

OLABISI ONABANJO UNIVERSITY, AGO-IWOYE
DEPARTMENT OF PLANT SCIENCE AND APPLIED ZOOLOGY
RAIN SEMESTER EXAMINATION 2005/2006 SESSION
BIO 104 (ANIMAL DIVERSITY) Exam taken February 2007

1. The correct hierarchy in the Animal kingdom is: (a) Phylum, Kingdom, Order, Class, Family (b) Kingdom, Phylum, Order Class Family (c) Kingdom, Phylum, Class, Family Order (d) Kingdom, Phylum, Class Order, Family
2. The Family name ends with (a) -idea (b) -idea (c) -inae (d) -sis
3. Animals are given two-part names. The first name is (a) Genus (b) Family (c) Order (d) Species
4. The correct scientific name of man is (a) *Homo Sapiens* (b) *homo Sapiens* (c) *Homo sapiens* (d) *homo sapiens*
5. The author of the binomial system of nomenclature is (a) Louis Pasteur (b) Charles Darwin (c) Lammark (d) Carl Linnaeus
6. The Superphylum Arthropoda includes: (a) Nematoda, Crustacea, Uniramia, Chelicerata (b) Crustacea, Uniramia, Chelicerata, Onychophora (c) Rotifera, Crustacea, Annelida, Chelicerata (d) Porifera, Annelida, Nematoda, Chelicerata
7. In the animal classification chart, animals with 3 body layers are called: (a) Diploblastica/Radiata (b) Triploblastica/ Bilateria (c) Triploblastica/Bilateria (d) Diploblastica/Radiata
8. Animals with true coelom in their body cavity are called (a) Pseudocoelomata (b) Acoelomata (c) Coelomata (d) Eucoelomata.
9. Animals with 2 body layers are: (a) Radiata/Bilateria (b) Radiata/Coelenterata (c) Triploblastica/Bilateria (d) Radiata/Diploblastica
10. Which of the following does not belong to the grade Radiata? (a) *Hydra* (b) *Planaria* (c) *Obelia* (d) *Eudrilus*
11. The Kingdom Animalia consists of: (a) One Kingdom (b) Two Kingdoms (c) Two SubKingdoms (d) One Kingdom and 3 branches
12. Which of the following does not belong to the worm Phyla? (a) Cnidaria (b) Nematoda (c) Annelida (d) Nematomorpha
13. Some Nematoda are protandric. It means: (a) male gonads mature before female gonads (b) female gonads mature before male gonads (c) both gonads mature at same time (d) gonads are lacking
14. Which of the following is not worm-like? (a) *Ascaris* (b) *Ancylostoma* (c) *Dracunculus* (d) *Pillodina*
15. Which of the following is free living? (a) *Taenia* (b) *Turbellaria* (c) *Fasciola* (d) *Trichinella*
16. The Flatworms are advanced over the Cnidarians because: (a) they are bilaterally symmetrical (b) they are triploblastic (c) they have definite organs (d) all of the above reasons
17. Which of these animals are metamerically segmented? (a) *Taenia* (b) *Ascaris* (c) *Hyperiodilus* (d) *Fasciola*
18. The epidermis in Nematoda is syncytial because (a) the cells are nucleated (b) the adjacent cells are not distinct (c) the cells form a tissue (d) the cell nucleus lacks a membrane.
19. The prostomium in the Annelida is the (a) first true segment (b) second segment (c) third segment (d) pre-oral segment.
20. The excretory organs in the Annelida is (a) nephridium (b) kidney (c) contractile vacuole (d) flame cell
21. The parasitic member in the Annelida has for attachment (a) cilia (b) pseudopodia (c) tentacles (d) suckers.
22. The outer rings on the body of *Hirudo* is (a) the limit of a segment (b) a septum (c) an annulus (d) an invagination of the outer cell.
23. Which of these arthropods possess biramous appendage? (a) Onychophora (b) Myriapoda (c) Crustacea (d) Hexapoda/Insecta.
24. The body wall (somatic) muscles are arranged (a) longitudinally (b) circularly (c) in bundles around appendages (d) in a diffuse manner.
25. The exoskeleton in the Arthropoda is for (a) waterproofing (b) attachment of muscles (c) protection (d) all of the above.
26. The haemocoel in the Arthropoda is (a) hydrostatic skeleton (b) the coelom filled with blood (c) excretory in function (d) coelom divided by septa.
27. The abdominal segments in Trilobitomorpha are fused and called (a) pygidium (b) prostomium (c) peristomium (d) opisthosoma.
28. The head in Trilobitomorpha is called (a) prosoma (cephalon) (b) cephalothorax (c) carapace (d) trunk.
29. The characteristic of the Hexapoda/Insecta that distinguishes it from other Arthropods is the division of the body into (a) head and trunk (b) prosoma and opisthosoma (c) head, thorax and abdomen (d) cephalothorax and abdomen.
30. Which of these arthropods is characterised by the possession of a pedicel? (a) scorpions (b) Mites and ticks (c) Insects (d) Spiders.
31. In the Chelicerata, the body is (a) divided into head, thorax and abdomen (b) divided into prosoma (cephalothorax) and opisthosoma (c) divided into cephalon and pygidium (d) not divided out all segments are fused.
32. Insects have (a) 3 pairs of walking legs (b) 4 pairs of walking legs (c) numerous walking legs (d) 6 pairs of walking legs.

