

Weed and Brush Control in Pasture and Rangeland Practice Questions

INSTRUCTIONS: Have a highlighter and a colored pen handy. As you study through the text, look for the answers to the following questions and mark them in the book or on the sheet provided. Also, as you study through the text, ask yourself, "If I know this information will I be a better applicator?" If you answer "YES" that information would also be a good question for the test. *Make a note of it !* In order to allow for quick grading, most questions on the test are in the form of Multiple Choice or True and False; but this is not necessarily so. Practice Labels and Calibration on separate work sheets.

1. Explain the effect overgrazing has on the spread of forbs and brush in Texas.
2. List the ten (10) vegetational regions in Texas and give three factors considered in devising these regions.
3. Explain the effect of complete plant removal on water conservation.
4. Name the type of plant that gives the longest lasting effects.
5. Tell how animal productivity is affected by weed control on pastureland.
6. Give the amount of grass that can be produced for each pound of weeds controlled.
7. Successful brush management require a long-term plans and and treatment schedules that cover _____ years.
8. Name affects of weeds baled with grass in hay fields.
9. Explain what a plant growing cycle is.
10. Define an annual.
11. Define a biennial.
12. Define a perennial.

13. Explain how a simple perennial is different from a creeping perennial.
14. What would you call a plant that has lived for three years?
15. Name and describe the 4 growth stages that grasses and broadleaf weeds pass through.
16. Give a weed example for each of the following:
 - A. warm season annual
 - B. cool season annual
 - C. biennial
 - D. perennial
17. Name the stage when all plants easiest to control.
18. Name the type of plant that can reproduce by seed and vegetatively by stolons, rhizomes or tubers.
19. Name the type of plant that can only reproduce by seed but can re-grow from the same tap-root year after year.
20. List some factors that can affect seed dormancy.
21. How effective is mechanical control of perennial plants at the maturity stage?
22. How effective is chemical control of perennial plants at the maturity stage?
23. How does the control of weeds vary with age?
24. List ways that weed seed can be distributed.
25. Are rhizomes a type of weed seed?

26. Where can information be found about cocklebur. List the important facts given about cocklebur. (on your own - do the same for other weeds listed)
27. Does Agarito fruit have any food value for wildlife and birds?
(What other weeds produce wildlife and bird food)
28. What are the most effective means of controlling ashe juniper.
(what are effective means of controlling other species)
29. Name a plant that serves as wildlife cover after herbicides have killed the plants.
30. What is the first weed you think of when you hear of a hard to control brush species that has had extensive control efforts aimed at it?
31. Define burl. Name a species that forms a burl.
32. How would you recognize each of these plants:
 - A. Tasajillo
 - B. Retama
 - C. Huisache
33. List several kinds of methods used for weed and brush control.
34. Should a weed control method be effective?
35. When selecting control alternatives, should other common problem weed species be considered?
36. Define girdling.
37. Define basal treatment.
38. Define plowing.

39. Define grubbing.
40. Name any other weed control methods listed in the text.
41. Describe a way to control species that sprout from the stem base.
42. How does soil type and conditions affect the efficiency of power grubbing. WHY?
43. Which mechanical control method would be most effective on large forest or woodland trees, 8 – 10 inches in diameter.
44. How do manual control methods compare to other methods in terms of labor input.
45. Describe the effects of grubbing.
46. Which times of year are best suited for girdling brush?
47. Where is the growing point on a grassy plant?
48. Where is(are) the growing point(s) of a broadleaf weed(s).
Why are some brushy weeds not fully killed?
49. Is the soil disturbance associated with using a bulldozer to control of woody plants of any concern?
50. How long will shredding provide brush control?
51. What is the effect of shredding on stem number and the size of the basal stem.
52. What is the most effective time of year for herbicide spray application?
53. What is the most effective time of year for shredding?
54. List the benefits of roller chopping.

55. Describe the cost of root-plowing.
56. How long do the effects of rootplowing last.
57. List plants or types of plants that can be controlled by heavy offset disks.
58. What affect does plowing have on bermudagrass?
59. What affect does plowing have on brush species?
60. What type of brush is controlled by chaining? Give an example.
61. What type of brush is NOT controlled by chaining? Give an example.
62. List the effects of cabling and give examples of the types of plants controlled.
63. The oldest way of controlling vegetation on rangeland is _____.
64. List the factors that help determine the best time to burn.
65. How should the grazing program be modified after burning?
66. Name two factors that maximizes yields from improved pastures.
67. What affects does fertilization have on an improved grass pasture.
68. Can insects be used to aid in biological weed and brush control?
69. List examples of insects that provide biological control and give the species of plant controlled.
70. List advantages for using chemicals to control shrubs and weeds on grazing lands.

