Second Semester B.Sc. Degree Examination, October/November 2022
(NEP Scheme)
FORENSIC SCIENCE
Basic Forensic Biology

Time : 2½ Hours

Max. Marks : 60

PART – A

I. Answer **any 6** of the following :

(6×1=6)

1) Define Totipotency.

2) What is Karyotyping ?

3) Define Variation.

4) What are somatic cells ?

5) List few diseases caused by fungi.

6) Define Muscular tissue.

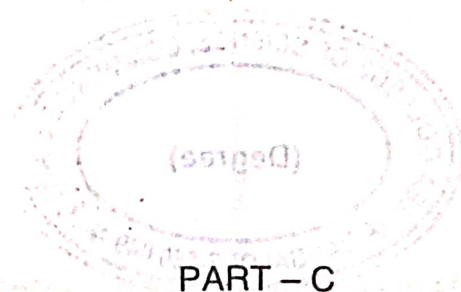7) Define Parasites.

8) Give the expanded form for DNA and RNA.

PART – B

II. Answer **any 6** of the following :

(6×2=12)

9) Draw a neat labeled diagram of Chloroplast.

10) Draw a neat labeled diagram of digestive system.

11) Write a note on beneficial microbes.

12) What are Antibiotics ?

13) What is Mitochondrial DNA ?

14) Explain elementary tissues of the body.

15) What are non chordates ?

16) Define meiosis.

P.T.O.

PART – C

III. Answer **any 3** of the following :   (3×4=12)
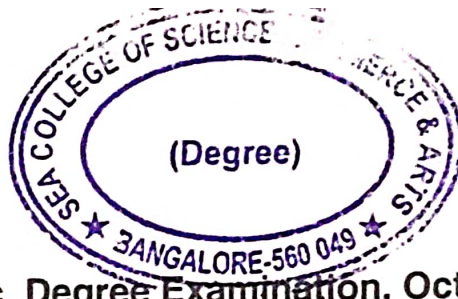
   17) Brief account on fluid mosaic model.

   18) Write a note on Limnology.

   19) Explain law of Dominance with example.

   20) Write a short note on Chromosome.

PART – D

IV. Answer **any 5** of the following :   (5×6=30)

   21) Explain law of Independent assortment with example.

   22) Give an account on Central dogma.

   23) Discuss salient features of Pteridophyta.

   24) Explain the process of Mitosis in detail.

   25) Explain the process of Replication.

   26) Discuss integumentary system in detail.

   27) Discuss in detail male reproductive system.

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(Degree)

II Semester B.Sc. Degree Examination, Oct./Nov. 2022
(NEP Scheme)
FORENSIC SCIENCE
Crime Scene Management

Time : 2½ Hours   Max. Marks : 60

PART – A

Answer **any 6** questions. **Each** question carries **1** mark.   **(6×1=6)**

1. Define outdoor crime scene.

2. Define victim, witness and suspects.

3. What is base line method ?

4. Define zone/quadrant method.

5. What is semen ?

6. What is saliva ?

7. Expand ABFO scale and GPR.

8. Define road traffic accident.

PART – B

Answer **any 6** questions. **Each** question carries **2** marks.   **(6×2=12)**

9. Explain the role of judicial officer.

10. Define standard sample and control sample.

11. What is preliminary walk through ?

12. Explain triangulation method.

13. What is medullary index and explain different hair patterns ?

DCFS 201

14. Define chain of custody.

15. Explain crime scene investigation kit.

16. Define refractive index.

PART – C

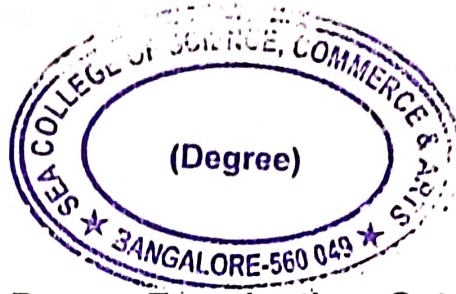Answer **any 3** questions. **Each** question carries **4** marks.   **(3×4=12)**

17. Briefly explain the safety measures to be kept at the crime scene.

18. Explain crime scene mapping.

19. Write a short note on glass evidence and its collection method.

20. Explain the stages of crime scene reconstruction.

PART – D

Answer **any 5** questions. **Each** question carries **6** marks.   **(5×6=30)**

