

# Science

## Sec.1

*Second Term 2025 - 2026*

# March Revision

*Mr. Ahmed Elbasha*

**Unit 1  
(Lesson 1 – 3)**

\* طبقاً لأخر تعديل في المادة للعام الدراسي 2025-2026



# March Revision

\*(1) **Choose the right answer:**

**Mr. Ahmed Elbasha**

1. Which process represents the only "pathway" for water from the biosphere to the atmosphere according to the plant life cycle?
  - a. Respiration
  - b. Photosynthesis
  - c. Transpiration
  - d. Decomposition
2. Which of the following is expected to occur in the absence of decomposers from the ecosystem?
  - a. Increased rate of energy transfer
  - b. Increased in the number of top predators
  - c. Faster plant growth
  - d. Accumulation of organic matter
3. When a person has a deep wound, a doctor advises increasing the intake of protein-rich foods. What is the scientific explanation for this?
  - a. Because proteins are involved in building body tissues and replacing damaged ones
  - b. Because proteins are the primary source of energy
  - c. Because proteins store energy for long periods
  - d. Because proteins prevent water loss from the wound
4. The relationship between the number of glucose molecules in disaccharide and polysaccharide and their solubility in water is ..... relationship
  - a. direct
  - b. inverse
  - c. constant
  - d. not exists
5. The unit of measurement (kJ/g) is used to express .....
  - a. The molar mass of chemical compounds
  - b. The energy required to raise the temperature of water
  - c. The heat capacity of water
  - d. The amount of heat produced by the combustion of one gram of a substance
6. A CGM device helps patients by monitoring .....
  - a. Heart rate
  - b. Blood sugar levels and carbohydrate availability
  - c. Oxygen levels
  - d. Blood viscosity

7. "Cholesterol" in the human body is involved in the formation of .....

- a. Vitamin D                      b. Starch                      c. Nucleic acids

8. The "Genetic Code" results from the difference in .....

- a. the sequence of nitrogenous bases                      b. the type of sugar only  
c. the number of phosphate groups                      d. the sequence of amino acids

9. Which of the following alternatives represents the correct order for the speed of obtaining energy ?

- a. Starch → Fats → Glucose                      b. Glucose → Sucrose → Starch  
c. Cellulose → Glucose → Fats                      d. Glycogen → Protein → Sucrose

10. The primary function of xylem tissue in plants is to transport .....

- a. Products of photosynthesis                      b. Oxygen  
c. Water and minerals                      d. Energy

11. The system responsible for transporting oxygen and nutrients in the human body is the .....

- a. Respiratory system                      b. Circulatory system  
c. Excretory system                      d. Digestive system

12. The pulmonary circulation begins with .....

- a. Oxygenated blood from the left ventricle  
b. Deoxygenated blood from the right ventricle  
c. Deoxygenated blood from the left ventricle  
d. Oxygenated blood from the right ventricle

13. In which blood vessels does the actual gas exchange occur?

- a. Aorta                      b. Pulmonary artery  
c. Pulmonary veins                      d. Blood capillaries

14. The renal denervation technique is a physical application used to treat .....

- a. Shortness of breath                      b. Diabetes mellitus  
c. Visual weakness                      d. High blood pressure

15. The accumulation of lactic acid in muscles leads to .....

- a. Products of photosynthesis                      b. Feeling of muscle fatigue(tired)  
c. decreases in water and minerals                      d. Increased muscle activity

**16. The Cohesion-Adhesion theory depends primarily on the properties of .....**

- a. Water molecules
- b. Food molecules
- c. Oxygen
- d. Carbon dioxide

**17. Anaerobic respiration in human muscles during strenuous exercise results in the accumulation of .....**

- a. Ethyl alcohol
- b. Glucose
- c. Glycogen
- d. Lactic acid

**18. Which of the following factors leads to an "increase" in arterial blood pressure?**

- a. Increased resistance of arterial walls
- b. widening of blood vessels
- c. Decrease in blood volume
- d. Slow heart rate

**19. Anaerobic fermentation in yeast cells produces .....**

- a. Oxygen
- b. Water only
- c. Lactic acid
- d. Ethanol

**20. Which of the following biological processes represents an example of an endothermic (energy-absorbing) reaction?**

- a. Cellular respiration
- b. Formation of water molecules
- c. Decomposition of potassium chloride
- d. Photosynthesis

**21. If  $\Delta H$  for the reaction = + 200 kJ, then...**

- a. The system releases heat
- b. The surrounding medium gain heat
- c. The system gains heat
- d.  $\Delta H$  is negative

