

WFSC 302
Practice Final Exam

Choose to which taxonomic group the named animal belongs (1 point)

1. Snowy Owl
 - a. Strigiformes
 - b. Charadriiformes
 - c. Columbiformes
 - d. Psittaciformes
 - e. Gaviiformes

2. Echidna
 - a. Chiroptera
 - b. Marsupialia
 - c. Monotremata
 - d. Edentata
 - e. Lagomorpha

3. Archaeopteryx
 - a. Neognathae
 - b. Paleognathae
 - c. Archaeornithes
 - d. Neornithes
 - e. Podicipediformes

4. Sage grouse
 - a. Gruiformes
 - b. Galliformes
 - c. Gaviiformes
 - d. Charadriiformes
 - e. Apodiformes

5. Baboon
 - a. Anthrooidei
 - b. Insectivora
 - c. Monotremata
 - d. Chiroptera
 - e. Prosimii

6. Plover
 - a. Gaviiformes
 - b. Pelicaniformes
 - c. Charadriiformes
 - d. Ciconiiformes
 - e. Gruiformes

7. Pika
 - a. Chiroptera
 - b. Insectivora
 - c. Scandentia
 - d. Proboscidea
 - e. Lagomorpha

8. Blue whale
 - a. Cetacea
 - b. Pinnipedia
 - c. Carnivora
 - d. Proboscidea
 - e. Hyracoidea

9. Chimney Swift
 - a. Columbiformes
 - b. Psittaciformes
 - c. Passeriformes
 - d. Apodiformes
 - e. Anseriformes

10. Scaly Anteaters

- a. Carnivora
- b. Tubulidentata
- c. Edentata
- d. Monotremata
- e. Pholidota

Choose the best possible answer (3 points each)

11. The evolution of which of the following characters most influenced the evolution of mammalian dentition and jaw structure.

- a. viviparity
- b. intelligence
- c. endothermy
- d. ability to nurse young
- e. nocturnal habits

12. The beaks of macaws are designed primarily to feed on:

- a. fruit
- b. insects
- c. grain
- d. vertebrates
- e. plankton

13. Which of the following is not a feeding strategy found in leaf-nosed bats?

- a. Sanguivory
- b. insectivory
- c. frugivory
- d. nectivory
- e. all the above are feeding strategies of leaf-nosed bats

14. A group of extinct, flightless birds from New Zealand.

- a. Kiwi
- b. Diatryma
- c. Emu
- d. Moa
- e. Cassowary

15. The reptilian ancestors of mammals had what type of skull

- a. Anapsid
- b. Euryapsid
- c. Kinetic
- d. Synapsid
- e. Diapsid

16. Which type of feeding strategy requires the greatest amount of energy.

- a. Predators
- b. aerial sweepers
- c. Fly-catchers
- d. nectivores
- e. Aquatic filter feeders

17. The function of air sacs in birds is to:
- reduce density and cool animal
 - oxygen exchange
 - aid in diving
 - increase flight speed
 - none of the above
18. Which of the following is thought to be the immediate ancestors of Therapsids?
- Multituberculates
 - Diadectomorphs
 - Limnoscelids
 - Edaphosaurids
 - Sphenacodonts
19. Which of the following is true of monogamous mating systems in birds?
- most prevalent mating system
 - only males care for eggs and young
 - only females care for eggs and young
 - females usually most brightly colored
 - none of the above
20. Vicariance biogeography is
- Movement of faunas as a result of geological processes
 - Exchange of faunas by dispersal over water
 - The extinction of animal species as a result of competition
 - A model of speciation
 - None of the above
21. Living Monotremes are found in what part of the world?
- South American and Australia
 - Africa & Australia
 - Australia only
 - Australia & New Zealand
 - Australia & New Guinea
22. Why were there no significant ice ages prior to the Carboniferous-Permian Boundary?
- The earth's atmosphere had insufficient oxygen and ozone.
 - The earth's climate was too warm to permit the establishment of glaciers
 - No large land masses were positioned close to the poles.
 - There was insufficient fresh water for large glaciers to form.
 - None of the above.

