

Science Reviewer - Set B

1. Which of the following does NOT describe a heterogeneous mixture?
 - a. The composition of the mixture is the same all throughout.
 - b. The composition of the mixture is visible.
 - c. The composition of the mixture can be easily identified.
 - d. None - all are correct
2. True or False – A solution always consists of a liquid solvent and a solid solute.
 - a. true
 - b. false
3. Which of these mixtures is heterogeneous?
 - a. colloid
 - b. solution
 - c. suspension
 - d. a & c
4. Aerosol, foam, emulsion, and sol are types of _____.
 - a. colloids
 - b. solutions
 - c. suspensions
 - d. all of the above
5. The bubbling in soft drinks or sodas is due to _____.
 - a. the sugar in the liquid
 - b. the alcohol in the liquid
 - c. the air dissolved in the liquid
 - d. the carbon dioxide dissolved in the liquid
6. Alum is used in the process of water purification called _____.
 - a. boiling
 - b. distillation
 - c. coagulation
 - d. aeration

7. Which of these statements is correct?
- Domain > Kingdom > Phylum > Class > Order > Family > Genus > Species
 - Kingdom > Domain > Phylum > Class > Order > Family > Genus > Species
 - Domain > Kingdom > Phylum > Class > Order > Family > Species > Genus
 - Kingdom > Domain > Phylum > Class > Order > Family > Species > Genus
8. All of these organisms are eukaryotes except _____.
- bacteria
 - fungi
 - plants
 - protists
9. Living things are made up of the following classes of organic compounds except _____.
- carbohydrates
 - lipids
 - proteins
 - hydrocarbons
10. DNA stores our genetic information while RNA helps make proteins. Both DNA and RNA are examples of _____.
- carbohydrates
 - lipids
 - proteins
 - nucleic acids
11. What does the cell theory NOT say?
- All organisms are composed of cells.
 - Cells are alive and the basic living units of organization in all organisms.
 - All cells come from other cells.
 - Cells can neither be created nor destroyed.
12. The following are found in both prokaryotes and eukaryotes EXCEPT _____.
- cytoplasm
 - ribosomes
 - DNA
 - mitochondria

13. Which organelle is where proteins are produced?
- Nucleus
 - Mitochondria
 - Ribosomes
 - Rough endoplasmic reticulum
14. Which organelle is in charge of dealing with the cell's waste, generally by using its digestive enzymes to break them down into parts that can be recycled?
- Smooth endoplasmic reticulum
 - Golgi apparatus
 - Lysosome
 - Nucleolus
15. In the process of manufacturing food, plants _____.
- create energy
 - destroy energy
 - store the energy from the sun
 - do not require energy from the sun
16. Plant cells have organelles called plastids. Which statement about the different types of plastids is incorrect?
- Chloroplasts are in charge of photosynthesis.
 - Leucoplasts store leucocytes.
 - Chromoplasts give some flowers and fruits their yellow, orange, or red color.
 - None - all are correct.
17. True or False – Our body can get energy from carbohydrates, lipids, and proteins.
- true
 - false
18. The sugar found in fruits is called _____.
- glucose
 - fructose
 - lactose
 - galactose

19. Our body can make its own proteins, but to do so, it needs amino acids, which we can get from eating _____.
- carbohydrates
 - proteins
 - vitamins
 - minerals
20. There are two main types of fats. Which type of fat is more often found in plant-based oils (such as olive, soybean, corn, canola, and sunflower oil) and fish? When eaten in moderation, this type of fat can have a positive effect on our health.
- saturated fat
 - unsaturated fat
 - trans fat
 - none of these
21. Minerals are chemical elements that are needed for body processes. Which mineral is incorrectly paired with its role in the body?
- calcium - for strong bones and teeth
 - iron - for making hemoglobin, which carries oxygen in red blood cells
 - potassium - for muscles to work properly
 - none - all are correct
22. The _____ is the system that is in charge of breaking down the food we eat into a form that can be absorbed by our cells.
- respiratory system
 - circulatory system
 - digestive system
 - excretory system
23. What type of digestion is the process of breaking down large food molecules into small nutrient molecules – changing the actual chemical structure of the food particles and turning it into a form that can be absorbed into the blood?
- chemical digestion
 - structural digestion
 - mechanical digestion
 - cellular digestion

