

برعاية معالي وزير التربية والتعليم
السيد الأستاذ / محمد عبد اللطيف
وتوجيهات مساعد الوزير لشئون تطوير المناهج التعليمية
والمشرف على الإدارة المركزية لتطوير المناهج

د/ اكرم حسن
اداءات وتقييمات

Integrated science

لجنة الاعداد والمراجعة
خبراء مكتب تنمية مادة العلوم
اشراف علمي
مستشار العلوم

د/ عزيزه رجب خليفة

2024 - 2025

Answer the following questions:

Question (1) :- A) Choose the correct answer:

1- What role does ozone play in the chemical treatment of water?

- a) Desalination of water
- b) Has a high ability to absorb organic matter and chemical pollutants.
- c) Oxidizes some organic and inorganic to harmless substances.
- d) Purification of water from gases

2- Which of the following reactions leads to decay ozone layer?

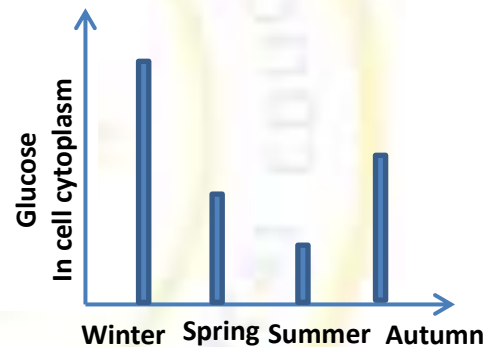
- a) $\text{NO} + \text{O}_3 \rightarrow \text{NO}_2 + \text{O}_2$
- b) $\text{NO}_2 + \text{O}_3 \rightarrow \text{NO} + \text{O}_2$
- c) $\text{NO}_2 + \text{O} \rightarrow \text{NO} + \text{O}_2$
- d) $\text{NO} + \text{O}_2 \rightarrow \text{NO}_2$

3- The opposite figure shows the amount of Glucose in the cytoplasm of the cells of an Organism.

- study it carefully and then conclude:

Which regions of the globe can this organism Live in?

- a) Aquatic temperate zone
- b) The frozen polar region
- c) Tropical forest zone
- d) Desert zone



4- Freezing of and Thawing of water is a reason for weathering

- a) Mechanical
- b) Biological
- c) chemical
- d) physical

5- One of your friends who lives in America wants you to tell the rest of your classmates in other countries that it is now 86 °F in America.

-The temperature you will send in a way that all your friends in the scientific field will understand =....

- a) 86 °F
- b) 30 °C
- c) 42 °C
- d) 303 K

6-Liquid substances often have a higher molecular weight than gaseous substances
, despite this, water is a liquid at normal temperature while hydrogen sulfide is a gas

(Molecular weight of $H_2O= 18$, molecular weight $H_2S= 34$)

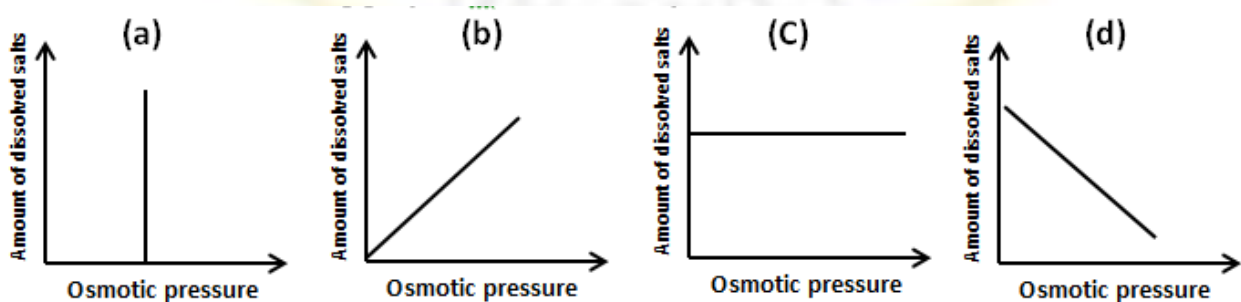
-this is due to.....

- a) Higher electronegativity of oxygen and lower polarity of water
- b) Lower electronegativity of sulphur and higher polarity of hydrogen sulphide
- c) Higher electronegativity of oxygen and higher polarity of water
- d) Higher electronegativity of sulphur and Lower polarity of hydrogen sulphide

7- The increase in the thicknesses of the soil indicates to all of the following except.....

- (a) Increasing the effect of living organisms on the rock
- (b) Increasing the period of time at which soil is formed
- (c) Decreasing the period of time at which soil is formed
- (d) The original rocks strongly affected by climate factors

8-Which of the following graphs is scientifically correct?



