

Biology Part 3

1. Which of the following is a part of the process of chemiosmosis?
 - a. Protons move along the electron transport chain.
 - b. Water molecules are split.
 - c. Hydrogen ions pass through membranes.
 - d. Light is absorbed by chlorophyll.

2. During mitosis, a double-stranded chromosome is attached to a spindle fiber at the.
 - a. cell plate
 - b. centromere
 - c. centrosome
 - d. centriole

3. Which is an effect of drugs on cells?
 - a. Produce toxic substance
 - b. Discontinuous cell activity
 - c. Cause damage to their structure
 - d. Poison the cell liquid

4. The cell wall of plant is made of .
 - a. Lipids
 - b. Cellulose
 - c. Protein
 - d. Cell membrane

5. Which is the storage cell of plants?
 - a. Microtubule
 - b. Collenchyma
 - c. Meristem
 - d. Parenchyma

6. Which results from drinking saltwater?
 - a. Poisoning of the cells
 - b. Dehydration of the cells
 - c. Increase in cell pressure
 - d. Bursting of the cells

7. What kind of tissue lines our skin and what is its important function?
 - a. Nerve tissue; responsible for reflexes
 - b. Epithelial; protection from ultraviolet radiation
 - c. Nerve tissue; receive stimuli on the skin

 - d. Epithelial; produce new cells when peeled off

8. At metaphase of the first meiotic division, the chromosomes are attached to the spindle fibers as .
 - a. double chromatids
 - b. non-homologous pairs
 - c. single chromatid strand
 - d. a tetrad of chromatids

9. Which type of cell would probably provide the best opportunity to study lysosomes?
 - a. Leaf
 - b. Nerve
 - c. Muscle
 - d. White blood

10. Which best describes meiosis as another form of cell division with accompanying nuclear changes?
 - a. The nuclear changes follow one another indefinitely.
 - b. Each new cell has double the amount from both parents.
 - c. The nucleoli break up into two parts and disappear.
 - d. Each new cell has half the number of chromosomes.

11. How are mitochondria and chloroplasts similar to bacteria? They

- a. are larger than normal cells.
- b. are bounded by a single membrane.
- c. lack ribosomes.
- d. have a limited amount of genetic material.

12. Which is the energy storage compound used to do all forms of work of the cell?

- a. Electron
- b. Adenine
- c. Nicotinamide
- d. Adenosine triphosphate

13. Meiosis reduces genetic make-up by half. What process brings it back to diploid state?

- a. Menstruation
- b. Fertilization
- c. Ejaculation
- d. Mitosis

14. The bipolar nature of the cell membrane is due to _____.

- a. presence of carriers
- b. presence of glycolipids
- c. phospholipid bilayer
- d. integral protein

15. When a red blood cell is placed in distilled water, it _____.

- a. plasmolyses
- b. remains the same
- c. shrinks
- d. swells

16. The "eyes" of potato are actually _____.

- a. internodes

- b. nodes
- c. leaf scars and buds
- d. stems

17. Which of these is NOT a fruit?

- a. Cucumber
- b. Ampalaya
- c. Squash
- d. Carrot

18. Which plant has underground stem modified for reproduction?

- a. Banana
- b. Bermuda
- c. Tubers
- d. Strawberry

19. Which plants formed the vast coal beds during the carboniferous period?

- a. Lycopods
- b. Conifers
- c. Angiosperms
- d. Gymnosperms

20. What kind of relationship is exhibited by an alga and a fungus in lichen?

- a. Commensalism
- b. Parasitism
- c. Mutualism
- d. Competition

21. Chlorophyll appears green because the green portion of light is .

- a. dispersed
- b. absorbed
- c. refracted

d. reflected

22. The end products of dark reaction phase of photosynthesis are ADP and .

a. carbon dioxide

b. sugar

c. carbon

d. nitrogen

23. Which gas is needed by the seed during germination?

a. Nitrogen

b. Carbon dioxide

c. Hydrogen

d. Oxygen

24. Which is the universal energy source of the cell of all living things?

a. Carbon

b. ATP

c. H₂O

d. PGAL

25. When the staminate flower is found in one plant and the pistillate flower on another, the plants is described as .

a. complete

b. monoecious

c. robust

d. dioecious

26. Which pigment is dominant in red algae?

a. Phycocyanin

b. Fucoxanthin

c. Chlorophyll

d. Phycoerythrin

27. Which process during photosynthesis involves the addition of hydrogen?

a. Oxidation

b. Hydration

c. Carbonation

d. Reduction

28. The dark reaction phase of photosynthesis consists of a series of chemical reactions which end up with the formation of a 3-carbon sugar called _____.

