

## Biology Part 6

51. The sea urchin's body is organized around the organism's center, like the spokes of a wheel. What kind of symmetry does the sea urchin have?
- a. bilateral
  - b. radial
  - c. asymmetrical
  - d. unilateral
53. Most vertebrates reproduce sexually. When does fertilization occur in sexual reproduction?
- a. when a male animal releases sperm and a female animal releases eggs
  - b. when part of an organism breaks off and begins to grow independently
  - c. when the cells of an embryo begin to differentiate and become specialized
  - d. when the nucleus of a sperm cell fuses with the nucleus of an egg cell
54. Which of the following is a difference between invertebrates and vertebrates?
- a. Vertebrates have exoskeletons, and invertebrates have endoskeletons.
  - b. Invertebrates reproduce only asexually, vertebrates only reproduce sexually.
  - c. Vertebrates have a backbone, while invertebrates do not.
  - d. Invertebrates have bilateral symmetry, while vertebrates have radial symmetry.
55. Which of the following is a function of the reproductive system?
- a. to produce all the body's hormones
  - b. to regulate the body temperature
  - c. to make the hormones that fight disease
  - d. to regulate the development of male and female characteristics
56. The animal phylum that contains the largest number of different species is the
- a. echinoderms
  - b. chordates
  - c. arthropods
  - d. roundworms

57. A hydra, which has two layers of body cells, is

- a. a coelenterate
- b. a flagellate
- c. an echinoderm
- d. a porifera

58. Unlike amphibians, reptiles

- a. are covered with scales
- b. have a circulatory system
- c. are cold – blooded
- d. lays eggs

59. Both an octopus and a clam are

- a. arachnids
- b. crustaceans
- c. tunicates
- d. molluscs

60. A fruit is a \_\_\_\_\_.

- a. ripened ovule
- b. ripened ovary
- c. ripened bud
- d. ripened stigma

61. An imperfect flower is one that lacks either \_\_\_\_\_.

- a. sepals or petals
- b. stamens or pistils
- c. petals or stamens
- d. pistils or sepals

62. Pollination is the \_\_\_\_.
- union of a person nucleus with an egg nucleus
  - growth of a pollen tube in a style
  - penetration of an embryo sac by a pollen tube
  - transfer of pollen grains from an anther to a stigma
63. The protist which can cause malaria when transmitted by the bite of the female anopheles mosquito is \_\_\_\_.
- Plasmodium falcifarum
  - Plasmodium ovale
  - Plasmodium vivax
  - Plasmodium
64. The arthropod which is an arachnid is the \_\_\_\_.
- butterfly
  - spider
  - beetle
  - cockroach
65. The squid belongs to phylum \_\_\_\_.
- Chordata
  - Mollusca
  - Echinodermata
  - Nemathelminthes
66. A dinner in a seafood restaurant includes clams, squid, and tuna. What phyla are represented?
- porifera and mollusc
  - cnidaria and chordate
  - mollusca and chordate
  - mollusca and arthropoda
67. The body temperature of cold – blooded animals

- a. is 10 deg. C
- b. is 100 deg. C
- c. changes with the environment
- d. remains constant

68. Each of the following is a primate except a

- a. tarsier
- b. gorilla
- c. kangaroo
- d. human

69. Development from a fertilized egg to adult may occur in either two ways. What do you call animals that are born resembling adults of the species, just like man?

- a. viviparous
- b. oviparous
- c. ovoviviparous
- d. none of them

70. Vivian and Carlo are two amateur fossils hunters, who were unable to unearth a complete fossil of mammals. How could they determine whether it was a herbivore, carnivore, or omnivore?

- a. based on the skull
- b. based on the type of teeth
- c. based on the phalanges
- d. based on the vertebral column

71. Amphibians have adaptations that protect them from very cold and very warm temperatures. During the cold winter months they become inactive. They bury themselves in mud until the temperature warms up. What do you call the period of inactivity during winter?

- a. hibernation
- b. aestivation
- c. incubation
- d. adaptation

72. Amoeba proteus is a very common amoeba that you use in the laboratory for experiments. You have probably observed their mode of motility. What do they use for locomotion?
- a. cilia
  - b. flagella
  - c. pseudopodia
  - d. feet
73. What is the relationship between the cattle and the bacteria and protozoa living within their stomachs?
- a. parasitism
  - b. commensalism
  - c. mutualism
  - d. predation
74. What is formed when two or more groups of different organisms live together and interact with each other in the same area?
- a. community
  - b. population
  - c. niche
  - d. ecosystem
75. A green alga provides a fungus with nutrients and water. The fungus protects the alga from the sun and high temperatures. What relationship is illustrated in the given example?
- a. parasitism
  - b. commensalism
  - c. mutualism
  - d. predation
76. Which is an example of a renewable energy source?
- a. oil
  - b. natural gas
  - c. solar power
  - d. coal

