

B.Sc. Semester - 6 (CBCS) Examination
April/May-2022 (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.

Q-1 Give the answer of following question. (14)

- (A) Answer the following question very shortly (04)
- (1) Give the four types of action mechanism.?
 - (2) What is the bore diameter for 12 bore shotgun in inches.?
 - (3) Explain Forensic Ballistics ?
 - (4) Who invented the percussion cap firearm.?
- (B) Answer the following question in brief (Any one) (03)
- (1) Write a note on different types of action mechanism.?
 - (2) Give the classification of modern firearm in flow chart.?
- (C) Answer the following question in detail (Any one) (07)
- (1) Write a note on history and development of old age firearm.?
 - (2) What is choking? Give its types on the basis of their shape & diameter.?

Q-2 Give the answer of following question. (14)

- (A) Answer the following question very shortly (04)
- (1) Give the types of cartridge cases on the basis of mode of ignition.?
 - (2) Define ammunition.?
 - (3) Chemical name for RDX & HMX ?
 - (4) Give the properties of lead.?
- (B) Answer the following question in brief (Any one) (03)
- (1) What is barrel fouling and give the factors that reduce the barrel fouling.?
 - (2) Classification of bullet on the basis of base of bullet with diagram.?
- (C) Answer the following question in detail (Any one) (07)
- (1) Explain in detail about the types of propellant charge used in firearm.?
 - (2) Write a note on Recoil.?

Q-3 Give the answer of following question. (14)

- (A) Answer the following question very shortly (04)
- (1) What is ballistic co-efficient. Give its formula.
 - (2) Explain wound ballistics.?
 - (3) Give the types of cavitations in wound.?
 - (4) What is base drag.?
- (B) Answer the following question in brief (Any one) (03)
- (1) Derive the Equation for vertex height of projectiles.?
 - (2) Give the characteristic of entry wound.
- (C) Answer the following question in detail. (Any one) (07)
- (1) Give the formula for Maximum Range & Range at vertex of projectile.?
 - (2) Determine the range of fire in case of Rifled firearm injury.?

Q-4 Give the answer of following question. (14)

(A) Answer the following question very shortly (04)

- (1) Which mark is superficial mark in fired cartridge case.?
- (2) What is recovery box in case of BDAS.?
- (3) Give the three principles applied for the identification of firearm.
- (4) Full form of –
 - IBIS
 - BDAS

(B) Answer the following question in brief (Any one) (03)

- (1) Explain tool mark principle and how its applicable in ballistic.
- (2) Explain compound microscope.

(C) Answer the following question in detail. (Any one) (07)

- (1) Write about different marks found on fired cartridge case with diagram.
- (2) Write a note on IBIS.

Q-5 Give the answer of following question. (14)

(A) Answer the following question very shortly (04)

- (1) Composition of Black Powder.
- (2) Mode of initiation of Explosive.
- (3) Write the two way used for collection of GSR by dry method.
- (4) For the detection of Nitrite in GSR which test is performed.?

(B) Answer the following question in brief (Any one) (03)

- (1) Give the classification of Explosive materials.?
- (2) Explain Wet method used for the collection of GSR.

(C) Answer the following question in detail. (Any one) (07)

- (1) Write a note on chemical method used to detect the GSR.
- (2) How to examine the scene of explosion.?
