

Bio\_Qz3\_Ch09Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06

Bio\_Qz3\_Ch10Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06 Q07 Q08 Q09

Bio\_Qz3\_Ch09Sec2\_2014-15

Q01 Q02 Q03 Q04

**INSTRUCTION:** **تعليمات** Please choose the BEST answer from the given options for each question.

**Question:**

A difference between DNA and RNA is.....

**Options:**

- DNA has the base Thymine but RNA has a Uracil
- DNA has a ribose sugar but RNA has a deoxyribose
- DNA is a single strand while RNA is a double helix
- DNA is nucleic acid but RNA is not

Exam Name: Biology\_Qz3\_2014-15  
Level:

Click on the question number to solve it.

Bio\_Qz3\_Ch09Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06

Bio\_Qz3\_Ch10Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06 Q07

Bio\_Qz3\_Ch09Sec2\_2014-15

Q01 Q02 Q03 Q04

**INSTRUCTION:** **تعليمات** Please choose the BEST answer from the given options.

**Question:**

Nucleic acids compose of monomers called.....

**Options:**

- Fatty acids
- Amino acids
- Monosaccharides
- Nucleotides

Click on the question number to solve it.

Bio\_Qz3\_Ch09Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06

Bio\_Qz3\_Ch10Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06 Q07

Bio\_Qz3\_Ch09Sec2\_2014-15

Q01 Q02 Q03 Q04



**INSTRUCTION:** تعليمات Please choose the BEST answer from the given o

**Question:**

Which of the following nitrogen bases are pyrimidines?

**Options:**

- Cytosine - Adenine
- Guanine - Cytosine
- Thymine - Cytosine
- Adenine - Thymine

Exam Name: Biology\_Qz3\_2014-15  
Level:

Curre

Click on the question number to solve it.

Bio\_Qz3\_Ch09Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06

Bio\_Qz3\_Ch10Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06 Q07

Bio\_Qz3\_Ch09Sec2\_2014-15

Q01 Q02 Q03 Q04

**INSTRUCTION:** تعليمات Please choose the BEST answer from the given opt

**Question:**

A nucleotide that found in DNA but NOT in RNA is .....

**Options:**

- Guanine
- Thymine
- Cytosine
- Adenine

Level:

Click on the question number to solve it.

Bio\_Qz3\_Ch09Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06

Bio\_Qz3\_Ch10Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06 Q07

Bio\_Qz3\_Ch09Sec2\_2014-15

Q01 Q02 Q03 Q04

**INSTRUCTION:** تعليمات Please choose the BEST answer from the given c

**Question:**

Skeletal muscles are connected to bones by means of ....

**Options:**

- Ligaments
- Tendons
- Adipose tissue
- Cartilage

Bio\_Qz3\_Ch09Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06

Bio\_Qz3\_Ch10Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06 Q

Bio\_Qz3\_Ch09Sec2\_2014-15

Q01 Q02 Q03 Q04

**INSTRUCTION:** **تعليمات** Please choose the BEST answer from the given

**Question:**

Cartilages are .....

**Options:**

- Nervous tissue
- Connective tissue
- Cardiac muscle
- Muscular tissue

Click on the question number to solve it.

Bio\_Qz3\_Ch09Sec1\_2014-15

Q01

Q02

Q03

Q04

Q05

Bio\_Qz3\_Ch10Sec1\_2014-15

Q01

Q02

Q03

Q04

Q05

Bio\_Qz3\_Ch09Sec2\_2014-15

Q01

Q02

Q03

Q04

**INSTRUCTION:** تعليمات Please choose the BEST answer from the

**Question:**

Adipose tissues belong to.....

**Options:**

- Connective tissues
- Nervous tissues
- Muscle tissues
- Epithelial tissues

**INSTRUCTION:** **تعليمات** Please choose the BEST answer

**Question:**

The DNA consists of .....

