

Professional Gunsmithing Test: INTRODUCTION TO GUNSMITHING

Version 5 Revised 7/3/2023

1. What does a "locking system" do in a cartridge-firing firearm?
 - a. It locks the action of the gun so that it cannot be fired
 - b. It is the system that is used to hold the cartridge in place and has a means to pull the cartridge out of the chamber after the gun is fired
 - c. It is a system that locks the trigger in place after the gun is fired
 - d. It is a system that locks the hammer in the half cock notch

2. A tipping bolt system can best be described as a _____.
 - a. System in which the breech bolt pivots from the front or rear and tips down on the opposite end to allow a cartridge to be loaded and securely held in place before being fired
 - b. system that allows the firing pin to drop out of the bolt by tipping the firearm rearward during the disassembly process
 - c. system in which the breech bolt tips upward just before the gun is fired
 - d. system in which bolt tips rearward just before the gun is fired

3. Muzzle loaders from about 150 years ago utilized a breech plug.
 - a. True
 - b. False

4. Which of the following is NOT a type of locking system for a rifle?
 - a. Hammer block
 - b. Rolling block
 - c. Falling block
 - d. Rotating bolt

5. Which locking system utilizes the hammer to hold the locking block closed after the shot is fired?
 - a. Hammer block
 - b. Rolling block
 - c. Falling block
 - d. Rotating bolt

6. A rotating bolt is found on most all antique muzzle loading rifles.
 - a. True
 - b. False

7. A type of system that is often used on submachine guns is the _____.
 - a. pump action
 - b. Jaeger
 - c. machine assist
 - d. straight blowback

8. What type of system is utilized on the Luger pistol?
 - a. Toggle lock
 - b. Jaeger
 - c. Rotating bolt
 - d. Rotating frame

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9. The following parts are commonly found on what type of firearm: action bars, locking block, action bar lock, magazine tube, bolt carrier?

- a. Bolt action rifle
- b. Submachine gun
- c. Inertia driven firearm
- d. Pump action firearm

10. A locking system that is best described as utilizing three pivot points that almost form a straight line when the action is closed is _____.

- a. straight pivot lock
- b. toggle lock
- c. bolt action
- d. rotating pivot lock

11. The rotating bolt system is ONLY found in a bolt action rifle.

- a. True
- b. False

12. Newton's Third Law states that every action has an equal and opposite reaction. Which of the following is the best example of Newton's Third Law?

- a. A rifle sitting idle in a bench rest
- b. The movement of a locking system being driven rearward by the energy of the expanding gases in a fired cartridge while the gases at the same time press on the bullet being driven down the barrel towards the muzzle.
- c. All of the above
- d. None of the above

13. The Transition area in the barrel from the mouth of the chamber to the full engagement of rifling is called the _____.

- a. Bullet squeeze
- b. Ballistic leap
- c. Throat
- d. Accelerator

14. The first successful semiautomatic shotgun design was the _____.

- a. long recoil operated shotgun
- b. manual pump action shotgun
- c. short recoil operated shotgun
- d. open bolt inertia driven shotgun

15. The main difference in long recoil and short recoil operated firearms is _____.

- a. the distance the barrel moves rearward compared to the length of its fired cartridge case
- b. the amount of felt recoil
- c. the distance of recoil measured in centimeters of muzzle flip
- d. all of the above

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16. The best example of a long recoil operated firearm is the Browning .50 caliber machine gun.

- a. True
- b. False

17. A gas operating system utilizes the gas generated from the fired cartridge and an internal or external piston, or expansion chamber to cycle the gun.

- a. True
- b. False

18. The "12/20 Burst" refers to _____.

- a. using a 20 gauge shotgun with 12 gauge shotgun shells and the fireball it produces out of the muzzle of the shotgun
- b. feeding a 12 gauge shotgun shell into a 20 gauge shotgun and causing it to burst
- c. feeding a 20 gauge shotgun shell into a 12 gauge shotgun chamber and then loading a 12 gauge shell behind it. When fired, the gun can blow up.
- d. Feeding a 12 gauge shell into a 20 gauge shotgun. When fired, the gun can blow up
- e. Both c. and d. above.