**22. What is the main function of reabsorption in the kidneys ?**

- a. Removing wastes from the blood
- b. Recovering useful substances such as glucose
- c. Storing urine
- d. Converting ammonia into urea

**23. Urine moves from the kidney to the bladder through .....**

- a. Ureters
- b. Urethra
- c. Nephron
- d. Blood vessels

**24. Evaporation of sweat from the skin surface helps .....**

- a. raise body temperature
- b. increase blood viscosity
- c. absorb oxygen
- d. decrease body temperature

**25. When there is a disturbance in ion concentration inside the body, delicate vital processes such as ..... are affected**

- a. Hair growth
- b. Nerve and muscle function
- c. Skin color
- d. Liver size

**26. The skin has an immune function because it contains .....**

- a. Epidermis  
b. Dermis  
c. Hypodermis  
d. Blood capillaries

**27. Which of the following illustrates the dual nature of metabolism?**

- a. Muscle contraction and relaxation  
b. Inhalation and exhalation  
c. Nerve impulse transmission  
d. Protein synthesis and glucose breakdown

**28. The layer that contains sweat glands and hair follicles is .....**

- a. Dermis  
b. Epidermis  
c. Hypodermis  
d. Outer membrane

**29. Which excretory organ would be most affected when consuming foods containing dyes?**

- a. Lungs  
b. Liver  
c. Bladder  
d. Skin

**30. Ammonia is a waste product resulting from the breakdown of .....**

- a. Starch  
b. Amino acids  
c. Fats  
d. Glucose

**31. Artificial kidney membranes prevent proteins from passing because of .....**

- a. their electrical charge  
b. the large size of their molecules  
c. their high speed  
d. the viscosity of the cleaning fluid

**32. Carbon returns to the atmosphere from living organisms through two processes .....**

- a. photosynthesis and transpiration  
b. weathering and deposition  
c. respiration and decomposition  
d. fixation and denitrification

**33. Excretion processes and natural cycles together ensure .....**

- a. depletion of resources  
b. the survival and sustainability of life in the biosphere  
c. the cessation of sound waves  
d. the freezing of the Earth

**34. Ultrasound devices used for imaging organs rely on sound properties such as .....**

- a. evaporation and transpiration  
b. weathering and deposition  
c. fixation and denitrification  
d. reflection and refraction

**35. The process that "pulls" carbon from the atmosphere is .....**

- a. respiration  
b. combustion  
c. photosynthesis  
d. decomposition

**36. Farmers rely on planting legumes to improve soil fertility because they .....**

- a. consume small amounts of nitrogen
- b. produce more proteins than other plants
- c. prevent nitrification
- d. contain bacteria that fix nitrogen in their roots

**37. The phosphorus cycle differs from the carbon and nitrogen cycles in that .....**

- a. the atmosphere is not part of it
- b. it does not require decomposers
- c. it is very fast
- d. it occurs in outer space

**38. Carbon moves from plants to animals through .....**

- a. respiration
- b. evaporation
- c. decomposition
- d. feeding

**39. The biosphere interacts with the hydrosphere when .....**

- a. living organisms breathe oxygen
- b. plants die and decompose in the soil
- c. plants absorb water from the soil
- d. plants absorb CO<sub>2</sub> gas from air

**40. From which of the following spheres does the plant absorb water and mineral salts?**

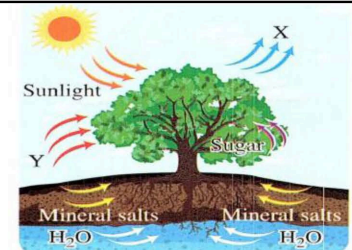
- a. The atmosphere only.
- b. The hydrosphere only.
- c. The atmosphere and lithosphere.
- d. The hydrosphere and lithosphere.

**41. When exposing a plant to a sunny day, which of the following gases its releasing rate from the leaf increases?**

- a. CO<sub>2</sub>
- b. O<sub>2</sub>
- c. N<sub>2</sub>
- d. H<sub>2</sub>

**42. From the opposite figure that illustrates one of the essential processes through which the plant manufactures its food , what do the letters (X) and (Y) represent respectively**

- a. Nitrogen and water.
- b. Oxygen and carbon dioxide.
- c. Water and oxygen.
- d. Carbon dioxide and oxygen.



**43. Which of the following living organisms is considered the primary source of energy in the ecosystem?**

- a. Corn plant.
- b. Locust.
- c. Plover bird.
- d. Snake.

**44. Which of the following living organisms depends in the formation of its food on abiotic components?**

- a. Mouse.
- b. Snake.
- c. Frog.
- d. Wheat plant.