**Options:**

- Three strands
- Four strands
- One strand
- Two strands



Eng\_Qz3\_CH09Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06

Eng\_Qz3\_CH10Sec3\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06 Q07 Q08 Q09

Eng\_Qz3\_CH09Sec2\_2014-15

Q01 Q02 Q03 Q04

**INSTRUCTION:** Please choose the BEST answer from the given options for each question.

**Question:**

Studying the FUNCTION of an organism's structure is called.....

**Options:**

- Taxonomy
- Physiology
- Anatomy
- Biology

Q01 Q02 Q03 Q04 Q05 Q06  
Q07 Q08 Q09 Q10 Q11 Q12 Q13 Q14  
Q15 Q16 Q17 Q18

**INSTRUCTION:** Please choose the right answer from the given options for

**Question:**  
The structural and functional units of nervous tissues are.....

**Options:**


- A) Bones
- B) Muscle
- C) Red blood cells
- D) Neurons

Click on the question number to solve it.

Bio\_Qz3\_Ch09Sec1\_2014-15 Q01 Q02 Q03 Q04 Q05 Q06

Bio\_Qz3\_Ch10Sec1\_2014-15 Q01 Q02 Q03 Q04 Q05 Q06 Q07 Q08 Q09

Bio\_Qz3\_Ch09Sec2\_2014-15 Q01 Q02 Q03 Q04

**INSTRUCTION:**  Please choose the BEST answer from the given options for each question.

**Question:**  
Organs are functionally coordinated in .....

**Options:**

- Cells
- Organ systems
- Tissues
- Atoms

Click on the question number to solve it.

Bio\_Q23\_Ch09Sec1\_2014-15

Q21 Q22 Q23 Q24 Q25 Q26

Bio\_Q23\_Ch09Sec2\_2014-15

Q27 Q28 Q29 Q30 Q31 Q32 Q33 Q34

Bio\_Q23\_Ch09Sec2\_2014-15

Q35 Q36 Q37 Q38

**INSTRUCTION:** Please choose the BEST answer from the given options.

**Question:**

The tissues are higher levels than.....

**Options:**

- Organ systems
- Organism
- Cells
- Organs

Level.

Click on the question number to solve it.

Bio\_Qz3\_Ch09Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06

Bio\_Qz3\_Ch10Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06

Bio\_Qz3\_Ch09Sec2\_2014-15

Q01 Q02 Q03 Q04

**INSTRUCTION:** تعليمات Please choose the BEST answer from the given

**Question:**

DNA replication follows a ..... Model

**Options:**

- Non-conservative
- Conservative
- Semi-conservative
- Conservative and semi-conservative

bio\_q01\_choose1\_2014-15    Q01   Q02   Q03   Q04   Q05   Q06

bio\_q02\_choose1\_2014-15    Q01   Q02   Q03   Q04   Q05   Q06   Q07   Q08   Q09

bio\_q03\_choose1\_2014-15    Q01   Q02   Q03   Q04

**INSTRUCTION:** Please choose the BEST answer from the given options for each question.

**Question:**  
Which tissues lines cavities in the body?

**Options:**

- Muscle tissues
- Connective tissues
- Nervous tissues
- Epithelial tissues

Click on the question number to solve it.

86\_Q23\_Ch09Sec1\_014/15    Q21   Q22   Q23   Q24   Q25   Q26

86\_Q22\_Ch09Sec1\_014/15    Q21   Q22   Q23   Q24   Q25   Q26   Q27   Q28   Q29   Q30

86\_Q21\_Ch09Sec1\_014/15    Q21   Q22   Q23   Q24

**INSTRUCTION:** Please choose the BEST answer from the given options for each question.

**Question:**  
..... are tissues which cause voluntary movement of the body.

**Options:**

- Smooth muscle
- Cardiac muscle
- All answers are correct
- Skeletal muscle

Click on the question number to solve it.

Bio\_Qz3\_Ch09Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06

Bio\_Qz3\_Ch10Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06

Bio\_Qz3\_Ch09Sec2\_2014-15

Q01 Q02 Q03 Q04



**INSTRUCTION:** تعليمات Please choose the BEST answer from the give

**Question:**

Translation of information on RNA occurs in the .....

