

B.Sc. (FS) Semester - 6 (CBCS) Examination
March/April-2025 (NEW COURSE)
Forensic Ballistic and Explosives (Core (New))

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. Write the classification of firearms based on their loading characteristics.
 2. The rifling gives _____ motion to the projectile.
 3. What is anvil?
 4. What is a ramrod?
- Que.1 (B) Answer any one in brief: (03)
1. Describe Stock & Magazine.
 2. Draw the brief classification of the modern firearm.
- Que.1 (C) Answer any one in detail: (07)
1. Write a brief note on Chocking.
 2. Explain the history of firearm.
- Que.2 (A) Answer in short: (04)
1. Specific gravity of lead is _____.
 2. Write the composition of black powder of propellant charge.
 3. In rifle firearm, the density of loading is _____.
 4. Define: Ignition time
- Que.2 (B) Answer any one in brief: (03)
1. Explain the classification based on firing mechanism of cartridge.
 2. Explain briefly: heat problems
- Que.2 (C) Answer any one in (07)
1. Explain Recoil in details.
 2. Write a note on Classification of bullet.
- Que.3 (A) Answer in short: (04)
1. Define: drop.
 2. Write the formula to find the remaining velocity V_r .
 3. Define blackening.
 4. Write the characteristics of shot gun wounds at close range.
- Que.3 (B) Answer any one in brief: (03)
1. What is Vertex height? Derive equation of vertex height in vacuum trajectory.
 2. Explain structure of projectile.

- Que.3 (C) Answer any one in detail: (07)
1. Derive the equation of maximum range and range at vertex.
 2. Explain briefly the (i) The characteristics of Entry wound and Exit wound&(ii) Effect on intermediate target.
- Que.4 (A) Answer in short: (04)
1. Firing pin marks is mixture of _____ & _____ marks.
 2. What is the diameter of stylus used in Striagraphy?
 3. The firearm undergoes various process such as _____.
 4. Drag mark is _____ mark.
- Que.4 (B) Answer any one in brief: (03)
1. Explain firing pin marks and breech face marks?
 2. Explain the tool mark principle being used in the firearm analysis.
- Que.4 (C) Answer any one in detail: (07)
1. Explain briefly: IBIS.
 2. Explain briefly: BDAS.
- Que.5 (A) Answer in short: (04)
1. What is CPR?
 2. From where does the GSR can be found in the scene of crime?
 3. What is the chemical name of RDX?
 4. Full form of PETN.
- Que.5 (B) Answer any one in brief: (03)
1. What is IED?
 2. Write composition of GSR & why it is needed to analysis?
- Que.5 (C) Answer any one in detail: (07)
1. Write a note on classification of explosive.
 2. Explain the forensic examination GSR.