71. List disadvantages of using chemicals to control shrubs and weeds on grazing lands.
72. What animal (or animals) may be used to help control woody vegetation?
73. List characteristics associated with chemical brush control on grazing lands.
74. Can anyone who wants to go out and use chemicals to control brush on grazing lands?
75. Define a selective herbicide.
76. Define a nonselective herbicide.
77. Define a contact herbicide.
78. Can any weed control method eradicate all weed problems?
79. How can mixing herbicides achieve kill of existing plants more quickly? Give an example.
80. Explain the relationship between systemic and translocated herbicides.
81. Name the type of herbicide that is absorbed by leaves or roots and move easily in the veins of the plant.
82. Define contact herbicide.
83. Herbicide sprays tend to bounce or run off plants with narrow vertical leaves. (True or False)
84. Hairs on the leaf surface prevent sprays from being absorbed by holding spray droplets away from the leaf surface. (True or False)
85. The cuticle and wax on plant leaves are thinner on younger weeds. (True or False)
86. Seedling weeds have fewer and shorter hairs. (True or False)

87. Mature plants are easier to control than seedlings. (True or False)
88. Compare the differences in location of growth points and leaf characteristics of grasses and broadleaf weeds.
89. Explain how plants differ in susceptibility to herbicides and other control methods.
90. Explain how a plants growth stage may impact the control achieved from a herbicide application to a weed pest.
91. List three or more factors that will influence how much chemical reaches the target during an application.
92. Define humidity.
93. Define temperature.
94. Define air stability.
95. How many times should all herbicide containers be rinsed before disposal.
96. Can either triple rinsed herbicide or insecticide containers be reused for storing water or other pesticides?
97. List the item(s) you should have on-hand in case a pesticide spill occurs.
98. When using chemical control, name a slow but effective method of plant treatment.
99. You should repressurize a pressurized hand sprayer when the pressure drops how many pounds per square inch (psi) from the initial reading.
100. The same liquid herbicides that are used for broadcast application may NOT also be applied to individual plants as a foliar application. (True or False)

101. List steps to follow when using a hand sprayer for weed spraying (include information about nozzle height, spraying across the target area, using overlapping motion, and walking speed)
102. Give two methods of herbicide control best suited for the treatment of broomweed.
103. Can some herbicides be applied both to the foliage and to the soil?
104. Explain where diesel fuel oil or a herbicide-diesel mixture is applied in a conventional basal treatment.
105. Define streamline basal.
106. Define conventional basal.
107. Define low volume basal.
108. Define a frill application.
109. Define a notch type application.
110. Define the injection application method.
111. Name the treatment method that works best on stems less than 4 inches in diameter with smooth bark.
112. Name a treatment that uses a mixture of 15 to 25 percent herbicide, 65 to 75 percent diesel and 10 percent penetrant.
113. Name an application that involves cutting a ring in the bark around the tree base and applying a herbicide mixture directly to the cut.
114. Name two types of formulations in which that soil-applied herbicides are available.

115. When soil applied herbicides are used for brush control does death of the target species occurs very quickly over a two week period or more slowly over one to three years?
116. Name the most successful broadcast brush control method used to control large brush?
117. Explain what is meant by aerial application.
118. Name the air temperature reached when an aerial applicator should stop the work of herbicide application.
119. Why are aircraft equipped with a metering and spreading device for application of pellets?
120. Name two places where guidelines for specific chemicals are written.
121. When are soluble herbicides most hazardous to groundwater.
122. Would you expect a herbicide that breaks down easily or is strongly absorbed to soils to be hazardous to groundwater ?
123. Define persistence.
124. List factors that affect the time that herbicides stay active in the soil.
125. Would it be correct to say that diversity in the ecosystem and resistance of some brush species to single control practices may make brush management systems necessary where two or more brush control methods are sequentially applied to achieve effective control.

Review all study questions in the text.

Know the key items in each description along with the name and the picture. You will be asked to match numbered photographs with the correct answer provided. That answer may be a plant name or it may be a plant characteristic.

STUDY PLANT PHOTOS and DESCRIPTIONS