**45. Which of the following represents a producer organism?**

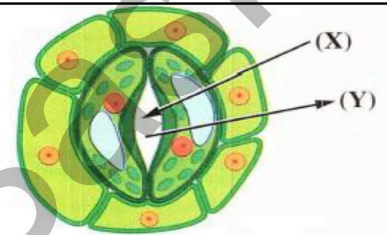
- a. Yeast fungus.
- b. Decomposer bacteria
- c. Green algae.
- d. Amoeba.

**46. Which of the following represent abiotic factors in the biosphere?**

- a. Light and plant.
- b. Water and bacteria.
- c. Minerals and air.
- d. Animal and human.

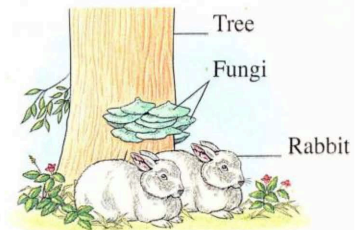
**47. The opposite figure illustrates a stoma (opening) which is responsible for gas exchange in plant leaves, which choice in the following table expresses gases (X) and (Y) in the photosynthesis process?**

- a. (X):O<sub>2</sub> (Y): CO<sub>2</sub>
- b. (X): CO<sub>2</sub> (Y): O<sub>2</sub>
- c. (X): H<sub>2</sub>O (Y): O<sub>2</sub>
- d. (X): O<sub>2</sub> (Y): H<sub>2</sub>O



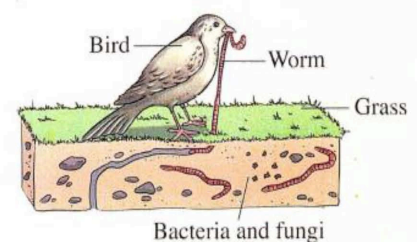
**48. In the opposite figure , the presence of tree , fungi I and rabbits together represents .....**

- a. consumers
- b. producers
- c. a population
- d. a community



**49. The opposite figure shows different living organisms that live in a certain area, what do the worms found in this area represent ?**

- a. A community.
- a. An ecosystem .
- c. A population.
- d. The biosphere.



**50. The forest that includes trees, insects and birds represents .....**

- a. a biome
- b. a community
- c. a population

**51. When several ecosystems have similar climate characteristics and dominant organisms they form what is known as .....**

- a. a community
- b. biosphere
- c. a biome
- d. a population

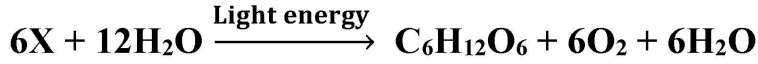
**52. Which of the following includes all biomes on Earth?**

- a. Lithosphere.
- b. The community.
- c. Biosphere.
- d. The population.

**53. Which of the following processes represents the conversion of light energy into chemical energy?**

- a. Respiration.
- b. Photosynthesis.
- c. Digestion.
- d. Organic decomposition.

**54. The following equation represents a vital process in the green plant:**

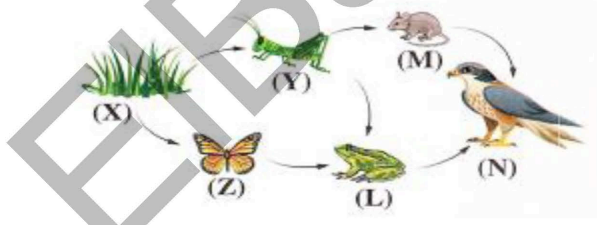


**Which of the following represent the vital process and letter (X) respectively?**

- a. Respiration / O<sub>2</sub>
- b. Photosynthesis / CO<sub>2</sub>
- c. Respiration / CO<sub>2</sub>
- d. Photosynthesis / O<sub>2</sub>

**55. The opposite figure illustrates a food web, which of the following living organisms represent secondary consumers?**

- a. (Y) and (N) .
- b. (L) and (M).
- c. (Z) and (M).
- d. (Y) and (Z).



**56. In the photosynthesis process, green plants use .....**

- a. carbon dioxide and water to produce energy
- b. oxygen and water to produce energy
- c. energy to produce carbon dioxide and water
- d. energy to produce oxygen, water and glucose

**57. What is the correct arrangement for a food chain in a terrestrial ecosystem?**

- a. Corn → Mouse → Owl → Eagle.
- b. Corn → Mouse → Eagle → Owl.
- c. Corn → Eagle → Mouse → Owl.
- d. Corn → Owl → Eagle → Mouse.