**Options:**

- Chloroplast
- Cytoplasm
- Mitochondria
- Nucleus



Level.

Click on the question number to solve it.

Bio\_Qz3\_Ch09Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06

Bio\_Qz3\_Ch10Sec1\_2014-15

Q01 Q02 Q03 Q04 Q05 Q06

Bio\_Qz3\_Ch09Sec2\_2014-15

Q01 Q02 Q03 Q04



**INSTRUCTION:** **تعليمات:** Please choose the BEST answer from the give

**Question:**

Simply, translation is a copy of.....

**Options:**

- Protein from RNA
- DNA from DNA
- DNA from Mrna
- RNA from DNA

Click on the question number to solve it.

Q1 Q2 Q3 Q4 Q5 Q6

Q7 Q8 Q9 Q10 Q11 Q12

Q13 Q14 Q15 Q16 Q17 Q18

Q19 Q20 Q21 Q22 Q23 Q24

Q25 Q26 Q27 Q28 Q29 Q30

Q31 Q32 Q33 Q34

**INSTRUCTION** → Please choose the BEST answer from the given options for each question.

**Question:**

The DNA replication gives two DNA molecules .....

**Options:**

- One with (2) new strands but the other with (2) old strands
- Each with (2) old strands
- Each with one new strand and one old strand
- Each with (2) new strands

Bio\_Qz3\_Ch09Sec1\_2014-15

Q01 Q02 Q03 Q04

Bio\_Qz3\_Ch10Sec1\_2014-15

Q01 Q02 Q03 Q04

Bio\_Qz3\_Ch09Sec2\_2014-15

Q01 Q02 Q03 Q04

**INSTRUCTION:** تعليمات Please choose the BEST answer from

**Question:**

Chromosomes consist of .....

**Options:**

- DNA and lipids
- RNA and sugar
- DNA and protein
- RNA and amino acids

34) mRNA is transcribed in the

- A) Nucleus
- B) Cytoplasm
- C) Ribosomes
- D) Golgi bodies

35) Which one of the following base is found in RNA but not DNA?

- A) Cytosine
- B) Adenine
- C) Uracil
- D) Thymine

36) DNA replication

- A. Forms four new DNA molecules
- B) Forms two daughter molecules, each has 50% of the parental DNA
- C) Begins when two DNA molecules join together
- D) Forms two daughter molecules, each has 100% of the parental DNA

37) A genetic codon consists of ..... nucleotides.

- A) Two
- B) Three
- C) Six
- D) Nine

38) Which of these is a difference between a DNA and an RNA molecule?

- A) DNA contains uracil, whereas RNA contains thymine
- B) DNA composed of nucleotides, whereas RNA composed of nucleic acids
- C) DNA contains five-carbon sugars, whereas RNA contains six-carbon sugars
- D) DNA is double-stranded, whereas RNA is single-stranded

39) Columnar epithelium is found in—

- A) Kidney
- B) Liver
- C) Capillaries
- D) Small intestine

40) The Small glands that begin digestion of starch is called .....

- A) Adrenal
- B) Thyroid
- C) Pineal
- D) Salivary

Good Luck ..... "Biology Unit"

27) The process of cellular respiration include ..... reactions  
A) Hydrolysis and Oxidation  
B) Oxidation and Dehydration  
C) Reduction and Hydrolysis  
D) Reduction and Oxidation

28) Most eukaryotic cells produce energy from glucose using .....  
A) Carbon dioxide  
B) Oxygen  
C) Nitrogen  
D) Hydrogen

29) The earthworms use the ..... in gas exchange  
A) Tracheal system  
B) Lungs  
C) Gills  
D) moist body surfaces

30) Blood from the lungs pours directly into .....  
A) Right atrium  
B) Left atrium  
C) Right ventricle  
D) Left ventricle

