

B.Sc.(FS) Semester - 5 (CBCS) Examination
Oct/Nov - 2024 (NEW 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 in short: (04)
1. Define: Primary Fracture.
 2. Write the "4R Rule".
 3. Write the formula for the percentage of weight loss of soil on Ignition.
 4. Write the elements used in production of Borosilicate Glass.
- Que.1(B) Answer any one in brief: (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 any one in detail: (07)
1. Explain the types of Glass Fracture.
 2. Write a note on soil profile & types of Soil.
- Que.2(A) Answer in short: (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.
- Que.2(B) Answer any one in brief: (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 any one in detail: (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 in short: (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.
- Que.3(B) Answer any one in brief: (03)
1. How is Seal Examination Performed?
 2. Write a note on forensic examination of String & Rope.
- Que.3(C) Answer any one in detail: (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 in short: (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
- Que.4(B) Answer any one in brief: (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 any one in detail: (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 in short: (04)
1. What is Image Sensor?
 2. What is Emulsion?
 3. Write the importance of Photography.
 4. Name the sub-type of Synthetic Adhesive.
- Que.5(B) Answer any one in brief: (03)
1. Write a note on the categories of Paint.
 2. Difference between Photomicrography & Macrophotography.
- Que.5(C) Answer any one in detail: (07)
1. Write a note on a Digital Photography.
 2. Write a note on a Crime Scene Photography.