24. Bile helps in the digestion of lipids. Which organ produces bile?
- pancreas
 - liver
 - gallbladder
 - kidney
25. What type of digestion happens in the small intestine?
- mechanical digestion
 - chemical digestion
 - both
 - neither
26. What do you call the tube that connects your mouth to your stomach?
- biliary tract
 - rectum
 - colon
 - esophagus
27. Which is longer?
- the large intestine
 - the small intestine
 - the two are equally long
28. Solid waste leaves your body through the _____.
- bladder
 - lungs
 - rectum
 - skin
29. Hormones affect many processes in the digestive system, like the release of acid in the stomach, the release of bile from the gallbladder, and how fast the intestines move. Which organ system is most involved in this?
- endocrine system
 - integumentary system
 - respiratory system
 - skeletal system

30. Our bodies lose water through the following processes, except _____.
- sweating
 - breathing
 - urination
 - none - all are correct
31. A _____ is an organism that can cause disease.
- villus
 - pathogen
 - protease
 - teratogen
32. Hair-like projections called _____ are also found in mucous membranes. They move in waves, sweeping mucus with its trapped pathogens and particles toward body openings.
- brushes
 - cilia
 - flagella
 - phagocytes
33. When pathogens are able to get through the body's first lines of defense – for example, when there is a break in the skin, like a cut or a scrape – the body sets off an inflammatory response. The blood vessels near the affected area dilate (become wider). This allows more blood to reach the injured part. It also allows more immune system cells (such as white blood cells) to get to the area, where they then go out of the blood vessels and go towards the site of injury. The following are signs of an ongoing inflammatory response (or inflammation) except _____.
- redness
 - swelling
 - warmth
 - none - all are correct
34. The immune system has two subsystems: (1) the innate or non-specific immune system, and (2) the adaptive or specific immune system. Which of these makes antibodies and uses them to fight certain germs that the body has previously come into contact with?
- innate immune system
 - adaptive immune system
 - both
 - neither

35. What is the smallest living thing that can cause disease in humans?
- virus
 - bacteria
 - protozoans
 - pollen
36. Bones, cartilage, and ligaments make up the _____ system.
- muscular
 - integumentary
 - renal
 - none of these
37. The bone at the tip of your pinkie (smallest finger) is a _____.
- long bone
 - short bone
 - flat bone
 - irregular bone
38. Some long bones have bone marrow, which is important because the bone marrow is where _____.
- insulin is produced
 - blood cells are produced
 - calcium is produced
 - calcitonin is produced
39. The longest bone in your body is the _____.
- tibia
 - fibula
 - femur
 - humerus
40. The point at which two or more bones meet is called a _____.
- fracture
 - overlap
 - cartilage
 - joint

41. The joints between the vertebrae of our backbone are _____.
- fixed joints
 - partly movable joints
 - movable joints
 - synovial joints
42. The type of movable joint that allows motion in two directions, forward and backward, is the _____.
- ball-and-socket joint
 - hinge joint
 - pivot joint
 - gliding joint
43. The knee is a _____.
- ball-and-socket joint
 - hinge joint
 - pivot joint
 - gliding joint
44. There are three different types of muscles in our body. The type of muscle that is under our conscious control is the _____. They are the muscles responsible for voluntary movement.
- skeletal muscle
 - smooth muscle
 - cardiac muscle
 - none of these
45. Muscles are attached to bones by a tough cord of connective tissue called a _____.
- ligament
 - tendon
 - orbit
 - patella
46. To straighten your elbows, your triceps muscle contracts and your biceps muscle _____.
- pulls
 - shortens
 - relaxes
 - assists in contraction

