Animal Biology, Exam II
Spring, 2004

Instructions: There are 50 questions. Pick the best answer for each one. Please make sure that you fill out your scantron correctly. In case of discrepancy, the answer on the scantron will be considered your answer. When you’re finished, please hand in the scantron. You may keep the exam sheet. Good luck!

d__ 1. Characterized by having mesoderm, being acoelomate, and having a single gut opening:
   a) Nematodes  b) Annelids  c) Cnidarians  d) Platyhelminthes  e) Vertebrates

e__ 2. Turbellarians:
   a) are parasites with more than one host         b) are parasites with a single host
   c) are parasites in humans                      d) a & c        e) are not parasites

b__ 3. In schistosomiasis the eggs leave the body with:
   a) urine                          b) feces         c) saliva         d) air expelled through the lungs
   e) don’t leave the body - they encyst in muscle

e__ 4. A characteristic of the Nematodes not shared by Annelids or Platyhelminthes:
   a) longitudinal muscles only           b) coelomate       c) pseudocoelomate       d) a & b        e) a & c

e__ 5. In trichonella, the larva leave the body with:
   a) urine                          b) feces         c) saliva         d) air expelled through the lungs
   e) don’t leave the body - they encyst in muscle

e__ 6. Polychaetes have:
   a) a true coelom                                           c) parapodia
   b) no permanent gonads                                      d) metanephridia
   e) all of the above

d__ 7. Rotifers share which characteristic with Nematodes:
   a) having a crown of cilia                                b) having a mastax
   d) being pseudocoelomate                                   e) none of the above

e__ 8. Rotifers have all of the following characteristics except:
   a) having a crown of cilia                                b) having a mastax
   d) having many forms with parthenogenesis                e) having a primitive circulatory system

a__ 9. Mollusks with a single tusk like shell:
   a) Scaphopoda                                      c) Bivalves
   b) Polycladophora                                   d) Gastropoda
   e) Cephalopoda

d__ 10. The largest squid we know about was found in New Zealand and was about:
   a) 17 inches                          b) 10 feet
   c) 100 feet                           d) 17 meters
   e) 1 km

a__ 11. Some Gastropods can be deadly to humans:
   a) True                                           b) False

e__ 12. Cephalopods have all of the following characteristics except:
   a) a closed circulatory system                    b) tentacles
   d) a beak                                         e) a benthic habitat
13. A type of “lung” is found in terrestrial forms of:
   a) Scaphopoda b) Polyplacophora c) Bivalves d) Gastropoda e) Cephalopoda

14. The two main characteristics of Arthropods are:
   a) jointed appendages and a closed circulatory system
   b) A closed circulatory system and an exoskeleton
   c) jointed appendages and dermal ossicles
   d) an exoskeleton and incomplete nervous system
   e) jointed appendages and an exoskeleton

15. Trilobites:
   a) are extinct   b) have three longitudinal body parts   c) have compound eyes
   d) a & b   e) a, b & c

16. The two main groups within the Chelicerates are:
   a) insects and arachnids   b) insects and isopods   c) insects and horseshoe crabs
   d) insects and spiders   e) horseshoe crabs and arachnids

17. Arthropods without antennae:
   a) Chelicerates   b) Hominids   c) Crustaceans   d) Trilobites   e) Uniramians

18. Millipedes are members of the:
   a) Chelicerates   b) Hominids   c) Crustaceans   d) Trilobites   e) Uniramians

19. Many insects are harmful due to their role in:
   a) decomposing   b) transmitting disease   c) destroying crops   d) all of the above
   e) b & c

20. An example of the order Diptera is:
   a) beetle   b) butterfly   c) bug   d) fly   e) grasshopper

21. An ant belongs to the order:
   a) Lepidoptera   b) Isoptera   c) Hymenoptera   d) Odonata   e) Dermaptera

22. Brachiopods have:
   a) lophophores and 2 shells that are slightly different in size
   b) no lophophores and 2 shells that are the same size
   c) no lophophores and 8 shells that are slightly different in size
   d) xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
   e) no lophophores and no shells at all

23. The number of living Brachiopods is about:
   a) 3   b) 30   c) 300   d) 3,000   e) 30,000

24. The class Holothuroidea is also known as:
   a) Star fish   b) Brittle stars   c) Sea urchins   d) Sea cucumbers   e) Sea lilies

25. Echinoderms are:
   a) Protostomes   b) Monostomes   c) Deuterostomes   d) Determinate
   e) Plachostomes
26. Sea lilies:
   a) are mobile, and belong to the class Holothuroidea
   b) are sessile, and belong to the class Crinoidea
   c) are mobile, and belong to the class Crinoidea
   d) are sessile and belong to the class Holothuroidea
   e) none of the above