mouth - subterminal / ant. 3 segments
anus - terminal

hind. 3 segments
oligochaete

33. Which of the following is not a class in Echinodermata? (a) Asteroidea (b) ~~Arachnida~~ (c) Echinoidea (d) Cinoidea.
34. The starfish (Asteroidea) typically has (a) 4 radiating arms (b) 6 radiating arms (c) 5 radiating arms (d) 7 radiating arms.
35. The mouth of the starfish is located (a) on the centre of the central disc (b) midway on one of the radiating arms (c) between two arms (d) the tip of one of the arms.
36. The organ of locomotion in Echinodermata is (a) cilia (b) pseudopodia (c) tube feet (d) parapodia.
37. Echinoderms are called deuterostomes because (a) the mouth does not develop from the blastopore (b) the mouth is overhung by a segment (c) the mouth develops on the oral surface (d) the mouth has a double opening.
38. Which of the following characteristics is peculiar to the Echinoderms? (a) coelom (b) haemocoel (c) water vascular system (d) blood vascular system.
39. In phylum Chordata, the nerve cord is (a) dorsal (b) hollow (tubular) (c) dorsal, hollow and below the notochord (d) dorsal, hollow and above the notochord.
40. Which of the following does not belong to phylum Chordata (a) Fish (b) Starfish (c) Bird (d) Rabbit
41. The class of fish without jaw is (a) Agnatha (b) Chondrichthyes (c) Placodermi (d) Osteichthyes
42. Fish respire by (a) lungs (b) gills (c) trachea (d) skin
43. Amphibians are characterised by (a) possession of scales (b) possession of gills and lungs (c) possession of lungs (d) absence of all of the above.
44. The forelimbs of birds are adapted for (a) walking (b) flying (c) catching prey (d) perching.
45. The glands present in the skin of mammals are (a) sweat glands (b) sweat and sebaceous glands (c) mucous glands (d) poison glands
46. Three subclasses of mammals are (a) Prototheria, Metatheria and Eutheria (b) Prototheria, Metatheria and Atheria (c) Metatheria, Eutheria, Placodermi and Prototheria (d) Eutheria, Prototheria, Chondrichthyes and Atheria.
47. The genera in family Hominidae to which man belongs is (a) Australopithecus (b) Plesianthropus (c) Homo (d) Pithecanthropus.
48. Which of the following is not a tetrapod (a) rat (b) snake (c) bird (d) man.
49. Which of the following is not a toad? (a) Hyla (b) Bufo (c) Xenopus (d) Rana
50. The ability of an organism to understand and respond to a new situation/solve a problem is a function of (a) Adaptability (b) Size (c) Intelligence (d) Density (population).
51. The fusion or grouping of segments together is (a) Tagmosis (b) Cephalisation (c) Neurulation (d) Axiation.
52. Each component of the above is a (an) (a) Segment (b) Cell (c) Tagma (d) Annulus.
53. The coelom is a (a) spacious cavity within the body filled with fluid (b) space within a cell (c) vacuole filled with fluid (d) vascular tissue.
