647510 **BSCbaeCC6020** **Seat No :_____**

B.Sc. Semester - 6 (*CBCS*) Examination
Oct/Nov -2020
BALLISTIC AND EXPLOSIVE (CORE)

Time: 2:00 Hours **Marks: 56**

Instructions:

1. Figures to the right indicate marks.
2. There are five questions in the question paper.
3. Answer any four of the following questions.

Q – 1 (A) Objective type questions (Any Four) **4 Marks**

1. Which are the subdivisions of forensic ballistic?
2. Give the name of parts of rifled firearms.
3. Define forensic ballistic.
4. What is the chocking?

Q – 1 (B) Answer in detail (Any 1 out of 2) **3 Marks**

1. Explain the barrel of rifled fire arm.
2. Give the classification of shotgun family.

Q – 1 (C) Write a note on (Any 1 out of 2) **7 Marks**

1. Write a note on choking and types of choke.
2. Explain any five parts of rifled fire arm.

Q – 2 (A) Objective type questions (Any Four) **4 Marks**

1. Which component is used for shock absorber or compress to provide cushioning effect under pressure in shotgun cartridge?
2. Which chemical was first used as primer?
3. Define ammunition.
4. Define ignition time.

Q – 2(B) Answer in detail (Any 1 out of 2) **3 Marks**

1. Types of cartridge case.
2. Explain recoil as a parameter of study of internal ballistic.

Q – 2 (C) Write a note on (Any 1 out of 2) **7 Marks**

1. Explain heat problems observed during the study of internal ballistic.
2. Give the Classification of bullets and Explain any four types of bullets .

Q – 3 (A) Objective type questions (Any Four) **4 Marks**

1. Define trajectory.
2. Define Yaw.
3. Define base drag.
4. Which two main factors that affects the performance of bullet on leaving the barrel?

Q – 3 (B) Answer in detail (Any 1 out of 2) **3 Marks**

1. Explain vaccum trajectory and main determination of trajectory.
2. Explain sectional density and ballistic co-efficient.

Q – 3 (C) Write a note on (Any 1 out of 2) **7 Marks**

1. Explain the effects of structure of projectile and air resistance on trajectory.
2. Define external ballistic and explain shortly those factors which should be taken in the consideration during the study of external ballistic.

Q – 4 (A) Objective type questions (Any Four) **4 Marks**

1. Marks on Fired cartridge.
2. GSR distribution depends on_____.
3. Brass trax is used in IBIS to capture images of _____.
4. Locard's principle.

Q – 4 (B) Answer in detail (Any 1 out of 2) **3 Marks.**

1. Characteristics of entry wound of fire arm injury.
2. Explain range and drop as a parameter of study of external ballistic.

Q – 4(C) Write a note on (Any 1 out of 2) **7 Marks**

1. Explain vacuum trajectory and list out those parameters which are used to determine the trajectory.
2. Determination of range of firing on the basis of characteristics of entry wound of rifled firearm injury.

Q – 5 (A) Objective type questions (Any Four) **4 Marks.**

1. Full form of GSR.
2. Full form of EDXRF.
3. Characteristics of explosive
4. Give the example of explosive.

Q – 5 (B) Answer in detail (Any 1 out of 2) **3 Marks**

1. Dry and wet methods for the collection of GSR.
2. Mechanism of explosion and effects of explosion.

Q – 5 (C) Write a note on (Any 1 out of 2) **7 Marks**

1. Define explosion, explosive, give the classification and example of explosive.
2. Chemical test and Instrumental methods used for the analysis of GSR.

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