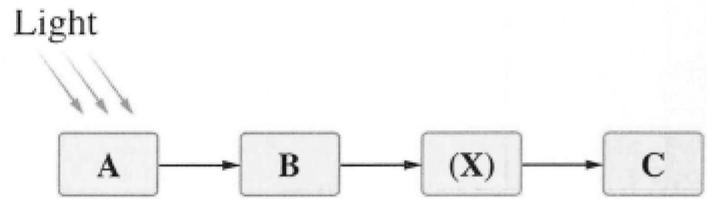
**58. Which of the following choices is correct about the following food chain?**



- a. Organism (2) is a carnivore.
- b. Organism (2) is a secondary consumer.
- c. Organism (3) is a carnivore.
- d. Organism (3) is a tertiary consumer.

**59. The opposite diagram represents a food chain, which of the following can be represented by letter (X)?**

- a. Rabbit.
- b. Grass.
- c. Locust.
- d. Snake.



**60. Decomposers in food chains perform the process of .....**

- a. food manufacturing by photosynthesis
- b. returning nutrients to the ecosystem
- c. energy absorption from the Sun
- d. production of new nutrients

**61. What is the type of organisms that represent the end of any food chain?**

- a. Autotrophs.
- b. Primary consumers.
- c. Tertiary consumers.
- d. Decomposers.

**62. The following organisms form a food chain in one ecosystem, which of the following represent( s) tertiary consumer( s)?**

- a. Zooplankton.
- b. Aquatic algae.
- c. Small fish.
- d. Shark fish.

**63. Which of the following represent the predators in the food chain?**

- a. Primary consumers only.
- b. Secondary consumers only.
- c. Secondary and tertiary consumers.
- d. Primary and secondary consumers.

**64. Energy transfer in the ecosystem begins with a .....**

- a. producer
- b. primary consumer
- c. secondary consumer
- d. decomposer

**65. Which of the following indicates the correct path for the energy transfer in a food chain?**

- a. Grass → Cow → Lion → Decomposing bacteria.
- b. Decomposing bacteria → Grass → Cow → Lion.
- c. Grass → Cow → Decomposing bacteria → Lion.
- d. Cow → Grass → Decomposing bacteria → Lion.

**66. The base of the energy pyramid is occupied by ..... organisms.**

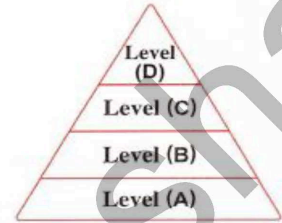
- a. producer
- b. primary consumer
- c. tertiary consumer
- d. decomposer

**67. What happens to the amount of energy that is transferred from one trophic level to the next level in the energy pyramid?**

- a. Increases.
- b. Decreases.
- c. Decreases then increases.
- d. Remains almost constant.

**68. The opposite figure represents an energy pyramid in which the organisms at level (A) obtain their energy from .....**

- a. producers
- b. organisms at level (B)
- c. the Sun
- d. organisms at level (D)

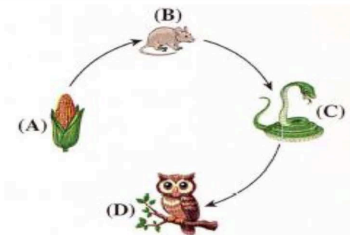


**69. The following organisms form a food chain in a single ecosystem. Which of these organisms will get the least amount of energy in the chain?**

- a. Green algae.
- b. Shrimp.
- c. Tuna fish.
- d. Shark fish.

**70. The opposite diagram illustrates a food chain, which of the following living organisms in the food chain contains the highest amount of energy that is transferred to the next organism?**

- a. (A).
- b. (B).
- c. (C).
- d. (D).



**71. The organisms found at the ..... of energy pyramid, receive ..... amount of energy compared to the mid-pyramid organisms.**

- a. top - same
- b. bottom - less
- c. top - less
- d. bottom - same

**72. The ratio between the amount of energy transferred to the organisms at the top of energy pyramid and the amount of energy transferred to the organisms at the middle of the pyramid**

- a. is greater than one
- b. is less than one
- c. is equal one
- d. cannot be determined

**73. If the amount of energy transferred to the secondary consumer in a food chain equals 2 J, what is the amount of energy in the producer?**

- a. 0.2 J
- b. 20 J
- c. 200 J
- d. 2000 J

74.If the amount of energy that the rabbit obtains from plants is 100 J, what is the amount of energy that can reach the fox that feeds on this rabbit?