27. The Tunicates are:
   a) mostly marine and sessile
   b) mostly terrestrial and mobile
   c) mostly marine and mobile
   d) mostly terrestrial and sessile
   e) none of the above

28. Characteristics of Vertebrates include all of the following except:
   a) a well developed nervous system
   b) a skull
   c) a closed circulatory system
   d) radial symmetry
   e) none of the above

29. Hagfish:
   a) are active predators, chasing and killing their prey
   b) eat by attaching to fish and sucking out body juices
   c) eat by burrowing into (usually) sick fish and eating the fish from the inside out.
   d) are filter feeders
   e) are closely related to leeches

30. Sharks have all of the following except:
   a) gill slits
   b) spiral valve
   c) receptors for electrical signals
   d) lateral line
   e) swim bladder

31. The subclass Actinopterygii includes:
   a) lung fish and ray-finned fish
   b) lung fish and lobe finned fish
   c) lobe-finned fish and ray-finned fish
   d) ray-finned fish only
   e) all fish

32. Caecilians:
   a) are found in North America
   b) look like small salamanders
   c) are related to worms
   d) are found in the tropics
   e) none of the above

33. Amphibians need water because:
   a) their eggs are not water tight
   b) they loose water through their skin
   c) they swim
   d) all of the above
   e) a & b

34. Reptiles have all of the following except:
   a) scaly skin
   b) internal fertilization
   c) no larval stages
   d) eggs with shells (if they lay eggs)
   e) there are no exceptions on this list

35. Snakes have none of the following except:
   a) legs
   b) eyelids
   c) ears
   d) lungs
   e) pineal eye

36. Turtles and birds share the following character:
   a) feathers
   b) endothermy
   c) adaptations for extreme weight loss
   d) no teeth
   e) a large keel

37. Mammals are divided into two subclasses:
   a) Theria and Metatheria
   b) Theria and Prototheria
   c) Eutheria and Theria
   d) Eutheria and Metatheria
   e) Eutheria and Prototheria
38. In the case of true placental mammals (mammals with a real placenta), the placenta forms from the:
a) yolk sac  
b) allantois  
c) amnion  
d) chorion  
e) shell

39. The most successful order of mammals are the:
a) Rodents  
b) Carnivores  
c) Bats  
d) Gazelles  
e) Birds

40. An example of the order Artiodactyla would be a:
a) mouse  
b) human  
c) bat  
d) sloth  
e) deer

41. The male of this mammal is has a venomous spine on it’s rear leg:
a) human  
b) bat  
c) duck-billed platypus  
d) echidna  
e) pangolin

42. Coprolites are:
a) fossilized footprints  
b) fossilized bones  
c) fossilized professors  
d) fossilized feces  
e) none of the above

43. Carbon 14 decays into:
a) Carbon 12  
b) Oxygen 12  
c) Lead 206  
d) Nitrogen 14  
e) Helium 20

44. The earliest animal fossils date from about:
a) 4 billion years ago  
b) 3 billion years ago  
c) 250 million years ago  
d) 700 million years ago  
e) 10 years ago

45. Also known as the age of fish, this period lasted from about 409 to 363 million years ago:
a) Cambrian  
b) Ordovician  
c) Silurian  
d) Devonian  
e) Carboniferous

46. The age of Dinosaurs is also known as the (careful, a bit tricky):
a) Mesozoic era  
b) Cretaceous period  
c) Jurassic period  
d) Cenozoic era  
e) Carboniferous period

47. The highlands of Scotland are actually a continuation of the:
a) Rocky mountains  
b) Alps  
c) Appalachian  
d) Himalayas  
e) are not a continuation of anything

48. Known from fragments of numerous specimens and from footprints in the Olduvai gorge, this is the first really well known hominid:
a) Australopithecus anamensis  
b) Australopithecus africanus  
c) Australopithecus afarensis  
d) Homo habilis  
e) Ardipithecus ramidus

49. The first evidence for stone tools is in:
a) Australopithecus anamensis  
b) Homo heidelbergensis  
c) Homo habilis  
d) Australopithecus africanus  
e) Homo erectus

50. These were probably killed off by modern humans:
a) Homo heidelbergensis  
b) Homo sapiens neanderthalensis  
c) Homo habilis  
d) Cro-Magnon  
e) Australopithecus afarensis

51. Extra credit. This exam is version A. To get two extra credit points, mark “A” on your scantron for question 51.

Your score will be posted on the web using your id # assigned in the first exam.