

B.Sc.(FS) Semester - 6 (CBCS) Examination
March/April-2024 (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 uses.
 2. The rifling gives _____ motion to the projectile.
 3. Write the formula to find bore diameter.
 4. What is a barrel?
- Que.1(B) Answer any one in brief: (03)
1. Explain the term 'Choking'?
 2. Draw the brief classification of the modern firearm.
- Que.1(C) Answer any one in detail: (07)
1. Write a brief note on rifled firearm.
 2. Explain the history of firearm.
- Que.2(A) Answer in short: (04)
1. What are the components of firearm cartridge?
 2. Write the composition of black powder of propellant charge.
 3. Define: Density of Loading.
 4. Name the factors contributing to recoil with its percentage.
- Que.2(B) Answer any one in brief: (03)
1. Explain the classification based on firing mechanism of cartridge.
 2. Explain briefly: Smokeless Powder used in Main Charge.
- Que.2(C) Answer any one in detail: (07)
1. Explain Recoil in details.
 2. Explain the term (i) Primary Charge; & (ii) Main Charge.
- Que.3(A) Answer in short: (04)
1. Define: remaining velocity.
 2. Write the formula to find the Range of the Projectile.
 3. Define tattooing.
 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 the term Vacuum Trajectory.
- Que.3(C) Answer any one in detail: (07)
1. Write a short note on External Ballistics.
 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. What is LEA and GEA.
 2. What is the diameter of stylus used in Striagraphy?
 3. Which mark get produced in fired cartridges?
 4. Write any two uses of IBIS.

- 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. Write a note on instrument used in forensic examination of ballistics.
 2. Explain briefly: BDAS.
- Que.5(A) Answer in short: (04)
1. What is GSR?
 2. From where does the GSR can be found in the scene of crime?
 3. What is the chemical name of TNT?
 4. Name the components of IED.
- Que.5(B) Answer any one in brief: (03)
1. What is explosive? Write its Mode of Initiation with its uses.
 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 methods of GSR briefly.