9- The structural adaptation that common between freshwater fish and salty water fish is.....

- a) Compressed body
- b) Increased concentration of salts in the cells
- c) Streamlined body
- c) Decreased concentration of salts in the cells

10- If the boiling point of a liquid is (X) °C at sea level and its boiling point is

(Y) °C at mountain level, which of the following is the ratio of X:Y?

- a) Greater than one
- b) Less than one
- c) Equal to zero
- d) Equal to one

11- The value 750 mmHg equivalent to N/m²

- (a) 99967.11
- (b) 89967.11
- (C) 101300
- (d) 1013

12- Which of the following is a reason of abnormal aquatic algae blooms?

- (a) Saturation of water with nitrate and phosphate salts
- (b) Increased solubility of CO₂
- (C) Saturation of water with sulfate and lead salts
- (d) Increased salinity of the water body

13- To treat the weak flowers of plants, fertilizers rich in the elementare used

- a) P
- b) K
- c) N
- d) S

14- The lowest density of water at

- (a) Temperature 4 °C
- (b) Temperature 5 °C
- (C) Temperature 3 °C
- (d) Temperature 1 °C

15- The minimum value (V_{rms}) required for propane gas to successes to escape

From Earth's atmosphere =.....

- a) 11.1 km/s
- b) 12.2 km/s
- c) 10.2 km/s
- d) 11.2 km/s

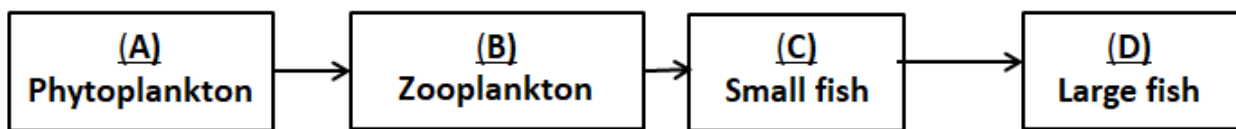
16- The bald eagle is almost extinct because.....

- a) The use of DDT, which affected the strength of its wings.
- b) The use of chlordane, which affected its ability to reproduce.
- c) Lack of raccoons, muskrats and rabbits to feed on
- d) The use of DDT, which affected their ability to reproduce

17- A technique that can be used to measure the ratio of harmful gases in the air and heavy elements in the soil is

- a) Spectroscopy
- b) Liquid chromatography
- c) Gas chromatography
- d) Wet chemical analysis

18- From the following diagram:



-All of the following are causes of disruption in this food chain except.....

- a) Increasing numbers of (A) and (B)
- B) (D) predating (C) in large numbers
- c) Increasing numbers of (B) and decreasing numbers of (A)
- d) Decreasing numbers of (D) and (A)

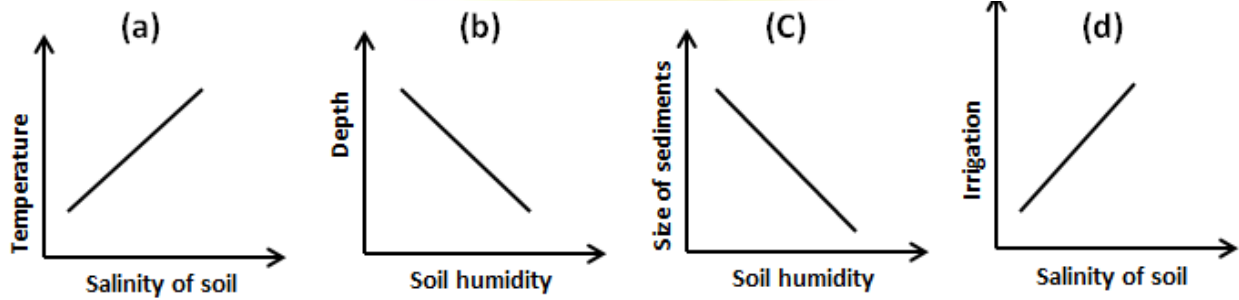
19- If the boiling point of acetic acid under (1 atm) pressure = 118 °C

- Then the expected boiling point under (0.8 atm) pressure =

.....

- (a) 111 °C
- (b) 118 °C
- (c) 119 °C
- (d) 125 °C

20- Which of the following graphs is scientifically incorrect?



Essay questions:-

1- *During the day, beach sand is very hot and seawater is cold, and at night the sand*

Is cooler than the water. Give the scientific explanation

.....

2- **What happened when?**

Vapour pressure of a liquid becomes equal atmosphere Pressure?

.....

3 -If the temperature at the top of the mountain 0°C and the height of the mountain 3520 m, Calculate the temperature at the base of the mountain

.....

