SOnerd's SSSS 2018-2019 Herpetology Test

Station 20 sounds found here: https://drive.google.com/drive/folders/1OQRmspTi13qv_yTLLK_Yy_VRie42ISqE?usp=sharing

Station 1

1. (3 points) Identification:
    a. Order:
    b. Family:
    c. Genus if applicable:
2. (1 point) T/F: These organisms are incapable of producing sound.
3. (1 point) T/F: These organisms can detach and eventually regenerate their tail when threatened by a predator.
4. (1 point) How do these organisms catch their prey?
5. (2 points) Describe the courtship ritual of this group.

Station 2

6. (3 points) Identification:
    a. Order:
    b. Family:
    c. Genus if applicable:
7. (1 point) How deep do animals in this group usually dig their nests?
8. (1 point) What is this group's status on the IUCN Red List?
9. (2 points) List 2 life history traits that have allowed these organisms to maintain their range despite environmental changes.
10. (1 point) How long is the incubation period of this group?

Station 3

11. (4 points total, 1 point each) Identify the following to the lowest classification required by the National List. The same taxonomic group can be used more than once.

a.


b.


c.


d.


12. (2 points) What characteristics to these animals have that make them of interest to scientists? List 2.

13. (2 points) What part of these organisms' brains are relatively large, and why?

14. (1 point per correct selection) Which characteristics do **some** organisms in this order exhibit? Select all that apply.

    a. Presence of a middle ear;

    b. True teeth on only the upper jaw;

    c. Venomous;

    d. External fertilization;

    e. Gills as adults;

    f. Ribs;

    g. More than 4 toes on forelimbs;

    h. Strong skull bones;

15. (1 point) Approximately how many extant species are in this order?

Station 4

16. (3 points) Identification:
    a. Order:
    b. Family:
    c. Genus if applicable:
17. (2 points) List 2 morphological adaptations that allow these organisms to be good climbers.
18. (1 point) In addition to concealing the tender parts of their bodies from predators, what defensive benefit does rolling into a ball provide for these organisms?
19. (1 point) Shade in the distribution map below, showing where in the US members of this group are found.

20. (1 point) Do these organisms breed on land or in water?

Station 5

21. (3 points) Identification:
    a. Order:
    b. Family:
    c. Genus if applicable:
22. (1 point) Which of the following best describes the growth of this animal?
    a. Grows at a steady rate throughout its life;
    b. Grows rapidly for 1-2 years, then slows down to a few mm/year;
    c. Grows steadily for 5-6 years, then stops growing;
    d. Grows a cm/year for the first 2-3 years, grows rapidly for 1 year, and then stops growth upon reaching sexual maturity;
23. (2 points, circle one word for each parentheses set) These organisms have (smooth/keeled) scales and a (divided/single) anal plate.
24. (1 point) Which of the following terms best describes this organism's teeth?
    a. Aglyphous;
    b. Proteroglyphous;
    c. Solenoglyphous;
    d. Opisthoglyphous;
25. (2 points) Define precocial. Are these snakes known to have precocial young?

Station 6

26. (3 points) Identify each of the following to the most specific level required by the National List.

a.	b.	c.
		

27. (1 point) Approximately what is the top "walking" speed of a snapping turtle?

28. (1 point) What is the difference between the usage of the terms "Testudines" and "Chelonia"?

29. (1 point) How do some turtles survive anoxic conditions?

30. (1 point) T/F: The snapping turtle's bite is very powerful because of its strong teeth, which pierce the skin of a victim.

Station 7

31. (3 points) Identification:
    a. Order:
    b. Family:
    c. Genus if applicable:

32. (1 point) What sense do juveniles of this group use to recognize conspecifics?

33. (1 point) How do these organisms kill their prey?
    a. Constriction;
    b. Venom;
    c. Powerful bite;
    d. Pinning it against the ground;

34. (1 point) How do these organisms produce a hissing sound?

