability of a physical or a behavioural trait to be used in a biometric application. **9marks**
2. Explain the two types of identity management functionalities provided by biometric system **6marks**
3. Discuss the advantages of multibiometric *over a* unibiometric system **10marks**

QUESTION Six

1. Describe the design cycle of Biometric Systems **15marks**
2. Discuss the two fundamental premises on which biometric recognition is based **4marks**
3. How does a biometric system identify a user based on his physical and/or behavioral traits **6marks**