21. Discuss the methods to collect and preserve biological evidence.

22. Explain the role of different agencies involved in crime scene management.

23. Explain the importance of sketching in crime scene.

24. Explain crime scene search patterns.

25. Explain the collection method of semen, tissue and hair.

26. Explain the collection and preservation of glass fragments.

27. Explain about the equipment's needed for crime scene investigation.

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PART – A

Answer **any 6** questions. **Each** question carries **1** mark.   **(1×6=6)**

1. What is speedy trials ?

2. Define criminal justice system.

3. What is Actus Reus and Mens Rea ?

4. What is culpable homicide ?

5. Define arrest.

6. Expand FIR.

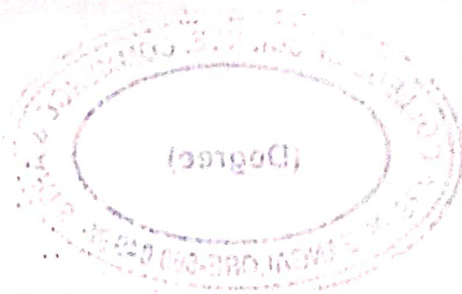7. Define anticipatory bail.

8. Define burden of proof.

PART – B

Answer **any 6** questions. **Each** question carries **2** marks.   **(2×6=12)**

9. What is arbitration and mediation ?

10. What is adversarial and inquisitorial system of CJS ?

11. Explain the Sections of rape and acid attack.

12. What is grievous hurt and murder ?

13. Define charge.

14. What is summary trials ?

15. What is expert witness ?

16. Define cross examination and re-examination.

PART – C
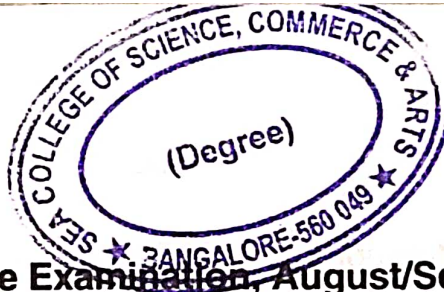
Answer **any 3** questions. **Each** question carries **4** marks.   (4×3=12)

17. Explain the reforms in Criminal Justice System (Malimath Committee Report).

18. Explain justifiable defenses (Section 96 – 106).

19. Explain search and seizure with or without a warrant and general provisions.

20. Explain Juvenile Justice Act, 2015 (Care and Protection of Children).

PART – D

Answer **any 5** questions. **Each** question carries **6** marks.   (6×5=30)

21. Explain Alternative Dispute Resolution System (ADRS).

22. Explain fundamental elements in judicial functioning.

23. Explain offence against property.

24. Explain the principles of group liability.

25. Explain the hierarchy of courts in India and functionaries under the code.

26. Explain the Procedure of FIR.

27. Explain Section 32, Section 45, Section 46, Section 47, Section 57, Section 58, Section 60 of Indian Evidence Act.

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DCFS – 201

II Semester B.Sc. Degree Examination, August/September 2023
(NEP – Freshers and Repeaters)
CRIMINOLOGY AND FORENSIC SCIENCE
Crime Scene Management

Time : 2½ Hours   Max. Marks : 60

PART – A

Answer **any 6** questions. **Each** question carries **1** mark.   (6×1=6)

1. Name the type of crime scene where the crime is initially took place.

2. Name the process in which the use of scientific methods, physical evidence, deductive reasoning and their interrelationship to gain explicit known of the series of events that surrounds the commission of crime.

3. Name the search pattern usually conducted by a single searcher who walks in a slightly decreasing, less than concentric circle from the outermost boundary towards the center.

4. Which condition plays a major role in the contamination of crime scene evidence ?

5. When does the collection and preservation of evidence begins ?

6. Which type of evidence is sensitive to absolute temperature or fluctuations in temperature ?

7. Name any two preliminary test used to detect the presence of saliva.

8. Expand ESDA and RUVIS.

PART – B

Answer **any 6** questions. **Each** question carries **2** marks.   (6×2=12)

9. Define Homicide.

10. Explain Baseline mapping.

P.T.O.