35. (2 points) What general type of soil do these organisms require in their habitat? Why?

Station 8

36. (3 points) Identification:
    a. Order:
    b. Family:
    c. Genus if applicable:
37. (1 point) Shade in below all areas in the US where members of this group can be found.

38. (2 points) How is the sex of these organisms determined? Explain what causes eggs to turn into males and what causes them to turn into females.
39. (1 point) Describe the parental care exhibited by this group.
40. (2 point) List 4 predators of this group, either of adults or young/eggs.

Station 9

41. (3 points) Identification:
    a. Order:
    b. Family:
    c. Genus if applicable:
42. (1 point) What is the average incubation period for this group?
43. (1 point) What is this group's top "running" speed?
44. (4 points) In what habitats is this group frequently found? List 3 morphological adaptations that allows this group to survive in such a habitat.
45. (1 point) How many toes do members of this group typically have?

Station 10

46. (3 points) Identification:
    a. Order:
    b. Family:
    c. Genus if applicable:
47. (1 point) What is the average lifespan for this group in the wild?
48. (1 point) What is this group's status on the IUCN Red List?
49. (2 points) Describe 2 efforts that have been made to conserve this group.
50. (1 point) T/F: These organisms are obligately aquatic, meaning they cannot survive in terrestrial environments.

Station 11

51. (4 points) Identification: Identify each snake below to the most specific level required by the National List. The same group can be used multiple times.

a. 

b. 

c. 

d. 

52. (1 point) What is the technical term for the shedding of skin in snakes?
53. (1 point) Which method of snake locomotion is the most common?
    a. Lateral undulation;
    b. Rectilinear;
    c. Sidewinding;
    d. Concertina;
54. (1 point) Which of the following terms can describe reproduction in snakes? Select all that apply.
    a. Oviparous;
    b. Ovoviviparous;
    c. Viviparous;
    d. Parthenogenetic;
55. (1 point) (TB-1) What enzyme is found in all snake venom?

Station 12

56. (3 points) Identification:
    a. Order:
    b. Family:
    c. Genus if applicable:
57. (1 point) Approximately how many species can be found in this group?
58. (1 point) What is unique about the way some members of this group reproduce?
59. (1 point) Explain the etymology of the scientific name of the group (the most specific level required by the National List).
60. (1 point) T/F: These organisms cannot bite, but they will release foul-smelling secretions when threatened.

Station 13

61. (3 points) Identification:
    a. Order:
    b. Family:
    c. Genus if applicable:
62. (1 point) What is this animal's preferred food?
63. (1 point) Approximately what size are most members of this group? (in centimeters)
64. (1 point) At what age do members of this group become sexually mature?
65. (1 point) Unlike most other frogs, many arboreal species in this group do not need water to reproduce. Explain how this is possible.

Station 14

66. (3 points) Identification:
    a. Order:
    b. Family:
    c. Genus if applicable:
67. (1 point) How do these organisms sense prey moving in dark/muddy water?
68. (2 points) Is the organism shown an adult? If so, is it a male or female? If not, in what stage of life is it?
69. (1 point) How many rows of teeth do these organisms typically possess?
70. (1 point) How many costal grooves do animals of this group typically possess?

Station 15

71. (3 points) Identification:
    a. Order:
    b. Family:
    c. Genus if applicable:
72. (2 points) Could the eggs in the picture have been produced by an animal from this order? If so, explain how you knew. If not, explain why not and what order may have produced them.