- a.10 J                                      b. 50 J                                      c. 90 J                                      d.100J

75.The percentage of energy lost when moving from any trophic level to the next level in the energy pyramid is equal to .....

- a. 1%                                      b. 10%                                      c.90%                                      d.100%

76.What is the ratio between carbon, hydrogen and oxygen atoms in the monosaccharide molecule respectively?

- a. 1:1:2                                      b. 1:2:1                                      c. 2:1:1                                      d. 2:2:1

77.Which of the following sugars represents an example for the simplest form of carbohydrates?

- a. Cellulose.                                      b. Starch.                                      c. Lactose.                                      d. Fructose.

78.Which of the following is from the monosaccharides?

- a. Sucrose.                                      b. Lactose.                                      c. Glucose.                                      d. Glycogen.

79.Which of the following is from the disaccharides?

- a. Starch.                                      b. Sucrose.                                      c. Cellulose.                                      d. Fructose.

80.Which of the following sugars is called grape sugar?

- a. Sucrose.                                      b. Lactose.                                      c. Glucose.                                      d. Fructose.

81.Fructose sugar is called .....

- a. grape sugar                                      b. fruit sugar                                      c. cane sugar                                      d. milk sugar

82.Which of the following sugars is called milk sugar?

- a. Glucose.                                      b. Fructose.                                      c. Glycogen.                                      d. Lactose.

83.Which of the following sugars is called the cane sugar?

- a. Starch.                                      b. Sucrose.                                      c. Fructose.                                      d. Cellulose.

84.Which of the following carbohydrates is involved in building plant cell walls?

- a. Cellulose.                                      b. Starch.                                      c. Glycogen.                                      d. Lactose.

85.Which of the following carbohydrates is stored in the leaves and tubers of plant?

- a. Glucose.                                      b. Fructose.                                      c. Starch.                                      d. Glycogen.

86.Which of the following carbohydrates is stored in human muscles?

- a. Starch.                                      b. Glycogen.                                      c. Cellulose.                                      d. Lactose.

87.All of the following are polysaccharides, except .....

- a. glucose                                      b. starch                                      c. cellulose                                      d. glycogen



**99. How many types of nucleotides are there in RNA?**

- a. 8                                      b. 5                                      c. 4                                      d. 2

**100. Which of the following nitrogenous bases characterizes DNA molecule?**

- a. A                                      b. U                                      c. C                                      d. T

**101. The companion cells in the phloem tissue help in .....**

- a. storing sugars in winter  
b. preventing the compression of sieve tubes  
c. acquiring the tissue with strength and stiffness  
d. regulating the movement of nutrients

**102. Which of the following substances doesn't/don't transfer through the plant transport system?**

- a. Water.                                      b. Glucose.  
c. Cellulose                                      d. Magnesium ions.

**103. During the winter, sugars are stored in some plants as sugar beet in .....**

- a. stems                                      b. leaves                                      c. roots                                      d. flowers

**104. What happens to the transpiration rate and the water flow rate in the stem respectively starting from the morning till noon?**

- a. Increases / Increases.                                      b. Increases / Decreases.  
c. Decreases / Increases.                                      d. Decreases / Decreases.

**105. During transpiration process, the ratio between the number of water molecules in a cell of the leaf to the number of water molecules in a cell of the stem is .....**

- a. less than one                                      b. greater than one  
c. equal to one                                      d. equal to zero

**106. Which of the heart chambers receives deoxygenated blood?**

- a. Right atrium.                                      b. Right ventricle.  
c. Left atrium.                                      d. Left ventricle.

**107. The blood that reaches the brain cells leaves the heart from the .....**

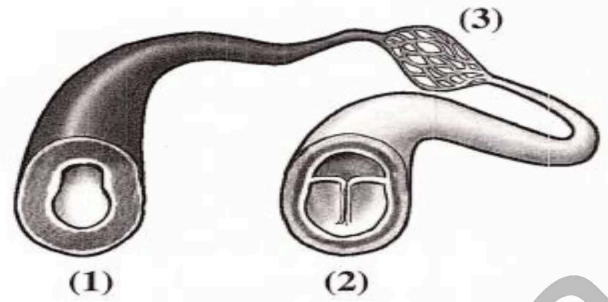
- a. left atrium                                      b. right atrium  
c. left ventricle                                      d. right ventricle

**108. Which of the following blood vessels carries deoxygenated blood from the right ventricle to the lungs?**

- a. Pulmonary artery.                                      b. Aorta.                                      c. Pulmonary vein.                                      d. Vena cava.