23. Which of the following is not a diagnostic character of mammals?
- a. sequential tooth replacement
 - b. viviparity
 - c. dentary-squamosal jaw articulation
 - d. set occlusal relationship
 - e. all the above are diagnostic characters
24. Of the following, which is not a type of polyandry
- a. resource defense
 - b. lekking
 - c. female access polyandry
 - d. cooperative breeding
 - e. all the above are types of
25. In the two models of the origin of bird flight, both models assumed Proavis to be.
- a. arboreal
 - b. feathered
 - c. cursorial
 - d. used arms as insect "net"
 - e. none of the above
26. What type of tooth structure was found in the fossil monotremes?
- a. triconodont
 - b. edentate
 - c. tribosphenic
 - d. homodont
 - e. none of the above
27. A result of the repeated isolation and subsequent mixing of habitats within the Congo Basin and Amazon forests during Pleistocene glacial and interglacial periods was:
- a. Increased competition for limited resources
 - b. Rapid speciation
 - c. High rates of extinction
 - d. Survival of many archaic mammals (living fossils)
 - e. None of the above
28. The most important sense for birds is:
- a. hearing
 - b. eyesight
 - c. touch
 - d. smell
 - e. compass sense
29. Which of the following characters is shared by Archaeopteryx and the ostrich.
- a. claws on wings
 - b. flight feathers
 - c. arrangement of bones of the palate
 - d. caudal vertebrae
 - e. pneumatic skeleton

30. What extraembryonic membranes make up the placenta of marsupials.
- a. Amnion and Chorion
 - b. Chorion and Allantois
 - c. Allantois and yolk sac
 - d. Amnion and yolk sac
 - e. Chorion and yolk sac
31. What extinct order of mammals occupied the gnawing-herbivore niches during the Mesozoic?
- a. Triconodonts
 - b. Monotremata
 - c. Therapsida
 - d. Cynodonts
 - e. Multituberculates
32. Which of the following originated in North America but are now found as native mammals only in Asia and Africa?
- a. Aardvarks and scaly anteaters
 - b. Marsupials and Sirenians
 - c. Rabbits
 - d. Elephant shrews
 - e. Horses and rhinos

True (A) or False (B) (1. pt. each)

33. The bone that is homologous to the mammalian stapes made up part of the reptilian jaw joint.
34. Canines are replaced before premolars.
35. The earliest known marsupials are from Texas.
36. The theory that feathers evolved from scales is supported by the study of fossils that show intermediate stages of scale and feather morphology.
37. The Xenarthrans are thought to have originated in South America.
38. The number of marsupial species in South America has declined dramatically since the late Pliocene when the land connection between North and South America was established.
39. Birds do not possess a urinary bladder.
40. During the Pleistocene significant climate changes occurred along with a great deal of continental displacement.
41. Parrots have been known to carry Newcastle's Disease.
42. Dimetrodon is thought to have been ectothermic.

43. The Rhea is an exception to the rule that Paleognathous birds are flightless.
44. All mammals are viviparous.
45. Thrinaxodon had a reptilian type of jaw articulation.
46. Hummingbirds are the only birds that can fly backwards.
47. The primitive Eutherian dentition contained 50 teeth.
48. Diarthrognathus was a Therapsid that possessed a jaw joint like that of mammals.
49. Birds primarily excrete urea.
50. Two factors that have been very important in mammalian evolution are chance and vicariance.
51. Mammary glands evolved from endocrine (hormone producing) glands.
52. Edaphosaurus was a predaceous Pelycosaur.
53. Triconodonts were the longest-lived (in geological time) group of mammals.
54. Otariids and Phocids are mostly tropical in distribution.
55. The original function of feathers probably was sensory (touch).
56. Body temperatures of birds are typically cooler than that of man.

PRACTICE FINAL EXAM – KEY

1. A
2. C
3. C
4. B
5. A
6. C
7. E
8. A
9. D
10. E
11. C
12. A
13. E
14. D
15. D
16. D
17. A
18. E
19. A
20. A
21. E
22. C
23. B
24. B
25. B
26. C
27. B
28. B
29. C
30. E
31. E
32. E
33. F
34. T
35. T
36. F
37. T
38. F
39. T
40. F
41. T
42. T
43. F
44. F
45. F
46. T
47. F
48. F
49. F
50. T
51. F
52. F
53. F
54. F
55. F
56. F