47. These types of muscles are involuntary, except _____.
- skeletal muscle
 - smooth muscle
 - cardiac muscle
 - none - all are involuntary
48. When you have a strain or sprain, you are often advised to do R.I.C.E.: rest, ice, compression, and _____.
- exaggeration
 - excitation
 - elevation
 - empathy
49. Which statement about the skin's important functions is incorrect?
- The skin acts as a barrier that keeps out organisms that might be harmful.
 - The skin produces sweat when it is hot. The sweat uses some of the heat in the body to evaporate – in this way, it helps cool the body down. Sweat also brings out waste such as ammonia and urea.
 - The skin helps us gather information about our environment, using special nerve endings that sense heat, cold, pressure, and pain.
 - None – all are correct
50. True or False – The epidermis does not have any blood vessels.
- true
 - false
51. The structure from where a hair grows is called the _____.
- strand
 - hair follicle
 - hair gland
 - keratin
52. The part of the respiratory system that is also known as the windpipe is the _____.
- bronchi
 - larynx
 - pharynx
 - trachea

53. The blood vessels that carry deoxygenated blood back to the heart are the _____.
- arteries
 - veins
 - capillaries
 - none of the above
54. Which part of the nerve cell receives signals and passes them on to the main part of the cell?
- axons
 - neurons
 - dendrites
 - cell bodies
55. The following are the main organs of the nervous system except:
- brain
 - spinal cord
 - mental prominence
 - no exceptions - all three are the main organs of the nervous system
56. The _____ is the fatty layer that insulates the axon and allows electrical signals to travel much more quickly.
- dendrite
 - synaptic cleft
 - myelin sheath
 - neuroplasm
57. The three main parts of the brain are the _____.
- cerebrum, cerebellum, brainstem
 - cerebrum, cerebellum, midbrain
 - cerebrum, cerebellum, spinal cord
 - cerebrum, cerebellum, medulla
58. Which of these statements is incorrect?
- The cerebrum is divided into two hemispheres: right and left.
 - Each hemisphere has four sections, or lobes: frontal, parietal, temporal, and occipital.
 - The two cerebral hemispheres are connected by a thick bundle of axons called the corpus callosum.
 - The right hemisphere controls the left side of the body and the left hemisphere controls the right side of the body.

59. Our sense organs don't recognize, by themselves, what they are sensing. Rather, they send messages about sights, smells, and other stimuli to our brain, and then our brain interprets the messages and tells us what it is we are detecting through our senses. The nerve cells responsible for carrying these messages from our sense organs to our brain are the _____.
- sensory neurons
 - motor neurons
 - interneurons
 - bioneurons
60. The part of the autonomic nervous system that relaxes our body after periods of stress, and is in charge during "rest and digest" conditions, when there is no emergency, is the _____.
- sensory nervous system
 - sympathetic nervous system
 - parasympathetic nervous system
 - baseline nervous system
61. The _____ is a hollow, muscular organ with stretchy walls. It collects and stores urine until it is ready to be excreted.
- urethra
 - ureter
 - uterus
 - urinary bladder
62. A dehydrated person is more likely to have _____.
- light-colored urine
 - dark-colored urine
 - red-colored urine
 - huge amounts of urine
63. The following vertebrates are cold-blooded except _____.
- amphibians
 - birds
 - fish
 - reptiles

64. Sea stars, sea urchins, and sea cucumbers are _____.
- arthropods
 - coelenterates
 - echinoderms
 - mollusks
65. What is the process by which an organism produces another individual that is biologically similar to itself?
- reproduction
 - fertilization
 - hibernation
 - interaction
66. This occurs when pollen from one flower is deposited on the stigma of a flower on another plant of the same species.
- cross-pollination
 - self-pollination
 - vegetative pollination
 - vegetative reproduction
67. These specialized plant structures are thick, fleshy, storage stems. They have buds called "eyes" that can develop into new individuals under proper conditions.
- rhizomes
 - runners
 - suckers
 - tubers
68. In this method of propagation, a ring of bark is removed from a branch. The exposed area is wrapped with soil or another rooting medium and covered with plastic to retain moisture. This induces roots to grow on a stem while it is still attached to the parent plant. It is also known as air layering.
- budding
 - cutting
 - grafting
 - marcotting