19. Which of the following is not a locking system for a pivot barrel shotgun?

- a. Greener cross bolt
- b. Yorkshire double under lock
- c. Purdy triple bolting
- d. a. and b. above
- e. a. and c. above

20. The blowback system that is used in handguns is most often used with high caliber cartridges, like the .40 S&W, .45 ACP and .357 mag, to provide enough energy to cycle the gun.

- a. True
- b. False

21. The type of handgun that requires the shooter to pull the trigger to fire every shot is _____?

- a. double action
- b. single action
- c. double action only
- d. single action only
- e. all of the above

22. The type of revolver that requires the shooter to manually cock the hammer for every shot is _____.

- a. double action only
- b. single action
- c. double action
- d. all of the above
- e. none of the above

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23. Which of the following systems is **not** used in a handgun?

- a. Rotating locking
- b. Cam lock
- c. Link lock
- d. Reverse blowback
- e. Delayed blowback

24. Which statement below best describes a delayed blowback system that is gas retarding?

- a. System that slows down the stoppage of a slide
- b. System that is designed to slow down the opening of a slide
- c. System in which the gas escapes through a compensated barrel
- d. System in which the gas is vented out of a rear assist pivot block

25. Which of the following two short recoil, tipping barrel systems is technically more accurate and will cause less wear on its internal parts?

- a. Cam lock
- b. Link lock

26. The term "Vertical stringing" means _____.

- a. a stoppage in a handgun that is caused by the vertical rise of the cartridges in a magazine under recoil
- b. the term for the incremental adjustment for elevation found on a handgun's rear sight
- c. when successively fired bullets create a vertical pattern on the target
- d. a vertical measurement in .000" that is taken from the top of the front sight to the bottom of the barrel bushing

27. What gives the toggle of the toggle lock system its ability to move rearward?

- a. The rearward motion of the barrel slamming into the breech face of the toggle when fired
- b. The center pivot of the toggle being forced upward by the gas hole in the gas tube
- c. The energy of the cartridge's discharge
- d. All of the above

28. The lower receiver of an AR-15 is considered the frame. It is the serial numbered part and thus is considered the firearm itself.

- a. True
- b. False

29. A "hammerless" revolver literally means that the gun has no hammer.

- a. True
- b. False

30. The hand on a revolver hits this part to rotate the cylinder.

- a. Crane
- b. Ratchet pad
- c. Elevator notch
- d. Doughnut hook
- e. Rotator cuff

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31. What is the purpose of the accelerator that is found on the Swedish Lahti pistol?
- a. To accelerate the power of the hammer.
 - b. To accelerate the return of the trigger for quicker follow-up shots.
 - c. To funnel heat from the gas of the discharged cartridges to the grips so the bullets in the magazine do not freeze in place.
 - d. To give the bolt an extra push when opening, which allows it to cycle in cold and freezing conditions.
 - e. a. and d. above
 - f. c. and d. above
32. The safest way to carry a loaded single action revolver that has no type of safety mechanism is to have the hammer resting in the safe notch.
- a. True
 - b. False
33. The definition for end shake is _____.
- a. the rattle you can hear when the barrel is loose
 - b. when you can feel the end of the mainspring shake during recoil
 - c. the fore and aft motion of the cylinder in the frame
 - d. the shaking of your hands before shooting a magnum revolver
 - e. the play in the trigger caused by a weak trigger return spring
34. In most single action revolvers, the trigger also acts as the sear.
- a. True
 - b. False
35. The rebound slide in a swing out cylinder double action revolver does what?
- a. Returns the trigger
 - b. Rotates the cylinder
 - c. Extracts the cartridges from the cylinder
 - d. Returns the cylinder stop to the cylinder notch
36. The function of the sear is to _____.
- a. hold the hammer back until the trigger is pulled
 - b. hold the firing pin back until the trigger is pulled
 - c. hold the striker back until the trigger is pulled
 - d. all of the above
37. On many striker fired semi-auto pistols, the firing pin is also the ejector.
- a. True
 - b. False
38. Magazines that have a front and rear set of lips are designed for feeding what type of cartridges?
- a. Rimmed
 - b. Rimless
 - c. Pin Fire
 - d. All of the above

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39. The rear set of lips on a magazine controls the height and position of the cartridge.

