

18/8/22

B.Sc.-M.Sc. DUAL DEGREE PROGRAMME (BIOTECHNOLOGY)
SEMESTER IV, EXAMINATION, August 2022
PAPER CODE – BBT-SEC02A
PAPER TITLE: Basics of Forensic Science

Time: 1.5 Hours

Maximum Marks: 37

Attempt all questions. All parts of a question must be attempted in continuation. Start answer of a fresh question on a new page. Cite examples and draw labelled diagrams wherever necessary

Question 1:

Choose the correct answers of the following:

[1×9= 9 Marks]

- a) Process of change in body temperature post mortem, until the ambient temperature is matched?
- | | |
|-------------------|------------------|
| i) Pallor Mortis | ii) Rigor Mortis |
| iii) Algor Mortis | iv) Livor Mortis |
- b) A hungry baby crying until he was fed is an example of what?
- | | |
|-------------|-----------------------|
| i) Superego | ii) Id |
| iii) Ego | iv) None of the above |
- c) Who is the creator of the literary detective Sherlock Holmes?
- | | |
|-----------------------------|------------------------|
| i) Francis Galton | ii) Alphonse Bertillon |
| iii) Sir Arthur Conan Doyle | iv) Agatha Christie |
- d) Which of the following method is recommended to develop "latent fingerprints" on human skin?
- | | |
|-----------------------|---|
| i) Amido-Black Method | ii) Ninhydrin Method |
| iii) DFO Method | iv) Silver-Iodine Plate Transfer Method |
- e) Ambidextrous writer is a writer who can write with equal ease and skill with____?
- | | |
|---------------------|--------------------------|
| i) Left hand only | ii) Right hand only |
| iii) Both the hands | iv) Holding pen in mouth |
- f) The presence of blood in the semen causing pink or reddish colour is known as____?
- | | |
|--------------------|------------------|
| i) Histospermia | ii) Oligospermia |
| iii) Hematospermia | iv) Azoospermia |
- g) Dying declaration is to be preferably recorded by?
- | | |
|------------------|----------------|
| i) Police | ii) Doctor |
| iii) Jury Member | iv) Magistrate |

h) Optical components in UV spectrophotometer are made up of____?

- i) Plastic
- ii) Glass
- iii) Quartz
- iv) Sodium-Halide Bromide

i) Semen samples having no sperms is called____?

- i) Histospermic
- ii) Aspermic
- iii) Oligospermic
- iv) Hematospermic

Question 2:

Answer any ONE from the following questions [1×7= 7 marks]

a) Describe the organisational structural and the tools and techniques used during the forensic science investigation?

b) What is a crime and its causes, classify different injuries related to crime scene and any four medico-legal aspects of injury?

Question 3:

Answer any ONE from the following questions [1×7= 7 marks]

a) What is an explosive and classify different fundamental explosives, describe common chemical evidences of explosives?

b) Describe the characteristics of handwritings, examination and comparison of handwriting in forensic investigation?

Question 4:

Answer any TWO from the following questions [2×3.5 = 7 marks]

a) Explain Modus-operandi with explaining a case study.

b) Describe ballistics and its role in forensics.

c) Describe the significance of toxicological findings (In brief).

d) Describe different methods of developing fingerprints.

Question 5:

Answer any ONE from the following question [1×7=7 marks]

a) What is DNA fingerprinting? Discuss the principles and applications of DNA profiling in context to forensic science.

b) What is cyber security? Discuss the methodologies of searching and seize of evidences from a computer from a crime scene.

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