**109. In the opposite figure, what do the blood vessels from (1) : (3) represent, respectively?**

- a. Vein / Artery / Blood capillaries.
- b. Artery / Blood capillaries/ Vein.
- c. Blood capillaries/ Artery / Vein.
- d. Artery / Vein/ Blood capillaries.



**110. Which of the following blood vessels carries oxygenated blood from the lungs to the heart?**

- a. Pulmonary artery.
- b. Aorta.
- c. Pulmonary vein.
- d. Vena cava.

**111. Which of the following body systems integrates with the circulatory system to transport oxygen to all the body parts?**

- a. Digestive system.
- b. Respiratory system.
- c. Excretory system.
- d. Skeletal system.

**112. The circulatory system cooperates with the excretory system in .....**

- a. transporting digested food
- b. increasing the heartbeats
- c. getting rid of metabolic wastes
- d. regulating the breathing rate

**113. In which blood vessels does the gas exchange take place between blood and body cells?**

- a. Arteries.
- b. Veins.
- c. Blood capillaries.
- d. All blood vessels.

**114. Which of the following is correct about systolic pressure?**

- a. It represents the lower value of blood pressure.
- b. It results from the relaxation of heart.
- c. Its normal value is 120 mm Hg.
- d. It represents the maximum pressure exerted by the heart on veins.

**115. Which of the following is correct about diastolic pressure?**

- a. It represents the lower value of blood pressure.
- b. It results from the contraction of heart to pump the blood.
- c. Its normal value is 120 mm Hg.
- d. It represents the maximum pressure exerted by the heart on arteries.

**116. A patient with arteriosclerosis suffers from .....**

- a. low blood pressure  
b. high blood pressure  
c. decreased red blood cell count  
d. Increased vascular elasticity.

**117. How many ATP molecules are resulted from the fermentation of the products of glycolysis of one glucose molecule in a muscle cell?**

- a. 2  
b. 18  
c. 36  
d. 38

**118. Which of the following organelles is responsible for the production of energy?**

- a. Chloroplast.  
b. Mitochondrion.  
c. Sap vacuole.  
d. Nucleus.

**119. The process of cellular respiration in the cells of a living organism begins with .....**

- a. alcoholic fermentation  
b. lactic acid fermentation  
c. glycolysis  
d. glucose oxidation

**120. Which of the following doesn't agree with the occurrence of anaerobic respiration in a muscle?**

- a. The increase of lactic acid in the muscle.  
b. The depletion of oxygen that reaches the muscle.  
c. The production of a large amount of ATP molecules.  
d. The muscle fatigue.

**121. From the opposite reaction:  $C_6H_{12}O_6 \rightarrow 2C_2H_5OH + 2CO_2 + 2ATP$**

**Where does this reaction take place?**

- a. Companion cells .  
b. Yeast fungus.  
c. Muscle cells.  
d. Tracheids.

**122. In a chemical reaction, if the heat content of products is lower than that of reactants , thus the reaction .**

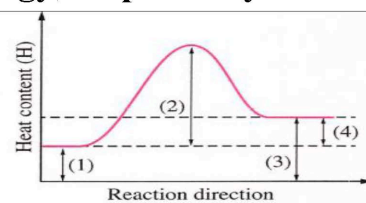
- a. is endothermic  
b. is exothermic  
c. has  $\Delta H$  value with a positive sign  
d. has  $\Delta H$  value = zero

**123. In the opposite reaction:  $2NO(g) + O_2(g) \rightarrow 2NO_2(g) + 112 \text{ kJ}$ ,  $\Delta H$  has .....**

- a. a negative sign, because the reaction is endothermic  
b. a positive sign, because the reaction is endothermic  
c. a negative sign, because the reaction is exothermic  
d. a positive sign, because the reaction is exothermic

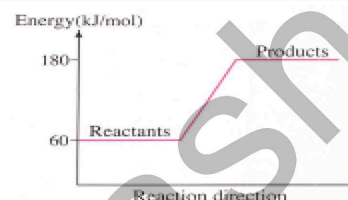
124. In the opposite graph, what is the number of the part which indicates each of the change in heat content of reaction and the activation energy, respectively?

- a. (1) / (3)                      b. (2) / (4)  
c. (3) / (4)                      d. (4) / (2)



125. From the opposite graph, what is the value of change in heat content within the occurred reaction?

- a. +120 kJ/mol                      b. -120 kJ/mol  
c. +240 kJ/mol                      d. -240 kJ/mol



126. In the process represented by the equation:  $\text{O}_2 \xrightarrow{UV} \text{O} + \text{O}$

Which of the following statements represents this process?