- a. True
- b. False

40. What makes laminated stocks so strong and stable?

- a. The shape of the comb
- b. The size of the cheek piece
- c. The type of lacquer that the stock is finished with
- d. The glue that is impregnated to hold the layers of wood together
- e. None of the above

41. With the firearm pointed away from you and looking down from the center line of the receiver to the center line of the heel of the stock allows us to see if the gun has _____.

- a. cast on
- b. cast off
- c. neither a. nor b. above
- d. both a. and b. above

42. *Toe in* and *Toe out* refer to _____.

- a. the direction in which the shooter's toes point when in firing position
- b. whether or not the firearm has correct footing
- c. the direction of the toe of the stock to the left or right of the center line of the stock
- d. whether or not the toe of the stock mounts correctly for a left-hand shooter
- e. none of the above

43. If the butt of the stock at the rear of the gun designed for a right hand shooter is to the left of the center line, it has cast on.

- a. True
- b. False

44. The pitch of the stock refers to _____.

- a. the frequency of the center tone when a tuning fork is held against the stock
- b. the angle to the top of the butt from the rear of the action in relation to the center line of the barrel's bore
- c. the sound the action makes in different stock materials
- d. the angle of the pistol grip in relation to the center of the trigger

45. The definition of twist rate is _____.

- a. the speed of the bullet's rotation in flight during the first three feet after it leaves the barrel
- b. the trajectory of the bullet drop, measured in meters
- c. how many revolutions the bullet makes in the throat of the chamber
- d. the distance in inches that the rifling of a barrel takes to make one complete revolution

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46. A barrel's rifling consists of _____.

- a. chrome moly inserts and case hardened reservoirs
- b. lands and grooves
- c. waves and reefs
- d. chatters and warbles
- e. none of the above

47. Which is NOT a type of rifling found in a barrel?

- a. Button rifling
- b. Cut rifling
- c. Hammer forging
- d. Diamond rifling
- e. Broached rifling

48. Damascus barrels get stronger with age.

- a. True
- b. False

49. The best and strongest barrels are made from ordinance steel.

- a. True
- b. False

50. The type of crown that offers the *least* amount of protection is the _____.

- a. round crown
- b. cone crown
- c. flat crown
- d. stepped crown

51. Two advantages of a fluted barrel are _____.

- 1. cuts down on the weight of the barrel
- 2. the barrel is case hardened and annealed near the muzzle
- 3. the barrel has more surface area so it cools faster
- 4. the barrel has more surface area so it retains heat better for greater accuracy

- a. both 1. and 3. above
- b. both 1. and 4. above
- c. both 2. and 3. above

52. The legal length of a shotgun barrel in the United States must be at least _____.

- a. 16 inches
- b. 18 inches
- c. 20.5 inches
- d. 24 inches

53. Choke tubes constrict the bore size of a barrel to tighten the pattern produced by the shot.

- a. True
- b. False

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54. Which type of cartridge case's rim is the same size as the case body?

- a. Rimless
- b. Rimmed
- c. Belted
- d. All of the above

55. The best definition of headspace is _____.

- a. the space between your ears
- b. the distance between the bolt face in closed position to the base of a fully seated case
- c. the distance between the end of the throat of the chamber and the bolt face
- d. the space between the cannellure of a cartridge and the tip of the bullet

56. The strict formula for cartridge designation is always the caliber of bullet first and then the number of grains of ANY type of powder. Example: .30/30 Winchester

- a. True
- b. False

57. A full metal jacket bullet would do more damage to the human body than a hollow point bullet.

- a. True
- b. False

58. The larger the objective lens is on a scope, the more light gathering ability it has.

- a. True
- b. False

59. Americans use the "Boxer" primer and Europeans use the "Berdan" primer.

- a. True
- b. False

60. The Berdan primer has its anvil in the primer and has a central flash hole in the primer pocket of the cartridge case.

- a. True
- b. False

61. With the **Go** gauge inserted in the chamber, the bolt should not be able to close on it.

- a. True
- b. False

62. A firearm is considered safe to shoot if the bolt can close completely with the *Field* headspace gauge in the chamber.

- a. True
- b. False