a. ADP

b. NADPH

c. ATP

d. PGAL

29. Which cell structure regulates the opening and closing of the stomata?

a. Phloem

b. Xylem

c. Companion

d. Guard

30. Spraying some plants with combination of auxins and gibberellins will _____.

a. promote ripening of fruits

b. result to seed dormancy

c. allow division of cells

d. enlarge fruit growth

31. All flowering plants belong to _____.

a. conifers

b. angiospermae

c. filicinae

d. gymnospermae

32. Fruit growers often propagate their plants by a sexual means because the resulting off spring will .

a. be an improved variety than the parent

b. show little variation from the parent

c. bear larger fruit than the parent

d. show no environmental variation

33. Which of the following is incorrectly paired?

a. Cnidaria- corals

b. Porifera- sponge

c. Annelida- earthworm

d. Platyhelminthes-Ascaris

34. What process is cause for the upward movement of water in very tall trees?

a. Transpiration

b. Osmosis

c. Turgor pressure

d. Air pressure

35. Which popular plant is described as carnivorous?

a. Water hyacinth

b. Cactus

c. Pitcher plant

d. Kataka-taka

36. What is the purpose of RA 8749?

a. Prevent rather than control air pollution

b. Formulate air pollution management

c. Utilize sustainable development

d. All of the above

37. What do you call the male gametophyte of an angiosperm?
- a. Pollen
 - b. Ovule
 - c. Seed
 - d. Petal
38. Which root system is the best adapted for anchorage?
- a. Secondary
 - b. Tertiary
 - c. Taproot
 - d. Fibrous e.
39. Egg-laying mammals are called .
- a. viviparous
 - b. primates
 - c. oviparous
 - d. marsupials
40. To what order do pouch bearing mammals?
- a. Marsupials
 - b. Craniata
 - c. Monotremata
 - d. Placental mammals
41. Large colonies belonging to class Anthozoa secrete hard skeletons of lime which later form reefs.
- a. Sea anemone
 - b. Obelia
 - c. Coral
 - d. Jellyfish
42. When body parts are paired on either side of the body; this type of symmetry is called .
- a. Dorso-ventral

b. Bilateral

c. Radial

d. Dorsal

43. What substance do leeches secrete which keeps the blood they feed on liquid state?

a. Hemoglobin

b. Ecdysone

c. Anticoagulin

d. Fibrinogen

44. One who specializes in all kinds of fishes and their characteristics has expertise on

.

a. Taxonomy

b. histology

c. entomology

d. ichthyology

45. In protozoans, digestion occurs in the .

a. stomach

b. contractile vacuole

c. ribosome

d. food vacuole

46. What is a distinguishing characteristic of Homo sapiens over the lower mammals?

a. Blood vessels

b. Sensitive skin

c. Large brain

d. Endoskeleton

47. What kind of adaptation enables the walking stick to elude its enemies?

a. Aggressive mimicry

- b. Aggressive adaptation
 - c. Protective mimicry
 - d. Protective coloration
48. Which stages of incomplete metamorphosis is undergone by grasshopper?
- a. Nymph, pupa, adult
 - b. Egg, larva, pupa, adult
 - c. Egg, nymph, adult
 - d. Egg, pupa, adult
49. Which are the hosts of *Ascaris lumbricoides* and *Ascaris suum*?
- a. Cow and man
 - b. Man and dog
 - c. Cow and pig
 - d. Man and pig
50. Two organisms can be identified as belonging to the same species if they can ____.
- a. eat the same kind of food
 - b. breed in a natural setting
 - c. tolerate one another in nature
 - d. survive together in nature

Biology Part 3 Answer Keys

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|----|---|----|---|-----|---|
| 1. | C | 5. | D | 9. | D |
| 2. | B | 6. | B | 10. | D |
| 3. | C | 7. | D | 11. | D |
| 4. | B | 8. | D | 12. | D |

- 13. B
- 14. C
- 15. D
- 16. C
- 17. D
- 18. C
- 19. A
- 20. C
- 21. D
- 22. B
- 23. D
- 24. B
- 25. B

- 26. D
- 27. D
- 28. D
- 29. D
- 30. D
- 31. B
- 32. A
- 33. D
- 34. A
- 35. C
- 36. D
- 37. A
- 38. C
- 39. C
- 40. A

- 41. C
- 42. B
- 43. C
- 44. D
- 45. D
- 46. C
- 47. D
- 48. C
- 49. D
- 50. B