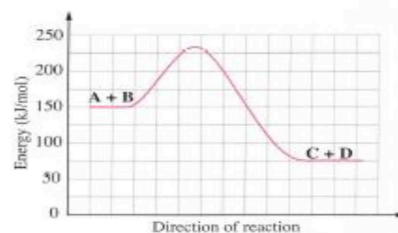
- a. Breakage of bonds takes place and the process is endothermic.  
b. Breakage of bonds takes place and the process is exothermic.  
c. Formation of bonds takes place and the process is exothermic.  
d. Formation of bonds takes place and the process is endothermic.

127. The mass of carbon in 2 mol of  $\text{CaCO}_3$  equals ..... [C = 12]

- a. 24 g                      b. 12 g                      c. 6 g                      d. 0.48 g

128. From the opposite graph, what is the value of the change in heat content of the following reaction  $\text{A} + \text{B} \rightarrow \text{C} + \text{D}$ ?

- a. - 225 kJ/mol  
b. - 75 kJ/mol  
c. +75 kJ/mol  
d. +225 kJ/mol



129. When dissolving ammonium chloride in water, the temperature of the solution decreased, which means that this process is .....

- a. endothermic, with a positive  $\Delta H$  value  
b. endothermic, with a negative  $\Delta H$  value  
c. exothermic, with a negative  $\Delta H$  value  
d. exothermic, with a positive  $\Delta H$  value

**130. From the opposite equation:**  $\text{H}_2\text{O}_{(l)} \longrightarrow \text{H}_2\text{O}_{(v)}, \Delta H = +44 \text{ kJ/mol}$

**We conclude that the heat content of water vapor is ..... the heat content of liquid water .....**

- a. less than                      b. equal to                      c. higher than                      d. half

**131. What is the molar mass in grams of glucose?**

**(Knowing that the atomic mass of: O = 16, C = 12, H = 1)**

- a. 16                      b. 80                      c. 100                      d. 180

**132. Which of the following is considered from the gaseous waste products produced from cellular respiration?**

- a. Oxygen.                      b. Hydrogen.  
c. Nitrogen.                      d. Carbon dioxide.

**133. Which of the following is produced from the breakdown of excess amino acids in the liver?**

- a. CO<sub>2</sub>                      b. Ammonia.                      c. Bilirubin.                      d. Water.

**134. Which of the following is considered a harmful metabolic byproduct resulting from the digestion of a piece of meat eaten by a person?**

- a. Nitrogen.                      b. Amino acids .                      c. Ammonia.                      d. CO<sub>2</sub>

**135. Which of the following is not a metabolic waste product?**

- a. CO<sub>2</sub>                      b. Nitrogen.                      c. Water.                      d. Urea.

**136. Which of the following explains the relationship between excretion and homeostasis in the body?**

- a. Expelling out of excess water only.  
b. Maintaining the internal environment of the body constant.  
c. Energy production.  
d. Oxygen transport.

**137. Which of the following substances has multiple ways to be eliminated by the body?**

- a. Excess water.                      b. CO<sub>2</sub>                      c. Drugs.                      d. Ammonia.

**138. Which of the following is not a major component of urine?**

- a. Glucose.                      b. Excess water.                      c. Excess salts.                      d. Urea.

**139. All of the following ions are needed by the body to regulate osmotic pressure inside and outside cells, except .....**

- a. sodium                      b. potassium                      c. lead                      d. chloride

**140. All of the following are reabsorbed from the kidney nephrons back into the bloodstream, except .....**

- a. glucose  
b. urea  
c. water  
d. potassium ions

**141. When salts in the blood increase, the kidneys respond by .....**

- a. increasing the sweat secretion  
b. increasing the water reabsorption  
c. increasing water excretion  
d. storing excess salts

**142. In a healthy person, as the temperature increases, the rate of urination .....**

- a. decreases  
b. increases  
c. isn't affected  
d. increases then decreases

**143. Which of the following organs can't excrete water from the body?**

- a. Skin.  
b. Lungs.  
c. Kidneys.  
d. Liver.

**144. The amount of toxic substances in the body increases when .....**

- a. the anaerobic respiration rate decreases  
b. the metabolic waste products accumulate  
c. the sweating rate increases  
d. the concentration of mineral ions decreases

**145. A person sits in a room at a temperature of 40°C for 30 minutes . What do you expect to happen for his body surface temperature and sweating rate, respectively?**

- a. Decreases / Decreases.  
b. Decreases / Increases .  
c. Increases / Decreases.  
d. Increases / Increases.

