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1. Alkenes are
   1. more acidic than alkanes
   2. more stable than alkanes
   3. more massive than alkanes
   4. more reduced than alkanes
2. The least specific viral classifications is
   1. Order
3. Which is true about bacteriophages
   1. They are taken into their host by endocytosis
   2. Penetration and uncoating are simultaneous
   3. All are temperate
   4. They are incredibly rare
4. Acetobacter is known for making what…
   1. Vinegar
5. Autolysins are required in prokaryotes for
   1. Growth and division
   2. Apoptosis
   3. Metabolism
   4. Movement
6. The two alternating components of peptidoglycan are
   1. N-acetyl muramic acid, N-acetyl glucosamine
7. Which of the following is phytohormone
   1. Ethylene
   2. Calcitonin
   3. Inhibin
   4. Orexin
8. Acquiring analogous traits in unrelated lineages is
   1. Convergent evolution
9. What is the most common protein in plants
   1. Rubisco
   2. Fructose biphosphate aldolase
   3. Triose phosphate isomerase
   4. Transketolase
10. Pott’s disease is caused by what pathogen
    1. Mycobacterium tuberculosis
11. Nitrogen fixation
    1. Converts nitrogen gas to methylamine
    2. Converts ammonia to nitrogen gas
    3. Synthesizes organic nitrogen compounds
    4. Converts nitrogen gas to ammonia
12. Tyrosine receptor kinase contain how many alpha helices?
    1. 7
13. Melena could be the result of bleeding in the
    1. Large intestine
    2. Brain
    3. Stomach
    4. Lungs
14. The Golgi apparatus is made up of flattened membrane discs called
    1. Cisternae
15. Backflow of blood from portal hypertension would not leads to
    1. Esophageal varices
    2. Anorectal varices
    3. Vesicle varices
    4. Caput Medusae
16. The internal portion of tubular structures was named this because light could be shined through it
    1. Lumen
17. Which of the following is not associated with apoptosis
    1. Blebbing
    2. Cell shrinkage
    3. Schizogony
    4. Nuclear fragmentation
18. This value is the number of times a cell can divide before senescence
    1. Hayflick limit
19. When Neural crest cells migrate neural folds develop into the
    1. Basal plate
    2. Neural tube
    3. Spinal cord
    4. Diencephalon
20. What is the first animal known to be able to survive in space?
    1. Tardigrades
21. Auerbach’s Plexus is found in the
    1. Submucosa
    2. Muscularis Externa
    3. Serosa
    4. Adventitia
22. An animals that lay eggs, with little or no other embryonic development within the mother exhibits
    1. Oviparity
23. Which of the following Plastids are pigmented
    1. Gerontoplasts
    2. Leucoplasts
    3. Etioplast
    4. Elaioplast
24. An organism in which there are a fixed number of cells at maturity for all members of the species are
    1. Eutely
25. Pseudopodia are produced by the action of
    1. Actin and myosin
    2. Dynein
    3. Kinesin
    4. Dynamin
26. Junctions that anchor cells together in animal tissues
    1. Desmosomes
27. What cells produce the myelin sheath in the central nervous system?
    1. Oligodendrocytes
    2. Schwann Cells
    3. Astroglia
    4. Ependymal cells
28. Which part of the vestibular system is sensitive to gravity and linear acceleration
    1. Otoliths
29. Which is false about Regulatory genes
    1. They are produced continuously
    2. They code for an allosteric protein
    3. They are in close to the operon they control
    4. They’re expressed at a low rate
30. Study of tree rings is
    1. Dendrochronology
31. Which of the following is not an internal obligate parasite
    1. Chlamydia
    2. Rickettsia
    3. Plasmodium
    4. Legionella
32. The initial diploid cell formed by the joining of two gametes is a
    1. Zygote
33. Dangers of red tides are often associated with the toxins produced by which of the following
    1. Alveolates
    2. Dinoflagellates
    3. Stramenopiles
    4. Apicomplexans
34. The first generally recognized animal fossils are members of the early group of multicellular eukaryotes collectively known as the
    1. Ediacaran biota
35. Endophytes display what kind of relationship with their host
    1. Commensalistic
    2. Mutualistic
    3. Parasitic
    4. Synnecrosism
36. Concentration of nervous tissue on one end of an orgasm is known as
    1. Cephalization
37. Collenchyma cells
    1. Support young, growing parts of the cell
    2. Perform most metabolic functions
    3. Support, mature, non-growing parts of the plant
    4. Are dead at functional maturity
38. The most common infectious blindness worldwide is caused by
    1. Chlamydia
39. The apoplast is a continuum of all but the following
    1. Cell walls
    2. Dead interiors of vessels
    3. Extracellular spaces
    4. Cytosol of cells
40. The series of reactions that convert the extracellular signal into a specific response is called
    1. Signal transduction
41. Which of the following become pathogenic through lysogenic conversion
    1. Corynebacterium diphtheria
    2. Vibrio cholera
    3. Shigella dysenteriae
    4. Streptococcus pyogenes
42. The relaxation phase of the heart is known as
    1. Diastole
43. Mobilome are
    1. transposable elements
    2. the total of all mobile genetic elements in a genome
    3. prophages
    4. plasmids, are also an important part of the mobilome
44. An abnormal accumulation of blood around an internal injury is known as a
    1. Hematoma
45. Interphase takes up about what percent of a cell’s lifespan
    1. 30%
    2. 50%
    3. 70%
    4. 90%
46. Viruses equipped with reverse transcriptase must be
    1. Retroviruses
47. Countercurrent multiplier systems are found in
    1. Lungs
    2. Fish gills
    3. Liver
    4. Mammalian kidneys
48. The endocrine gland above the kidney which releases hormones in response to stress is the
    1. Adrenal gland
49. Most ATP Synthase molecules in mitochondria are found in the
    1. Crista
    2. Outer membrane
    3. Matrix
    4. Intermembrane Space
50. The variety of cells a virus can infect is its
    1. Host range