11. Define closeup photography.

12. What are the questions to be asked at the time of interrogation ?

13. Define Crime.

14. Define Section 2(h) of CrPC.

15. Define accidental asphyxia.

16. Name different types of accidental deaths.

PART – C

Answer **any 3** questions. **Each** question carries **4** marks.   (3×4=12)

17. Explain cross projection and polar coordinate mapping.

18. Explain the collection and preservation of urine sample.

19. Explain the casting of tool marks.

20. Name one advanced method to detect the latent prints and explain its working.

PART – D

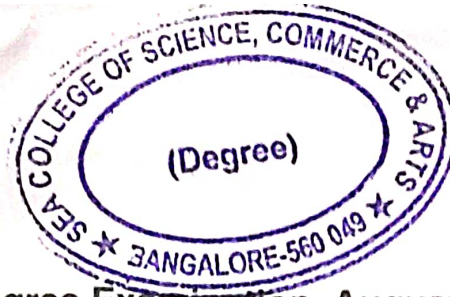Answer **any 5** questions. **Each** question carries **6** marks.   (5×6=30)

21. A dead body was found lying on the bank of the river just a few miles outside of the city. There is a bullet wound on the victim's chest where it appears a bullet entered the body. There are a few bullets that have been found scattered near the body of the victim. You can seen that a gun is resting on the bottom of the river in the shallow end near the shore. Based on the above case study answer the following questions :

   a) Discuss the first thing you should do as you approach the crime scene.

   b) Explain how to handle the bullets found near the body of the victim.

   c) What are the information you be able to find from the gun and bullets found at the crime scene ?

22. Outline the role of different agencies in Crime scene management.

23. Explain different safety precautions to be taken while in crime scene.

24. Explain different steps in crime scene investigation.

25. Explain different stages in crime scene reconstruction.

26. Name one non destructive technique used to find missing people in different environment. Explain its working.

27. Write a short note on :

   a) Fingerprint kit

   b) Casting kit

   c) Alternate light source.

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PART – A

Answer **any 6** questions. **Each** question carries **1** mark. (1×6=6)

1. Define burden of proof.
2. Define expert witness.
3. Define revision.
4. Define anticipatory bail.
5. Define FIR.
6. Define acid attack.
7. Define Lok Adalats.
8. Expand ADRS.

PART – B

Answer **any 6** questions. **Each** question carries **2** marks. (2×6=12)

9. Explain adversarial criminal justice system.
10. Illustrate the hierarchy of courts in India.
11. Define criminal breach of trust.
12. Explain dowry death.
13. What is cognizable and non-cognizable offence ?
14. What is charge and framing of charge ?
15. Define appeal and transfer of criminal cases.
16. Define admissions and confessions.

PART – C

Answer **any 3** questions. **Each** question carries **4** marks. (4×3=12)
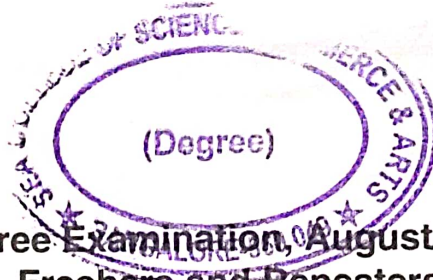
17. Explain bail and constitutional overtones of bail.

18. Explain FIR and procedure after filing the FIR.

19. Explain offence against property.

20. Explain principles of group liability.

PART – D

Answer **any 5** questions. **Each** question carries **6** marks. (6×5=30)

21. Explain General Exceptions (A).

22. Explain POCSO Act.

23. Explain ADRS.

24. Explain Trials before a court of session: warrant cases, summon cases and summary trials.

25. Explain Arrest with/without warrant, Search and Seizure.

26. Explain offence against human body.

27. Explain criminal justice system including types.

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PART – A

I. Answer **any 6** of the following.   (1×6=6)

   1) What is karyokinesis ?

   2) Define somatic cell.

   3) List few diseases caused by bacteria.

   4) Define parasite.

   5) What is tissue ?

   6) What is meninges ?

   7) What is Amphibia ?

   8) Name the colour pigments of the Red algae.

PART – B

II. Answer **any 6** of the following.   (2×6=12)

   9) Define cell.

   10) State the functions of Plasma membrane.

   11) What is Meiosis ?

   12) What is micron ?

   13) Write a short notes on chromosome.

   14) What is gametogenesis ?

   15) What is Rhizoids ?

   16) What is fertilization ?

PART – C

III. Answer **any 3** of the following. (4×3=12)

17) Differentiate plant cell and animal cell.

18) Brief account on types of epithelial tissue.

19) State the glands associated with skin.

20) Write the enzymes involved in chemical digestion of food.

PART – D

IV. Answer **any 5** of the following. (6×5=30)

21) Explain mitosis with neat diagram.

22) Explain the life history of Pteridophytes.

23) Explain the structure of Nephron.

24) Explain the replication of DNA.

25) Discuss in detail male reproductive system.

26) Explain the forensic aspects of botany.

27) Explain law of independent assortment with example.

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