

B.Sc.(FS) Semester - 5 (Remedial) (CBCS) Examination**March/April-2022(Old Course)****FORENSIC PHYSICS (CORE)****Time: 2:30 Hours****Marks: 70****Instructions:**

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

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- Que-1 (A) **Answer the following questions:- (Any 4)** (04)
1. Enlist the instrument used for elemental analysis of glass.
 2. Enlist the location at where the glass is found as a evidence.
 3. The process of formation of the soil is know as _____.
 4. What is weathering ?
 5. Write any three features of Red Soil.
- Que-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 the soil profile.
- Que-1 (C) **Answer the following questions:- (Any 1)** (07)
1. Explain the types of glass fracture.
 2. Write a note on soil profile & types of soil.
- Que-2 (A) **Answer the following questions:- (Any 4)** (04)
1. Define: Tool mark.
 2. Write the formula for the speed of the vehicle at the time of accident.
 3. What is tracing ?
 4. What is wood's metal ?
 5. Name the casting material used for collection of foot prints evidence.
- Que-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.
- Que-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.
- Que-3 (A) **Answer the following questions:- (Any 4)** (04)
1. Name the instruments used for elemental analysis of wire & cable.
 2. Full Form: ACCS.
 3. Write the composition for wood's metal.
 4. Write the xantho test for fiber.
 5. Define: Cavitation.
- Que-3 (B) **Answer the following questions:- (Any 1)** (03)
1. How seal examination is performed?
 2. Write a note on forensic examination of string & rope.
- Que-3 (C) **Answer the following questions:- (Any 1)** (07)
1. Write a note on detection of counterfeit coin.
 2. Write a note on different methods for restoration of marks.
- Que-4 (A) **Answer the following questions:- (Any 4)** (04)
1. Full form: i.) FAR; ii.) EER
 2. Name the system involved in the speech production of human beings.
 3. What is insert editing ?
 4. What is active articulatory & passive articulatory ? With Example
 5. Write the types of tape alterations.

- Que-4 (B) **Answer the following questions:- (Any 1)** (03)
1. Write a note on components of speaker recognition.
 2. Define: i.) Time domain & Frequency domain.
ii.) Formant frequency & Fundamental frequency.
iii.) Crest & Trough.
- Que-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.
- Que-5 (A) **Answer the following questions:- (Any 4)** (04)
1. What is Crime Scene Photography ?
 2. Full form: CCD & CMOS
 3. Types of lenses
 4. Name the instrumental method for paint analysis.
 5. Define: Binder.
- Que-5 (B) **Answer the following questions:- (Any 1)** (03)
1. Write a note on the categories of paint.
 2. Difference between Photomicrography & Macrophotography.
- Que-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.
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