

B.Sc. Semester - 5 (CBCS) Examination
Oct/Nov - 2021 (NEW COURSE)
Forensic Physics (Core)

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

Q.1(A) Answer the following questions: - (04)

1. Define: Primary fracture.
2. Enlist the location at where the glass is found as a evidence.
3. Write full form: i.) ICPMS; ii.) XRF
4. What is weathering?

Q.1(B) Answer the following questions: - (Any 1) (03)

1. Write the information obtained from glass evidence and importance of glass evidence in forensic Science.
2. Write a note on sample collection of soil evidence.

Q.1(C) Answer the following questions: - (Any 1) (07)

1. Explain the production of glass fracture & type's of glass fractures.
2. Write a note on soil profile & types of soil.

Q.2(A) Answer the following questions: - (04)

1. What is Foot line?
2. Write the principle for tool mark.
3. What does the number 4901 indicates on side wall of tyre.
4. Define: wheel base.

Q.2(B) Answer the following questions: - (Any 1) (03)

1. Explain the importance of tool mark and features of tool mark.
2. Write a note on location of evidence of foot print and nature of foot print.

Q.2(C) Answer the following questions: - (Any 1) (07)

1. Write a note on collection & examination of tyre and skid mark.
2. i.) Define: Tool mark & Gait pattern
ii.) Explain the forensic examination of tool mark.

Q.3(A) Answer the following questions: - (04)

1. Define: Numismatic.
2. Full Form: ACCS.
3. Write the composition for wood's metal.
4. Write the xantho test for fiber.

- Q.3(B) Answer the following questions: - (Any 1) (03)
1. How seal examination is performed?
 2. Write the scope & principle for restoration of marks.
- Q.3(C) Answer the following questions: - (Any 1) (07)
1. Write a note on a forensic examination of wire & cable.
 2. Write a note on different methods for restoration of marks.
- Q.4(A) Answer the following questions: - (04)
1. Full form: i.) FAR, ii.) EER
 2. Name the methods used for speech enhancement.
 3. Give the range of voice for man, woman, & child.
 4. What is assemble editing?
- Q.4(B) Answer the following questions: - (03)
1. Write a note on components of speaker recognition.
 2. Define: i.) Formant frequency & Fundamental frequency.
ii.) Crest & Trough.
iii.) Time domain & Frequency domain.
- Q.4(C) Answer the following questions: - (Any 1) (07)
1. Write note on a Audio-Video tape authentication.
 2. Explain the mechanism of speech production with the help of example of vocal cord as a resonator tube with vibrating membrane.
- Q.5(A) Answer the following questions: - (04)
1. What is Crime Scene Photography?
 2. What is emulsion?
 3. Write the importance of Photography.
 4. Name the sub-type of synthetic adhesive.
- Q.5(B) Answer the following questions: - (Any 1) (03)
1. Write a note on the categories of paint.
 2. Difference between Photomicrography & Macro photography.
- Q.5 (C) Answer the following questions: - (Any 1) (07)
1. Explain briefly types of camera.
 2. i.) Explain the main components of Paint.
ii.) Explain the light source used in crime scene photography.