31) Which of these not true ? cellular respiration .....  
A) Produces carbon dioxide  
B) Is a single stage.  
C) Releases ATP  
D) Break down glucose

32) Carbon dioxide, ATP and electrons  
A) lay a role in glucose breakdown  
B) Are inputs to Calvin cycle  
C) Are products of the Calvin cycle  
D) Are inputs of light reactions

33) In photosynthesis, sugar is produced in the ..... through .....  
A) Stroma , Calvin cycle  
B) Stroma , Light dependent reactions  
C) Thylakoid , Calvin cycle  
D) Thylakoid , light dependent reactions

- 21) The plasma Membranes are composed mainly of -----**
- A) Phospholipids
  - B) Nucleotides
  - C) Steroids
  - D) Lipoprotein
- 22) A piece of a DNA strand خيط with specific nucleotides sequence is a—**
- A) Gene
  - B) Chromosome
  - C) Chromatin
  - D) Ribosome
- 23) What tissue makes up most of your heart?**
- A) Muscles
  - B) Fat
  - C) Loose
  - D) Mucosa
- 24) Which of the following connective tissue is responsible for oxygen and nutrients transportation?**
- A) Bones
  - B) Adipose
  - C) Blood
  - D) Cartilage
- 25) Which of the following tissue does cover the outside of the body and line organs and cavities within the body?**
- A) Muscle tissue
  - B) Epithelial tissue
  - C) Nervous tissue
  - D) Connective tissue
- 26) Movement of solute with/down concentration gradient is.....**
- A) Active transport
  - B) Photosynthesis
  - C) passive transport
  - D) Cellular respiration

14) ATP molecules from Glycolysis + Krebs cycle are .....

- A) 28 ATP
- B) 4 ATP
- C) 32ATP
- D) 12ATP

15) Which of the following are meat-eaters?

- A) Herbivores
- B) Omnivores
- C) Producers
- D) Carnivores

16)----- contributes to blocked blood vessels and high blood pressure.

- A) HDL
- B) LDL
- C) DHL
- D) DSL

17) In an animal cell, DNA may be found in the.....

- A) Lysosomes
- B) Chloroplasts
- C) Nucleus and mitochondria
- D) Cell membrane

18) The main matrix of bones is

- A) White blood cells
- B) Plasma
- C) Calcium and phosphorus
- D) Fat

19) Which of the following has a single layer but appears stratified?

- A) Stratified squamous epithelium
- B) Pseudostratified columnar epithelium
- C) Simple squamous epithelium
- D) Simple cuboidal epithelium

20) Cell's ATP is produced mainly by a membrane-bound organelle called.....

- A) Mitochondria
- B) Nucleus
- C) Nucleolus
- D) Golgi bodies

7) What organ system does the trachea belong to?

- A) Nervous
- B) Respiratory
- C) Circulatory
- D) Digestive

8) What process takes place in the lungs?

- A. Food is digested
- B. Wastes are eliminated
- C. O<sub>2</sub> is exchanged for CO<sub>2</sub>
- D. All of the above

9) Extracellular matrix (ECM) is made up of---

- A) Cellulose
- B) Chitin
- C) Fibrin
- D) Collagen

10) Which of the following is a product of alcohol fermentation?

- A) Ethanol and carbon dioxide
- B) Glucose and carbon dioxide
- C) Oxygen and ATP
- D) Oxygen and carbon dioxide

11) What are the benefits of photosynthesis?

- A) It begins all food chains
- B) It produces oxygen gas
- C) It makes organic molecules like sugar
- D) All answers are correct

12) The pigment that absorbs excessive light that would damage chlorophyll is called?