69. Which is NOT a reason why mangrove swamps are important?
- They serve as breeding and nesting grounds for many animal species.
 - They serve as natural barriers, protecting the coastline from flooding and erosion.
 - They are an important source of livelihood for people living in coastal areas.
 - None - all are correct
70. Which statement is true about the nature of matter?
- The molecules in a solid are smooth and flow easily.
 - Compounds are the simplest particles in nature.
 - Atoms are either liquids or gases only.
 - The molecules in a liquid flow and take the shape of the container.
71. Which of these has a neutral charge?
- proton
 - electron
 - neutron
 - none of the above
72. A negatively charged particle _____.
- has more electrons than protons
 - has more protons than electrons
 - has more neutrons than electrons
 - has an equal number of protons and electrons
73. A person is pushing a grocery cart northwards. In what direction is friction acting on the cart?
- north
 - south
 - east
 - west
74. We get our energy from the food we eat, which stored that energy in what form?
- nuclear energy
 - thermal energy
 - chemical energy
 - mechanical energy

75. True or False - When you are perched on top of a water slide, you have mechanical energy.
- true
 - false
76. The law of _____ of energy states that energy can neither be created nor destroyed. It can be transformed/converted from one form to another but the total amount of energy remains the same.
- transformation
 - transition
 - conversion
 - conservation
77. Most buildings have ramps that people on wheelchairs can navigate more easily than stairs. A wheelchair is an example of a device that has a wheel and axle, while the ramp is an example of which simple machine?
- inclined plane
 - lever
 - screw
 - wheel and axle
78. The force that an object exerts on a given unit of area is called _____.
- weight
 - volume
 - density
 - pressure
79. You put a piece of metal pipe in front of your eyes, but the pipe is bent and so you can't see through it. This is because _____.
- mirrors reflect rays of light
 - lenses bend rays of light
 - metal reflect rays of light
 - light travels in a straight line
80. True or False – Electromagnetic waves travel at the speed of light through empty space.
- true
 - false

81. Cell phone signals are carried through the air as which electromagnetic wave?
- radio waves
 - microwaves
 - X-rays
 - gamma rays
82. Which of these statements is false?
- You can't see infrared light but you can feel it as heat.
 - Night vision goggles can detect infrared light waves and convert them to visible images.
 - We see light of different wavelengths as different colors of light.
 - Ultraviolet light has more energy because it has a higher wavelength, that's why it can be used to kill bacteria in food and sterilize surgical instruments.
83. This is when light is neither reflected or transmitted and instead transfers its energy to an object, as in the case of a car becoming very hot when it has been sitting under the sun all day, particularly when it is dark in color.
- refraction
 - scattering
 - absorption
 - diffusion
84. Matter that does not let any light pass through it is _____.
- transparent
 - translucent
 - opaque
85. A person standing waist-deep in a swimming pool appears to have short legs because of _____.
- reflection
 - refraction
 - absorption
 - diffusion
86. _____ is the bouncing back of light when it hits an object.
- Absorption
 - Infraction
 - Reflection
 - Refraction

87. Which of the following cannot be attracted by magnets?
- cobalt
 - gold
 - iron
 - nickel
88. Heat can travel through solids by _____.
- conduction
 - convection
 - radiation
 - insulation
89. Heat is transmitted across empty space or vacuum through _____.
- conduction
 - convection
 - radiation
 - insulation
90. A material that allows electricity to pass through it is called a _____.
- conductor
 - electrode
 - insulator
 - radiator
91. A circuit in which components are connected end-to-end, forming a single path for current
- open circuit
 - closed circuit
 - parallel circuit
 - series circuit
92. This electrical safety device trips when it detects excess current from an overload or short circuit, interrupting current flow. It can be reset and so can be used again.
- circuit breaker
 - defibrillator
 - fuse
 - insulation
93. The _____ is the point on the surface of the Earth that is directly above an earthquake's underground point of origin.

- a. breaking point
- b. focus
- c. epicenter
- d. fault

94. An earthquake that results from the movement of magma within volcanoes

- a. tectonic earthquake
- b. volcanic earthquake
- c. endemic earthquake
- d. man-made earthquake

95. Which is made up of the liquid part of the mantle and the outer core?

- a. outer core group
- b. crust
- c. lithosphere
- d. asthenosphere

96. Which is also known as the Hanging Amihan?

- a. northeast monsoon
- b. northwest monsoon
- c. southwest monsoon
- d. southeast monsoon

97. Which brings moist, warm air into the country that makes rains heavier and typhoons stronger?

- a. cold fronts
- b. trade winds
- c. northeast monsoon
- d. southwest monsoon

98. Which statement about the Earth is false?

- a. The Earth spins on its axis.
- b. The Earth revolves around the sun.
- c. The sun revolves around the Earth.
- d. The Earth travels on its orbit around the sun.

