

- (b) Forensic odontology
- (c) Differentiation between human and non-human skeletal remains
- (d) Sex differentiation in human skull
- (e) Forensic identification using DNA

4. Attempt **any three** questions of the following :  
(essay type) 10×3=30

- (a) What is forensic anthropology ? What are its applications ? Discuss briefly the scope of forensic anthropology. 2+2+6=10
- (b) How does forensic anthropologist determine stature from skeletal remains ?
- (c) Define complete and partial identification. Discuss about the different characteristics of a person that are examined for the purpose of personal identification. 2+8=10
- (d) What is bite mark ? Explain how it helps in forensic investigation.
- (e) Describe the forensic characterization of blood stains ?
- (f) Describe briefly about the techniques of DNA profiling that are applied in forensic anthropology.

**The figures in the margin indicate full marks for the questions.**

1. Choose the correct answer : 1×7=7
  - (a) Who is known as the Father of Forensic Anthropology ?
    - (i) T. D. Stewart
    - (ii) Thomas Dwight
    - (iii) W. M. Krogman
    - (iv) Ellis R. Kerley

- (b) What is the shape of the male pelvis ?
  - (i) Narrow and heart-shaped
  - (ii) Shallow and wide
  - (iii) Broad and oval
  - (iv) Larger and having a rounder pelvic inlet
- (c) The branch of science that involves the handling of dental evidence in a criminal justice context is known as
  - (i) forensic odontology
  - (ii) racial dentistry
  - (iii) primate dentition
  - (iv) dentition of man
- (d) Who is regarded as the Father of Forensic Serology ?
  - (i) Henry Faulds
  - (ii) Edmond Locard
  - (iii) Paolo Zaccchia
  - (iv) Arthur Mourant
- (e) The shape of a non-human mandible is
  - (i) U-shaped
  - (ii) V-shaped
  - (iii) oval-shaped
  - (iv) round

- (f) Ossification of bones may be used for determination of
    - (i) age
    - (ii) stature
    - (iii) sex
    - (iv) time of death
  - (g) Algor mortis is
    - (i) post-mortem blood pooling
    - (ii) post-mortem decomposition
    - (iii) change in body temperature post-mortem
    - (iv) time since death
2. Answer the following questions in brief : 2×4=8
- (a) Write down the full form of 'mtDNA'. Who introduced DNA markers as a technique in forensic anthropology ?
  - (b) What are the three types of blood stains ?
  - (c) Write two uses of fingerprints in personal identification.
  - (d) What is facial reconstruction in forensics ?
3. Write short notes on : (**any three**) 5×3=15
- (a) Application of somatometry in forensic anthropology