73. (1 point) Are these organisms nocturnal or diurnal?
74. (1 point) T/F: Because toads are poisonous, they cause warts on human skin upon contact.
75. (2 points) Circle all the letters that describe the actions of the organisms in the photo shown.
    a. Amplexus;
    b. Axillary;
    c. Basking;
    d. Foraging;
    e. Inguinal;
    f. Lekking;
    g. Reproduction;
    h. Oviposition;
    i. Intrasexual competition;

Station 16

76. (3 points) Identification:
    a. Order:
    b. Family:
    c. Genus if applicable:

77. (4 points) Fill in the following table relating to the habitat preferences of this group:

Attribute	Description of Preference
Elevation Range (give a range in ft)	
Vegetation Density (high/low)	
Soil Type (brief description)	
Sun exposure (high/low)	

78. (1 point) Why might members of this group ingest sand and rock while feeding?

79. (2 points) Approximately how many clutches of eggs do members of this group lay per year, and how many eggs are in each clutch?

80. (1 point) Which of the following statements is true regarding sexual maturity in this group?
    a. Males reach sexual maturity sooner and at a smaller size.
    b. Females reach sexual maturity sooner and at a smaller size.
    c. Females and males reach sexual maturity at the same age and size.
    d. There are no males of any species found in this group, and females reach sexual maturity in approximately 7 months.

Station 17

81. (3 points) Identification:
    a. Order:
    b. Family:
    c. Genus if applicable:

82. (1 point) T/F: Members of this group tend to travel relatively quickly and frequently.

83. (1 point) Why do members of this group prefer bodies of water with softer sandy bottoms?

84. (2 points) Circle of the following life history traits that apply to members of this group.
    a. High fecundity;
    b. Reach sexual maturity relatively quickly;
    c. High survivorship of adults;
    d. High hatchling success rate (~80% successful);
    e. Relatively short incubation period;

85. (1 point) Why do some members of this group stomp on the ground while foraging?

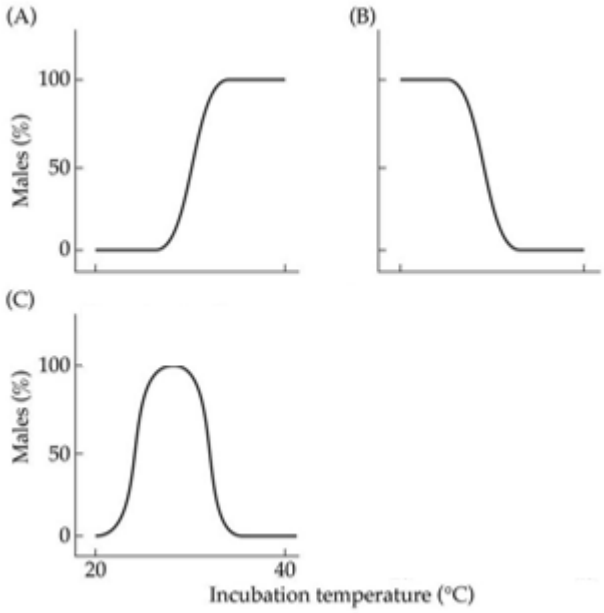
Station 18

86. (3 points) Identification:
    a. Order:
    b. Family:
    c. Genus if applicable:
87. (1 point) T/F: These organisms lack a nasolabial groove.
88. (1 point) How many toes are found in the forelegs and hindlegs of animals in this group?
89. (2 points) In which region (SW, SE, NE, NW) of the US is this group the least likely to be found and why?
90. (2 points) List 2 ways organisms of this group have positively impacted humans.

Station 19

91. (2 points) What is the major developmental factor that allowed reptiles to move from water onto land? Explain what it is and how it allows for a terrestrial life cycle.
92. (1 point) What is the urine of amphibians primarily composed of?
93. (1 point) What trait makes amphibians great indicator species?
94. (1 point) What muscle do amphibians use to elevate their eyes?
95. (4 points) The following graphs show incubation temperature on the X-axis and percentage of males on the Y-axis. Appropriately title them using the following word bank. More than one title can go on each graph.

Lizards Alligators Most Turtles Crocodiles



Station 20

Sounds found here: https://drive.google.com/drive/folders/1OQRmspTi13qv_yTLLK_Yy_VRie42ISqE?usp=sharing