Faculty of Science
End Semester Examination May 2025
FS3CO24 Forensic Anthropology

Programme	:	B. Sc. (Hons.)	Branch/Specialisation	:	FS
Duration	:	3 hours	Maximum Marks	:	60

Note: *All questions are compulsory. Internal choices, if any, are indicated. Assume suitable data if necessary. Notations and symbols have their usual meaning.*

		Marks	CO	BL
Section 1 (Answer all question(s))				

Q1. Which bone is most commonly used to determine the sex of an individual in forensic anthropology?   **1 1 1**
- ○ Femur
- ○ Humerus
- ● Pelvis
- ○ Skull

Q2. What role does forensic anthropology play in mass disaster investigations?   **1 1 3**
- ○ Analyzing blood spatter patterns
- ● Identifying victims through skeletal analysis
- ○ Determining the cause of the disaster
- ○ Reconstructing the sequence of events

Q3. Which types of teeth are not present in human primary dentition?   **1 2 2**
- ○ Molar
- ○ Canine
- ○ Incisor
- ● Pre Molar

Q4. Anthropometry term derive from which greek term?   **1 2 2**
- ○ Anthropos + metry
- ● Anthropos + metron
- ○ Anthros + pometry
- ○ Anthro + metry

Q5. What does the Cranial Index indicate about skull shape?   **1 3 3**
- ○ The ratio of skull height to skull length
- ● The ratio of skull breadth to skull length
- ○ The ratio of facial height to facial width
- ○ The ratio of nasal height to nasal width

Q6. Which measurement technique is used to assess body weight composition?   **1 3 2**
- ○ Anthropometry
- ○ Somatometry
- ○ Craniometry
- ● Bioelectrical impedance analysis

Q7. What role does tissue depth data play in facial reconstruction?   **1 4 3**
- ○ It determines the color of the reconstructed face
- ● It guides the placement of soft tissues over the skull
- ○ It identifies the individual's cause of death
- ○ It assesses the individual's age at death

Q8. The applications of the face recognition are _____.   **1 4 2**
- ○ Criminal investigation
- ○ Surveillance
- ○ Tracking attendance
- ● All of these

Q9. The first reconstruction of the face was carried out by-   **1 5 1**
- ● Wilheim His
- ○ Wilton Maria Krogmann
- ○ Karen Taylor
- ○ Welcke

Q10. In video superimposition techniques, what advantage does real-time image adjustment provide over photographic superimposition?   **1   5   3**
- ● Higher image resolution
- ○ Immediate alignment and comparison
- ○ Permanent record creation
- ○ Enhanced color accuracy

Section 2 (Answer all question(s))
Marks CO BL

Q11. Define forensic anthropology.   **2   1   1**

Rubric	Marks
Definition of 'Forensic Anthropology'	2

Q12. List three key features used to determine sex from the human pelvis with diagram.   **3   1   1**

Rubric	Marks
any three features: 1 mark each	3

Q13. (a) Explain the importance of dental records in age determination.   **5   1   2**

Rubric	Marks
Dental records: 1mark Its importance: 4 marks	5

(OR)

(b) Write a note on "determination of age and sex from skull."

Rubric	Marks
Age determination: 2.5 marks Sex determination: 2.5 marks	5

Section 3 (Answer all question(s))
Marks CO BL

Q14. What is somatoscopy? Mention its role in forensic identification.   **3   2   2**

Rubric	Marks
Definition 1 mark, roles 2 marks	3

Q15. (a) Describe the importance of personal identification in forensic science.   **7   2   1**

Rubric	Marks
personal identification 2 marks Importance 5 marks	7

(OR)

(b) What are the different somatoscopic techniques used for personal identification? Explain in detail.

Rubric	Marks
definition: 1 mark techniques: 6 marks	7

Section 4 (Answer all question(s))
Marks CO BL

Q16. What is the cranial index? How is it useful in forensic identification? 3 3 2

Rubric	Marks
Definition	1
Application in anthropology	2

Q17. (a) Explain the Frankfurt Plane and its importance in craniofacial measurements. 7 3 3

Rubric	Marks
Introduction to Frankfurt Plane 4 marks Importance in craniofacial measurements 3 marks	7

(OR)

(b) Describe the landmarks present over the head and face used in somatometry.

Rubric	Marks
Definition: 1 marks Description of Landmarks: 6 marks	7

Section 5 (Answer all question(s))

Marks CO BL

Q18. Differentiate between 2D and 3D facial reconstruction. 4 4 2

Rubric	Marks
4 differences points of 2D & 3D facial reconstruction	4

Q19. (a) Discuss the role of computer-aided facial reconstruction in forensic identification. 6 4 3

Rubric	Marks
definition: 1 mark Role: 5 marks	6

(OR)

(b) Write a note on the computer software's used for facial approximation.

Rubric	Marks
Description of any 2 computer softwares:3 marks each	6

Section 6 (Answer any 2 question(s))

Marks CO BL

Q20. Write a detailed note on the superimposition technique. 5 5 2

Rubric	Marks
Note on the superimposition technique. Introduction Application- 1 Marks	1
Methods and principle Limitations	3
Application	1

Q21. Discuss about various landmark used in facial reconstruction. 5 5 3

Rubric	Marks
5 to 6 points various landmark used in facial reconstruction	5

Q22. Differentiate between photographic and videographic superimposition. Discuss their advantages and disadvantages.   **5**   **5**   **2**

Rubric	Marks
any 5 differences including advantages and disadvantages: 1 mark each	5

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