2016 HOSTA Tractor and Farm Safety Exam
Kansas Hazardous Occupation Training

Instructor: A passing score of 75% is recommended for the written exam, meaning the student must get at least 30 questions correct.

Instructions: Place your name and today’s date at the top of the first page. This exam is based on information contained in Hazardous Occupations Safety Training for Agriculture (HOSTA) Task Sheets. Please place a check mark in the box next to the correct answer on multiple choice questions and a check mark next to the correct answer on True or False questions.

1. After completing a 10 hour training program that complies with the Department of Labor Hazardous Occupations Order in Agriculture, a person who is 14 or 15 years of age can be hired by someone other than a parent to: (Task Sheet 1.2.1)
   - Handle explosives
   - Operate a tractor over 20 PTO horsepower with no powered equipment attached
   - Apply anhydrous ammonia
   - Work in a pen with bulls
   - All of the above
   - None of the above

2. True or False? On a farm, the work routine can be highly irregular with many jobs being seasonal or done once or twice per season or year. (Task Sheet 1.1)
   - True
   - False

3. True or False? Most farm injuries involve working with livestock. (Task Sheet 2.1)
   - True
   - False

4. Thinking about personal safety when you dress for farm work, some generally approved choices include: (Task Sheet 2.7)
   - Loose-fitting pants, sweatshirt with drawstrings, sandals, and tank tops
   - Dress shoes, tie, blazer, and wool socks
   - Long pants that fit properly, solid shoes with slip-resistant soles, shirts with banded instead of buttoned cuffs
   - Baggy cut-off shorts, canvas tennis shoes, and a loose-fitting t-shirt
5. The color red on a machinery hazard warning decal means: (Task Sheet 2.8)
   - CAUTION – you need to follow safety instructions
   - WARNING – there is a slight potential hazard
   - DANGER – there is a serious potential hazard
   - ATTENTION – no safety hazard exists

6. The American Society of Agricultural Engineers (ASAE) has adopted 11 standard hand signals for use when machinery noise or distance prevents verbal communication. The symbol pictured here means: (Task Sheet 2.9)
   - Stop
   - Come to me
   - This far to go
   - Start the engine

7. Personal Protection Equipment (PPE) is something you wear to prevent injury or damage, most often to your head, eyes, ears, body, and feet. Which item of PPE would you wear to protect your lungs? (Task Sheet 2.10)
   - Dust mask
   - Goggles
   - Ear plugs
   - Leather gloves

8. True or False? Shielding the worker from a shear point is difficult on many agricultural machines. The best precaution to take for preventing injury is to shut off the machine before making repairs or adjustments. (Task Sheet 3.1)
   - True
   - False

9. True or False? Pull-in points can be formed by moving machine components, such as feed chambers on a small square baler. (Task Sheet 3.1)
   - True
   - False

10. Freewheeling parts is a term used to describe a mechanical hazard that is caused when: (Task Sheet 3.1)
    - two machine parts move together and at least one part moves in a circle.
    - a machine discharges materials into its surrounding environment.
    - parts of a machine continue to move after the power to the machine has been turned off.
    - the edges of two objects are moving toward each other or when one object is moving toward a stationary object and the gap between the two is decreasing.
11. Animals have a zone of comfort within which they will behave normally. Intrusion into that space will cause the animal to move to re-establish the comfort zone. The animal’s comfort zone is also known as: (Task Sheet 3.4)
- Flight zone
- Landing zone
- Twilight zone
- Speed zone

12. Modern agriculture relies on many chemicals to produce and preserve food. Chemicals are found in fertilizers, pesticides, cleaners, sanitizers, crop preservatives, fuels, and solvents. If you are asked to work with a restricted use chemical (Category I and II agricultural chemicals) you must tell your employer that you are under age 16 and are prohibited by law from doing so. (Task Sheet 3.5)
- True
- False

13. Which fire type of fire extinguisher can be used on fires with burnable liquids and electrical fires but not on wood fires? (Task Sheet 3.7.1)
- Dry powder (Chemical) extinguisher
- Water type extinguisher
- Hydrogen extinguisher
- CO₂ extinguisher

14. True or False? Front-wheel-drive and assist-drive tractors provide extra traction and stability for packing and towing on silage bunkers. (Task Sheet 3.9)
- True
- False

15. How long would it take to completely engulf a person when grain begins to flow inside of a grain bin? (Task Sheet 3.10)
- 5 seconds
- 5 minutes
- 15 seconds
- 1 hour

16. Farm tractors were designed to do what primary purpose(s): (Task Sheet 4.1)
- transport
- remote power source
- load mover
- implement carrier
- all of the above
- none of the above
17. Tractor hazards are generally grouped into four categories. Which listing below correctly identifies those categories? (Task Sheet 4.2)
   ☐ pinch point, wrap point, hot spot, crush point
   ☐ fuel, oil, degreaser, hydraulic fluid
   ☐ John Deere, International Harvester, Case, Ford
   ☐ PTO entanglements, runovers, overturns, older tractors

18. True or False? Older tractors (over 30 years old) should always be considered less safe than newer tractors. (Task Sheet 4.2)
   ☐ True
   ☐ False