**146. Which of the following plays a role in regulating the body temperature?**

- a. Sweat glands only.  
b. Hair follicles only.  
c. Sweat glands and blood vessels.  
d. Hair follicles and blood vessels.

**147. Which of the following layers of skin acts as a thermal insulator?**

- a. Epidermis .  
b. Basal layer of epidermis .  
c. Dermis .  
d. Hypodermis.

**148. Which of the following shows the correct pathway for the body to eliminate urea?**

- a. Liver → Kidney → Urethra → Urinary bladder → Ureter.  
b. Liver → Urethra → Kidney → Ureter → Urinary bladder.  
c. Liver → Kidney → Ureter → Urinary bladder → Urethra.  
d. Liver → Ureter → Kidney → Urinary bladder → Urethra.

**149. Which of the following excretory organs is/are called the treatment plant of wastes?**

- a. Skin.                                      b. Kidney.                                      c. Liver.                                      d. Lungs.

**150. Bilirubin is produced from the breakdown of .....**

- a. enzymes                                      b. amino acids  
c. white blood cells                                      d. red blood cells

**151. Which of the following excretory organs is/are responsible for treating toxins and foreign substances?**

- a. Skin.                                      b. Liver.                                      c. Kidneys.                                      d. Lungs.

**152. Which of the following substances does/do not pass through the semi-permeable membrane of the bio-artificial kidney?**

- a. Proteins.                                      b. Water.                                      c. Mineral salts.                                      d. Urea.

**153. Which of the following living organisms contribute to decreasing the percentage of carbon in the atmosphere?**

- a. Producers.                                      b. Decomposers.  
c. Primary consumers.                                      d. Secondary consumers.

**154. Which of the following biological processes is a direct source of carbon that is found in carbohydrates stored in plant tissues?**

- a. Respiration.                                      b. Excretion.  
c. Photosynthesis.                                      d. Decomposition.

**155. Which of the following living organisms play(s) a role in fixing atmospheric nitrogen in the soil?**

- a. Green plants.                                      b. Nodular bacteria.  
c. Mushroom fungus.                                      d. Herbivores .

**156. Nitrogen reaches the producers after the .....**

- a. respiration                                      b. decomposition of organic matter  
c. photosynthesis                                      d. nitrogen fixation

**157. Nitrogen fixation occurs by some types of microorganisms in the .....**

- a. soil                                      b. atmosphere  
c. oceans                                      d. underground water

## Model Answer

### ✱ Choose the correct answer:

1. C	41.B	81.B	121. B
2. D	42.B	82.D	122. B
3. A	43.A	83.B	123. C
4. B	44.D	84.A	124. D
5. D	45.C	85.C	125. A
6. B	46.C	86.B	126. A
7. A	47.B	87.A	127. A
8. A	48.D	88.C	128. B
9. B	49.C	89.C	129. A
10.C	50.B	90.B	130. C
11.B	51.C	91.C	131. D
12.B	52.C	92.D	132. D
13.D	53.B	93.D	133. B
14.D	54.B	94.C	134. C
15.B	55.B	95.C	135. B
16.A	56.D	96.B	136. B
17.D	57.A	97.C	137. A
18.A	58.C	98.D	138. A
19.D	59.D	99.C	139. C
20.D	60.B	100. D	140. B
21.C	61.D	101. D	141. B
22.B	62.D	102. C	142. A
23.A	63.C	103. C	143. D
24.D	64.A	104. A	144. B
25.B	65.A	105. A	145. D
26.A	66.A	106. A	146. C
27.D	67.B	107. C	147. D
28.A	68.C	108. A	148. C
29.B	69.D	109. D	149. C
30.B	70.A	110. C	150. D
31.B	71.C	111. B	151. B
32.C	72.B	112. C	152. A
33.B	73.C	113. C	153. A
34.D	74.A	114. C	154. C
35.C	75.C	115. A	155. B
36.D	76.B	116. B	156. D
37.A	77.D	117. A	157. A
38.D	78.C	118. B	
39.C	79.B	119. C	
40.D	80.C	120. C	

تطبيق



مذكرات جاهزة للطباعة

لتحميل الملفات التعليمية مجاناً للمعلم والطالب

مذكرات وملازم / مراجعات وملخصات / امتحانات / كتب الوزارة /  
أدلة المعلم / دفاتر التحضير / سجلات مدرسية / أوراق تأسيس

امسح الكود بموبايلك علشان تقدر تثبت التطبيق

وتقدر ف أي وقت تحمّل ال نفسك فيه ببلاش

هيغنيك عن البحث والجروبات والقنوات الكثيرة

