

SOLUTIONS TO ANIMAL PEST CONTROL STUDY QUESTIONS

For the TDA Commercial/Non-Commercial Exam

INSTRUCTIONS: As you study through the text, look for the answers to the following questions and mark them in your study book or on the sheet provided. In addition to these study questions, there are review questions in the manual. In order to allow for quick grading, most questions on the TDA Exam are in the form of Multiple Choice or True and False.

1. Most animals can withstand a low level of parasitism with little reduction in production efficiency. **Pg 1**
2. What environmental requirements for development do external parasites have? **Pg 1**
temperature, humidity, rainfall, etc.
3. List the life stages of the tick. **Pg 1**
egg, larva, nymph, adult
4. The Lone Star Tick receives it's common name from a distinctive white spot on the back of the female. **Pg 1**
5. Because the Lone Star tick has long mouthparts, deep feeding wounds result that may subsequently become infested with screwworms. **Pg 2**
6. Lone Star ticks can be controlled effectively by approved insecticides applied as dips and sprays. **Pg 2**
7. What is the preferred host of the larva and nymph of the Gulf Coast tick? **Pg 2**
meadow larks and quail
8. What tick is known as the "gotch ear" tick? **Pg 2**
Gulf Coast tick
9. How is the fever tick being controlled? **Pg 2**
quarantine, use of insecticides, identification and collection
10. Three hosts are required for the Gulf Coast tick to reach maturity. **Pg 2**

11. The fowl tick is the principal tick of poultry and is known as the blue bug. Pg 2

12. Lice are classified according to mouth parts and feeding habits. Pg 3

13. Lices eggs are called nits. Pg 3

14. Lice are more of a problem in what season? Pg 3

winter

15. Some species of mange mites that attack horses, cattle, sheep and goats are under quarantine regulations. Pg 4

16. What symptoms result from severe mite infestations? Pg 4

Loss of hair, wool or mohair

17. State and federal ordinances may specify pesticide application for mites. Pg 4

18. Thoroughly read and understand the pesticide label before attempting any use of the pesticide. Pg 4

19. The first step to determine the volume of dipping vats is to measure the vat. Pg 5

20. Dip samples for qualitative analysis should be routinely taken and submitted to a laboratory to determine pesticide concentration. Pg 5

21. List problems associated with flies and mosquitoes: Pg 8

annoyance, feeding wounds, transmission of diseases

22. The cattle grub is the larva state of the heel fly. Pg 8

23. Animals may instinctively fear the heel fly and try to elude its egg laying activity. Pg 8

24. The larva of the heel fly is found where? Pg 8

Backline of the animal

25. What losses are caused by the cattle grub: **Pg 8**
reduced animal efficiency, ruined meat, damaged hides, misc. injuries
26. When should cattle grubs be controlled? **Pg 8**
during the early larval migration phase
27. Grub control in the early larva stage is best obtained with a systemic insecticide treatment. **Pg 8**
28. Horn and stable flies have piercing, sucking mouthparts and take blood meals from hosts. **Pg8**
29. The stable fly lays eggs in fecal material. **Pg 8**
30. Reducing breeding areas is the best way to control stable flies. **Pg 8**
31. Horse Flies are large, vicious biters that attack all domestic animals. **Pg 9**
32. List 3 diseases transmitted by the horse fly: **Pg 9**
Anaplasmosis, anthrax, tularemia
33. Black flies may cause suffocation of an animal resulting in death. **Pg 9**
34. Screwworm larvae feed on living animal tissue. **Pg 9**
35. The larval stage of the screwworm fly may cause death in animals. **Pg 9**
36. List ways to evade screwworms during active screwworm seasons. **Pg 9**
systemic insecticides, delay dehorning, castration and branding
37. List the metamorphic stages of a fly. **Pg 9**
egg, larva, pupa, adult
38. The house fly may transmit disease organisms to man and animals. **Pg 10**
39. The horse bot is controlled by a drench or bolus in the larval stage. **Pg 10**

40. Most of the eggs of the horse bot are deposited on the hair of the chest, legs, and mouth of horses and the larva migrate from the mouth to the stomach. **Pg 10**
41. The egg, larva, and pupal stages of mosquitos are found in and on water. **Pg 10**
42. The adult mosquito is capable of flying varying Distances depending on the species. **Pg 10**
43. The pesticide applicator is responsible for following label instructions. **Pg 11**
44. The pesticide label includes application rates and mixing instructions. **Pg13**
45. To calibrate a vat, measure the exact amount of water in the vat. **Pg 13**
46. In filling a vat to the 7/8 full level, the easiest method is to use a water meter to determine the amount of water used. **Pg 13**
47. How do you find the volume of the main vat? **Pg 15**

Multiply the length of the main vat in inches by the average width of the main vat in inches by the depth in inches.

48. To find the cubic inch of the ramp in a vat, you should multiply length (average width) times depth in inches and divide by 2. **Pg 15**
49. Prepare 50 gallons of a 1.25 % solution with a 7.5 % wettable powder pesticide using water as a dilutant. Using the formula $Q = \frac{S \times A \times D}{C}$ How many pounds of wettable powder are required. **Ppg16, 17**

69.1 pounds

50. Prepare 100 gallons of 0.4 % solution using a pesticide with 20% active ingredient with water as a dilutant.

Use the formula $Q = \frac{S \times A}{C}$ **Pg 18**

2 gallons

ADDITIONAL FACTS TO STUDY

Dips should be sampled in vats at the beginning of the vats initial charge; before and following each replenishing; and following the dipping of the last animal.

Some symptoms of pesticide poisoning in animals includes: excessive salivation; breathing difficulty; and rolling of the eyes.

Failure to apply pesticides properly may result in illegal residues in animal products; death of domestic animals; and accidental poisoning of an applicator.

The scientific name of the two species of fever ticks that may be found in Texas are *Boophilus annulatus* and *Boophilus microplus*

The cattle fever tick (*Boophilus annulatus*) has been eradicated from the U.S. except for periodic introductions on illegal movements on stray cattle from Mexico.

This course is designed to aid the student in certification of Tick, Louse, and Mite control.