THE OPEN UNIVERSITY OF SRI LANKA

FACULTY OF HUMANITIES AND SOCIAL SCIENCES



LL.M. IN CRIMINAL JUSTICE ADMINISTRATION - LEVEL 7

FINAL EXAMINATION – 2015/2016

LWP 2107 - CRIMINAL INVESTIGATION II - BALLISTICS AND EXPLOSIVES

DURATION – 03 HOURS

Date: 25.06.2017 Time: 09.30 a.m. – 12.30 p.m.

Total number of questions 6

Candidates will be penalized for illegible handwriting.

Answer FOUR (04) questions selecting TWO (02) questions from each part. Each question carries 25 marks.

PART A - BALLISTICS

- 1. Explain the following
 - (a) Flintlock firing mechanism of a SBML firearm.
 - (b) Automatic firing mechanism of a rifled bore firearm.
- 2. What do you mean by the following in Forensic Ballistics? Explain those with illustrations.
 - (a) <u>0.38 Special</u> live cartridge and <u>9x19mm</u> spent cartridge,
 - (b) Land diameter and groove diameter of a rifle barrel.
 - (c) Center-fire rimless live cartridge and Rim-fire live cartridge.

3. How do you identify or exclude a firearm scientifically in a case of shooting, when a 12 bore spent cartridge found at a crime scene and a suspected 12 bore hammer type SBBL gun which was forwarded by the Police are available for examination.

PART B – EXPLOSIVES

- 4. Explain and compare the role of a plain detonator and an electric detonator in the firing train of High-Explosive charges.
- 5. Explain the purpose of the introduction of "Shaped Charge Effect" in High-Explosive devices and Rocket-Propelled Grenades (RPGs), with examples.
- 6. Explain the mechanisms and modifications of different designs of "Suicide Bomb Jackets" used during period of LTTE terrorism in Sri Lanka