19. A tractor has one seat for the operator. Passengers should: (Task Sheet 4.2)
   ☐ stand on the drawbar
   ☐ hold onto the fenders
   ☐ sit next to the operator’s seat
   ☐ never be allowed to ride anywhere on the tractor

20. When pulling a heavy load of hay up a hill, which gear/RPM (engine speed) combination should you use? (Task Sheet 4.4)
    ☐ Highest gear with lowest RPM
    ☐ Lower gear with medium RPM
    ☐ 5th gear with high RPM
    ☐ Low RPM in highest gear

21. True or False? Accelerating the tractor quickly with a heavy load going up a hill can cause the tractor to rear up and tip backward. (Task Sheet 4.4)
    ☐ True
    ☐ False

22. True or False? High engine speed when a tractor is under load from a plugged hay baler could shear off the implement’s safety shear pin. (Task Sheet 4.4)
    ☐ True
    ☐ False

23. If you are operating a tractor in the field and the oil light comes on, what should you do? (Task Sheet 4.4)
    ☐ Drive to the shop.
    ☐ Shut down immediately
    ☐ Shut off the engine until it cools down and then restart.
    ☐ Stop and let the engine idle.
24. Tractor manufacturers have used a color coding system for controls for many years. Referring to their color coding system, what control does the color YELLOW indicate? (Task Sheet 4.5.3)

- Power engagement
- Ground motion
- Stop engine
- Position and adjust

25. True or False? As a general rule the engine stop control is by key and by mechanical push-pull control. A key is always turned counterclockwise to stop a tractor engine. A push-pull lever is always pulled out to stop the engine. (Task Sheet 4.4 & 4.5)

- True
- False

26. Operational symbols were designed to promote and improve tractor use and safety in the agricultural workplace. What does the symbol pictured below indicate? (Task Sheet 4.5.6)

- Throttle
- Engine coolant level
- Engine speed
- PTO

27. The tractor you are operating begins to show a low-battery charge problem. What should you do? (Task Sheet 4.5.6)

- Return to the shop area immediately
- Shut down immediately
- Return to the shop area after you finish your chores
- It doesn’t matter

28. A good operator uses a checklist of items and systems to inspect before starting the tractor. This is often called a pre-operation checklist and the tractor should be inspected: (Task Sheet 4.6)

- daily
- monthly
- seasonally
- annually

29. True or False? Starting the engine is more than turning the ignition key. (Task Sheet 4.7)

- True
- False
30. True or False? Turning the key to the “off” position will always stop a diesel engine. There is no need to shut off the fuel pump also. (Task Sheet 4.7)
   □ True
   □ False

31. True or False? Start the engine of a tractor from the driver’s seat only. (Task Sheets 4.7 and 4.8)
   □ True
   □ False

32. A good tractor operator will use which of these procedures every time he/she climbs into the operator’s seat. (Check all that apply) (Task Sheet 4.8)
   □ Use handholds and steps to keep three points of contact with the tractor at all times.
   □ Adjust the seat and steering wheel.
   □ Adjust and buckle the seat belt (if the tractor has ROPS)
   □ Check the major controls for the neutral (or PARK) position.

33. Keys to safely dismounting a tractor are: (check all that apply) (Task Sheet 4.9)
   □ Park on a level surface so you don’t twist an ankle when you jump from the steps
   □ Be sure to leave tools and other equipment on the operator platform and steps so they can be easily found the next time the tractor is used
   □ Face the tractor and use handholds and steps, keeping three points (two feet and one hand) on the tractor at all times.
   □ Leave the keys in the ignition so the next operator can easily find them.

34. True or False? The power train transmits power from the tractor engine to the wheels. The switch mechanism that disconnects the rotating crankshaft of the engine from the transmission gears may be a clutch, a hydraulic device, or an electro-hydraulic mechanism. (Task Sheet 4.10)
   □ True
   □ False

35. Steering a tractor involves several concepts. To safely steer a tractor, the operator must have knowledge of: (Check all that apply) (Task Sheet 4.10)
   □ Locking pin placement
   □ Space needed to corner the tractor around a building or object
   □ Whether the tractor uses gasoline or diesel fuel
   □ Width and length of the tractor

36. True or False? To back a tractor safely, check your line of travel, back slowly, and have someone help direct you if needed. (Task Sheet 4.11)
   □ True
   □ False
37. What direction should you steer a tractor when backing a two-wheeled implement to the left? (Task Sheet 4.11)
   - Steer the tractor to the left
   - Steer the tractor to the right
   - Backing a two-wheeled implement is impossible. Do not attempt.
   - All of the above

38. Which of the following is NOT a purpose for a tractor? (Task Sheet 4.13)
   - A remote power source
   - A machine to pull/carry another machine
   - A way to provide rides
   - A transporter of materials

39. True or False? When operating a tractor on a public roadway with traffic backed up behind the tractor, you should pull completely off the road, if safely possible, to let traffic flow past. Do not signal traffic to pass you. Signaling motorists to pass makes you responsible for them. (Task Sheet 4.14)
   - True
   - False

40. True or False? Proper equipment marking and lighting is not necessary for roadway travel. (Task Sheet 4.14.1)
   - True
   - False