99. Which statement is true about the Earth's movement?
- Revolution causes day and night.
 - The Earth rotates in a counterclockwise direction when viewed from the northern polar star.
 - Seasonal changes are effects of the Earth's rotation.
 - The movement of water in the seas and oceans is an effect of the Earth's revolution.
100. What do you call the short climatic changes caused by the Earth's tilted axis?
- coriolis
 - monsoon
 - season
 - weather
101. Which of the terrestrial planets is the biggest?
- Mars
 - Earth
 - Venus
 - Mercury
102. Which among the planets have extensive and complex rings?
- Saturn
 - Jupiter
 - Uranus
 - Neptune
103. Which is known as the red planet?
- Uranus
 - Mars
 - Jupiter
 - Venus
104. Why do the planets stay in their orbits as they revolve around the sun?
- Because of the earth's size
 - Because of the earth's rotation
 - Because of the earth's gravity
 - Because of the sun's gravity

105. Term used to describe the moon when more than half of it is illuminated, but not fully
- crescent
 - gibbous
 - waning
 - waxing
106. In which phase does the moon appear dark?
- full moon
 - new moon
 - first quarter
 - last quarter
107. A star's lifespan is primarily determined by its _____.
- gas component
 - color
 - mass
 - distance from a black hole
108. _____ is the process by which condensed water vapor falls back to the Earth in the form of rain, hail, snow or sleet.
- Evaporation
 - Condensation
 - Precipitation
 - Transpiration
109. High, wispy, feathery clouds
- cirrus
 - cumulus
 - nimbus
 - stratus
110. This refers to the hotness or coldness of the environment.
- humidity
 - pressure
 - temperature
 - weather

111. Which of these weather instruments measures wind speed and pressure?
- a. anemometer
 - b. barometer
 - c. hygrometer
 - d. wind vane
112. Which of these weather instruments measures the amount of liquid precipitation that has fallen over a specific area within a specific time period?
- a. anemometer
 - b. barometer
 - c. hygrometer
 - d. rain gauge
113. _____ is a dark-colored organic material made up of decaying plants and animals. It is found in the uppermost layer of the soil.
- a. Clay
 - b. Loam
 - c. Humus
 - d. Sand
114. This layer is made up of a large solid mass of rock or undisturbed large boulders.
- a. topsoil
 - b. subsoil
 - c. parent rock
 - d. bedrock
115. The following are mechanical weathering processes except _____.
- a. abrasion
 - b. exfoliation
 - c. oxidation
 - d. thermal expansion

ANSWER KEY

1. a	26. d	51. b	76. d	101. b
2. d	27. b	52. d	77. a	102. a
3. b	28. c	53. b	78. d	103. b
4. a	29. a	54. c	79. d	104. d
5. d	30. d	55. c	80. a	105. b
6. c	31. b	56. c	81. b	106. b
7. a	32. b	57. a	82. d	107. c
8. a	33. d	58. b	83. c	108. c
9. d	34. b	59. a	84. c	109. a
10. d	35. b	60. c	85. b	110. c
11. d	36. d	61. d	86. c	111. a
12. d	37. a	62. b	87. b	112. d
13. c	38. b	63. b	88. a	113. c
14. c	39. c	64. c	89. c	114. d
15. c	40. d	65. a	90. a	115. c
16. b	41. b	66. a	91. d	
17. a	42. b	67. d	92. a	
18. b	43. b	68. d	93. c	
19. b	44. a	69. d	94. b	
20. b	45. b	70. d	95. d	
21. d	46. c	71. c	96. a	
22. c	47. a	72. a	97. d	
23. a	48. c	73. b	98. c	
24. b	49. d	74. c	99. b	
25. c	50. a	75. a	100. c	