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	<p style="text-align: center;">LESSON PLAN <u>INTRODUCTION TO INFANTRY WEAPONS AND EQUIPMENT-2:</u> <u>CHARACTERISTICS OF 5.56 INSAS RIFLE, AMMUNITION, FIREPOWER, STRIPPING, ASSEMBLING AND CLEANING</u></p> <p>Code - INF-2 Period - Two Type - Lecture/practice Term - II</p> <hr/> <p><u>Training Aids</u> 1. 5.56 mm INSAS rifle with magazines -10, targets-10, groundsheets-10, black board, easel, pointer staff, charts of 5.56 mm INSAS, drill cartridges.</p> <p><u>Time Plan</u> 2. (a) Introduction. - 05 mins (b) Part I-Characteristics of 5.56 mm INSAS Rifle, - 20 mins Ammunition and Firepower (d) Part II-Stripping including practice - 20 mins (e) Part III-Assembling including practice - 20 mins (f) Part IV-Cleaning -10 mins (g) Conclusion - 05 mins</p> <p>(a) <u>PART I: CHARACTERISTICS, AMMUNITION AND FIREPOWER</u></p> <p>3. Calibre - 5.56mm. 4. Length of Rifle without bayonet - 960mm 5. Length of Rifle with bayonet - 1110mm. 6. Length of Barrel - 464mm 7. <u>Weight</u> (a) Fixed butt with empty magazine - 3.6kg. (b) Fixed butt with loaded magazine - 3.69kg. (c) Empty magazine - 90gm. (d) Full magazine - 340gm. (e) Bayonet - 305gm 8. Effective Range - 400 mtr. 9. Sight Radius - 470mm 10. Muzzle velocity - 900m/s. 11. Principal of operation - Gas Op. 12. Penetration - 3mm at 700m. 13. Mode of fire - Single shot & three round burst (TRB) 14. <u>Rate of Fire</u></p>

- | | | | |
|-----|-------------------------|---|---------------------|
| (a) | Normal | - | 60 rds/min. |
| (b) | TRB (Three Round Burst) | - | 90 rds/min. |
| (c) | Intense | - | 150 rds/min. |
| (d) | Cyclic | - | 600 to 650 rds/min. |
15. **Type of Ammunition**
- | | |
|-----|---------------|
| (a) | Ball Round. |
| (b) | Tracer Round. |
| (c) | Blank Round. |
| (d) | HD Cartridge. |

(b)

PART II: STRIPPING

16. 5.56 mm INSAS rifle is the basic weapon of a soldier. It is responsibility of the soldier to take care of his weapon. Stripping assembling and cleaning of this weapon is very easy. If a soldier maintains the weapon properly it will produce good result.

Removing Magazine

17. Hold the mag with left hand and press the mag catch to the front with thumb and Remove the mag.

Stripping Assembly Cover

18. Cock the rifle and keep the change lever on 'S' Press lever locking retainer with Left hand and press the retainer to the front with right hand thumb. When retainer moves To the front , it is free from locking retainer . Now lift the assembly opening cover and move to the front.

Stripping of Piston Extension Assembly

19. While pressing retainer make the recoil spring assembly free from the guide and move it out.

Stripping of Piston Extension Assembly

20. Hold rear portion of piston extension and while pressing it downward, remove it from the rifle.

Stripping of Breach Block

21. Hold piston extensions with left hand turning it upside down and with the right hand, slide out the breach block from the recess.

Stripping of Firing Pin

22. Remove locking pin with the help of drift. Firing pin will come out.

Stripping of Extractor

23. Drift tool is used for stripping of the extractor. Press the extractor with the left hand thumb. Then press access pin with pointed portion of the drift. Access pin will come out. Now remove the extractor and spring from its recess.

Stripping of Gas Plug and Project Sight

24. With the help of drift, remove the pin fixing gas plug and while pressing gas plug remove the gas block. Now the projector sight will also get removed.

Stripping of Hand Guard

25. The front edge of hand guard is in the cup near the gas block. Straighten the pin locking and remove it with the help of drift. Shifting the cup towards gas block, remove the hand guard.

Stripping of Magazine

26. While pressing retainer dimple remove bottom plate. Remove retainer spring and the platform.

(c)

PART III: ASSEMBLING

27. Assembling of the rifle is carried out in reverse sequence of stripping as under: -

- (a) Assembling of mag.
- (b) Assembling of extractor and firing pin.
- (c) Assembling of hand guard.
- (d) Assembling of piston extension and breach block.
- (e) To insert piston extension assembly in gas cylinder and bracket.
- (f) To insert recoil spring assembly in piston extension.
- (g) To insert piston extension assembly and recoil spring in body housing.
- (h) To close cover assembly and loading of retainer.
- (j) Fix magazine.

Inspection after Assembling of Rifle

28. (a) Remove magazine.
(b) Move change lever to 'R'.
(c) Cock the rifle.
(d) Ensure piston extension has completely moved forward.
(e) Move change lever to 'S'.
(f) Try to press trigger, it will not get pressed.

(d)

PART IV: CLEANING

29. Items required for cleaning are: -

- (a) Oil bottle with oil.
- (b) Brush cleaning bore.
- (c) Brush cleaning chamber.
- (d) Pullthrough.
- (e) Road cleaning barrel.
- (f) Tool adjusting for sight/rear sight.
- (g) Tool removing repair case.
- (h) Chindi.
- (j) Drift.

Rifle Parts to be oiled

30. (a) Complete breach block less its face.
(b) Magazine Catch.
(c) Trigger mechanism.
(d) Rifle spring assembly.

Rifle Parts Not to be oiled

31. (a) Barrel.
(b) Cylinder.
(c) Plug Gas.

- (d) Piston extension assembly.
- (e) Mag platform site.

32. Field strip the rifle and clean its parts. Clean bore with pull through and chindi. Oil the bore. Oil brush cleaning cylinder, and clean cylinder gas. Clean cylinder with pull through and chindi. Gas affected parts like breach block ,piston, extension and firing pin to be cleaned carefully so that gas fouling is completely removed. After cleaning ,parts requiring oil to be oiled with a piece of cloth. Do not rub hard outer surface of the rifle with soaked oil.