

AR - 498

First Semester B. Sc. (Part - I) Examination

IS : FORENSIC SCIENCE

(Basics of Forensic Science)

P. Pages : 8

Time : Three Hours]

[Max. Marks : 80

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- Note :** (1) All questions are compulsory.
(2) Question no. **one** carries **eight** marks while each of remaining questions carry **twelve** marks.
(3) Draw Diagram and write equations wherever necessary.

1. (A) Fill in the blanks :—

- (i) The examination of body fluids and organs for drugs and poison is a function of the _____ unit.
- (ii) Comparison microscope was invented by _____ .
- (iii) The place where crime took place is called _____ .
- (iv) The diameter of bloodstain is 1 to 3 mm in the _____ bloodstain pattern. 2

AR-498

P.T.O.

(B) Multiple Choice Questions :

- (i) The branch of science deals with the study of death.
- (a) Odontology
 - (b) Anthropology
 - (c) Thanatology
 - (d) DNA fingerprinting
- (ii) Fingerprints on the white surface can be developed by
- (a) Black powder
 - (b) White powder
 - (c) Fluroscnt powder
 - (d) Talcum powder
- (iii) Rate of stiffening help in the determination of
- (a) Cause of death.
 - (b) Time of death.
 - (c) Place of death.
 - (d) Manner of death.

(iv) Leading questions are permitted only in-

(a) Re-Examination

(b) Cross Examination

(c) Examination in Chief

(d) Judicial Examination. 2

(C) **One** sentences answer :

(i) What is Asphyxia ?

(ii) Define Adipocere formation.

(iii) What is Bestility ?

(iv) Define crime scene. 4

UNIT I

2. (a) Explain criminalization in brief. 4

(b) What is crime ? Explain types of crime in legal system. 4

(c) Write down the history of forensic science. 4

OR

3. (p) Write down the role of Forensic scientist. 4
- (q) Explain the following terms :
- (i) Francis Galton.
- (ii) Calvin Goddard. 4
- (r) What is Forensic Science ? Explain importance of it in criminal investigation. 4

UNIT II

4. (a) Explain in brief division in the Forensic Science Laboratory. (F.S.L.)
- (i) Physics division.
- (ii) Chemistry division.
- (iii) Serology division. 6
- (b) What is blood? Explain its importance in criminal investigation. 3
- (c) Explain documentation of bloodstain pattern analysis. 3

OR

5. (p) Explain directionality in brief. 3
- (q) Explain the following bloodstain pattern –
- (i) Cast-off stain pattern.
 - (ii) Transfer blood stain pattern.
 - (iii) Expired blood stain pattern. 6
- (r) What are the services and functions provided by (F.S.L.) Forensic Science Laboratory. 3

UNIT III

6. (a) Explain crime scene procedure. 4
- (b) Explain methods of sketching. 4
- (c) Write down the methods of searching. 4

OR

7. (p) Discuss the components of crime scene management.
- (i) Manpower Management.
 - (ii) Technology Management. 4

- (q) Explain photography in crime scene investigation. 4
- (r) Explain collection and preservation of physical evidence. 4

UNIT IV

8. (a) Explain the following terms –
- (i) Black powder.
 - (ii) White powder.
 - (iii) Fluroscent powder. 6
- (b) What is bite mark? Explain the collection of bite marks. 3
- (c) Explain forensic significance of footprint and bite marks. 3

OR

9. (p) Explain the following pattern :-
- (i) Central Pocket loop.
 - (ii) Lateral Pocket loop.
 - (iii) Twin loop. 6

- (q) Explain procedure for recording of fingerprints. 3
- (r) Explain forensic significance of lip print. 3

UNIT V

10. (a) Define document. Explain indented and chained document. 4
- (b) Explain Traced forgery in detail. 4
- (c) Write down the following terms :
- (i) Addition
- (ii) Obliteration 4

OR

11. (p) What is handwriting ? Explain individual characteristics of handwriting. 4
- (q) Explain in detail disguise writing. 4
- (r) Explain basic 2 tools needed for document examination. 4

UNIT VI

6. (a) Define death. Explain modes of death. 3
- (b) Write in brief on following terms : -
- (i) Magistrate inquest.
- (ii) Police inquest.
- (iii) Coroner inquest. 6
- (c) Explain following terms.
- (i) Rigor mortis.
- (ii) Algor mortis. 3

OR

13. (p) Explain late changes of death. 4
- (q) Define thanatology. Explain mummification in detail. 4
- (r) Explain Mechanical injury. 4