54. When the coelom is reduced and filled with blood, it is called (a) Blastocoel (b) Haemocoel (c) Haemolymph (d) Lymph.
55. Haemocoel occurs in (a) Annelida (b) Turbellaria (c) Crustacea (d) Platyhelminthes.
56. The arrangement of the muscles in coelomate animals is (a) loose (b) in bundles (c) in layers (d) diffuse.
57. In metamerism, the segments are (a) of different ages (b) of different sizes (c) independent of each other (d) of the same age.
58. Cephalisation arises as a result of the (a) division of the body into segments (b) Concentration of sensory cells in the anterior part of the body (c) Formation of the coelom (d) Fusion of segments.
59. The arthropod body is characterised by (a) cuticle forming exoskeleton (b) paired jointed appendages (c) grouping of muscles into bundles (d) all of the above characteristics.
60. The coelom in the arthropods is (a) spacious and filled with blood (b) reduced and filled with blood (c) reduced and filled with excretory fluid (d) spacious and lacks any fluid.
61. Axiation means (a) there is an anterior-posterior orientation (b) there is an axis around which an animal revolves (c) there is an axis dividing the animal body (d) there is presence of chitinous exocuticle.
62. In coelomate animals (a) the fluid is required for excretion (b) the fluid is required for growth (c) the fluid necessitates the development of a transport system (d) the fluid itself is the transportation medium.
63. Coelomate animals exhibit (a) radial symmetry (b) bilateral symmetry (c) heliocyclic symmetry (d) none of the above.
64. The appendages in arthropoda are (a) paired (b) jointed (c) paired and jointed (d) paired, jointed and biramous.
65. Coelom arises as a result of a split in (a) Mesoderm (b) Ectoderm (c) Endoderm (d) Mesoglea
66. Organs are surrounded by the coelom. Hence the muscles of the organs (a) can contract independent of the body wall muscles (b) cannot contract (c) contract simultaneously with body wall muscles (d) are syncytial.
67. The organ of the animal responsible for analysing information from the environment is (a) The epidermis (b) The endodermis (c) The notochord (d) The brain.
68. The olfactory function of the brain are performed by (a) medulla oblongata (b) cerebral hemisphere (c) cerebellum (d) pituitary gland.

ANSWERS TO 2005/2006

BIO 104 Rain Semester Examination.

John [Signature]

- ① D
- ② B
- ③ A
- ④ C
- ⑤ D
- ⑥ B
- ⑦ B
- ⑧ D
- ⑨ D
- ⑩ D
- ⑪ D
- ⑫ A
- ⑬ D
- ⑭ B
- ⑮ C
- ⑯ C
- ⑰ B
- ⑱ A
- ⑲ A
- ⑳ D
- ㉑ D
- ㉒ B
- ㉓ C

- ㉔ D
- ㉕ B
- ㉖ A
- ㉗ A
- ㉘ C
- ㉙ D
- ㉚ B
- ㉛ D
- ㉜ B
- ㉝ C
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- ㉟ A
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- ㊺ C
- ㊻ B
- ㊼ C
- ㊽ A
- ㊾ A
- ㊿ A

- 54 B
- 55 A
- 56 C
- 57 C
- 58 C
- 59 D
- 60 A
- 61 A
- 62 C
- 63 B
- 64 D
- 65 A
- 66 C
- 67 D
- 68 A