77. Which is a source of biomass energy?
- a. water
  - b. wind
  - c. geysers
  - d. plants
78. Which of the following refers to commensalism?
- a. both organisms benefit
  - b. both organisms are harmed
  - c. one organism benefits and the other is harmed
  - d. one organism benefits and the other is unaffected
79. What ecological structure is formed by a group of individuals of the same species living together in the same area?
- a. niche
  - b. community
  - c. population
  - d. ecosystem
80. All members of a group stem from a common ancestor and are capable of interbreeding. The taxonomy category referred to here is \_\_\_\_\_.
- a. class
  - b. order
  - c. species
  - d. family
81. Which of the following is an abiotic factor that may affect the types and numbers of animals that live in an area?
- a. the range of temperatures experienced in the area
  - b. the types of plants available for food sources
  - c. the number and types of predators in the area
  - d. the number of plants available for food sources

82. What do you call animals that feed on both plant and meat?
- herbivores
  - carnivores
  - omnivores
  - insectivores
83. After drinking dirty water, a student developed bloody diarrhea and liver problems in a few weeks later. Which of the following is the most likely cause of the disease?
- paramecium
  - dinoflagellates
  - amoeba
  - euglena
84. Chemical produced by some bacteria that can kill or weaken other bacteria
- antitoxins
  - antibodies
  - antibiotics
  - antiseptic
85. At what stages in its life cycle is a butterfly most active?
- egg and larva
  - larva and adult
  - pupa and adult
  - adult and egg
85. Insecticides are used to control insect populations so that they do not destroy crops. However, over time, a new insecticide has to be developed as they become less effective in killing the insects. Why?
- Insecticides build up in the soil.
  - Insecticides are concentrated at the bottom of the food chain
  - Surviving insects pass their resistance to insecticides to their offspring.
  - Surviving insects have learned to include insecticides as a food source.
86. Not all organisms are harmful. Which of these is done by yeast?

- a. encourage disease food
- b. cause milk to become cheese
- c. cause Yakult to be milky
- d. Promotes the rising of bread for baking

87. Which of the following organisms is used to convert milk to cheese?

- a. bacteria
- b. protozoa
- c. virus
- d. algae

88. Why is it not quite possible for viruses to live and multiply in the outer layers of our skin?

- a. The outer layer of the skin has dead cells only
- b. The outer layer of the skin has oil which is harmful to viruses.
- c. The outer layer of the skin has a lower temperature unsuitable for viruses.
- d. The outer layer of the skin has salt from perspiration which is harmful to viruses

89. Young people stand straight. Very old ones usually stoop. Why?

- e. Sedentary lives of the old.
- f. Habit of stooping developed in the old.
- g. Greater gravitational pull on the old than on the young.
- h. Bones of the old have become weak and soft and their joints become loose.

90. Which of the following factors contribute to “greenhouse effect”?

- a. destruction of the forests
- b. use of carbon dioxide by land plants
- c. depletion of minerals in the soil by overfarming
- d. use of solar glass panels to capture radiant energy

91. Angiosperms are also known as



- a. cone bearing
- b. seed bearing
- c. flower bearing
- d. spore bearing

92. Some animals have the ability to produce a lost body part such as lizard, starfish, and brittle star. This method is known as

- a. regeneration
- b. fragmentation
- c. budding
- d. fission

93. Metamorphosis is the change in structure from a larva to an adult. The following animals follow definite stages in their life cycle except

- a. fly
- b. frog
- c. butterfly
- d. turtle

94. One of the principal causes of acid rain is

- a. Waste and acid from chemical factories being pumped into rivers.
- b. Acid from chemical laboratories evaporating into the air.
- c. Gases from burning coal and oil dissolving in water in the atmosphere.
- d. Gases from air conditioner and refrigerators escaping into the atmosphere.

95. While observing some plants, a student notices some very small plants found attached on rocks.

The plants most likely belong to

- a. angiosperms
- b. gymnosperms
- c. tracheophytes
- d. bryophytes

96. A certain plant with needle – like leaves and cone – bearing usually grow and reproduce in cold places. What is the classification of this plant?
- angiosperms
  - gymnosperms
  - bryophytes
  - monocots
97. This is an offshoot of water pollution resulting from an accumulation of phosphates and nitrates from waste materials, detergents, and fertilizers. What is this phenomenon that kills aquatic life?
- acid rain
  - eutrophication
  - dynamite fishing
  - cyanide fishing
98. Animals are grouped based on their structural similarities. Identify which pair of animals is closely related.
- snake and toad
  - whale and shark
  - bat and monkey
  - salamander and turtle
99. The following practices promote sustainable development except
- reforestation
  - recycling
  - selective hunting
  - cyanide fishing
100. Ant returning from a new food source marks a trail for other ants to follow. This chemical signal is called
- hormones
  - enzymes
  - catalyst
  - pheromones

**Biology Part 6 Answer Keys:**

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

69. A  
70. B  
71. C  
72. C  
73. C  
74. A  
75. C  
76. C  
77. D  
78. D  
79. C  
80. C  
81. A  
82. C  
83. C  
84. C  
85. B

86. D  
87. A  
88. A  
89. H  
90. A  
91. C  
92. A  
93. D  
94. C  
95. D  
96. B  
97. B  
98. C  
99. D  
100. D