- A) Chlorophyll a
- B) Chlorophyll c
- C) Carotenoid
- D) Chlorophyll a + b

13) Breakdown of pyruvate occurs in ---

- A) Glycolysis
- B) Oxidative phosphorylation
- C) Citric acid cycle
- D) Glycolysis and Krebs



**Select the correct single choice of the following MCQS and Mark with a Circle, then mark the proper square in the answer sheet.**

- 1) To block the enzyme action, the enzyme's active site interacts with**
- A) the enzyme's substrate
  - B) competitive inhibitors
  - C) non-competitive inhibitor
  - D) All of them
- 2) The "energy" is .....**
- A) Quantity of food eaten
  - B) Capacity to perform work
  - 9) Laws that study energy transformations
  - D) Laws that study cell movement
- 3) Which of the following is a result of glycolysis?**
- A) Loss of 6 ATP per glucose molecule
  - B) Gain of 28 ATP per glucose molecule
  - C) Citric acid cycle, oxidative phosphorylation, and glycolysis
  - D) Oxidative phosphorylation, citric acid cycle, and glycolysis
- 4) One of Smooth ER functions is .....**
- A) Lipids synthesis
  - B) Protein synthesis
  - C) Making membrane
  - D) Synthesis sugar
- 5) An enzyme that begins the chemical digestion of proteins.**
- A) Pepsin
  - B) Lipase
  - C) Amylase
  - D) Lactase
- 6) Tiny finger like projections in the small intestine.**
- A) Villi
  - B) Alveoli
  - C) Pilli
  - D) Cilia

Which stage of aerobic respiration requires ATP?

- a. Glycolysis
- b. Oxidative phosphorylation.
- c. Fermentation
- d. Krebs cycle

بس احس كلهم يحتاجو طاقه ولا ؟ .. A الجواب



The are.....in aerobic cellular respiration?!

A-two stages.

B-three stages.

C-one stage.

D-four stages.

إيش الجواب الصحيح؟

ال أ هل..... في التنفس الخلوي الهوائية؟!

أ لف - مراحل السحب.

ب - ثلاث مراحل.

ج - مرحلة واحدة.

د - أربع مراحل.

إيش الجواب الصحيح؟

Cell drinking

🍓 phagocytosis

🍓 pinocytosis 🍓

🍓 exocytosis

All organisms require

🍓 DNA

🍓 RNA

🍓 energy 🍓

Break down a complex molecules

🍓 anabolism

🍓 metabolism

🍓 catabolism 🍓

Series of chemical reaction

🍓 metabolism 🍓

🍓 anabolism

🍓 catabolism

The energy currency of cells

🍓 ADP

🍓 ATP 🍓

🍓 AQP

Enzymes have unique shapes

🍓 3d 🍓

🍓 🍓 🍓 🍓

Water travels from lower to high

🍓 diffusion

🍓 active transport

🍓 osmosis 🍓

Solvent and solute particles move to equalize

🍓 diffusion 🍓

🍓 osmosis

🍓 passive transport

Only solvent particles move

🍓 diffusion

🍓 osmosis 🍓

🍓 active transport

🍓 passive transport

Used to export bulky molecules

🍓 endocytosis

🍓 exocytosis 🍓

🍓 pinocytosis

Used to import substance

🍓 endocytosis 🍓

🍓 exocytosis

🍓 phagocytosis

Cell drinking

🍓 phagocytosis

🍓 pinocytosis 🍓

🍓 exocytosis



All organisms require

🍓 DNA

🍓 RNA

🍓 energy 🍓

The membrane protein function as


 enzymes 

 cell

 DNA

 RnA


Transport low to high is

 passive

 active 


Active transport needed


 ATP 



 protein

 ADP

Non polar molecules for example



 glucose


 sugars

 carbon dioxide 


Polar molecules for example



 carbon dioxide

 glucose 



 oxygen


Moves down a concentration gradient (from high to low)

 active

 passive 

Facilitated diffusion a type of

 passive transport 

 active transport

❄️ birds and mammals have

- small lungs
- large lungs
- simple lungs
- complex lungs ✓

❄️ gas exchange have ..... phases

- one
- Three ✓
- four
- eight

❄️ ..... is a respiratory organ found in many aquatic organisms

- gill ✓
- lungs
- air sacs
- body surface

❄️ ..... Loading and unloading of O<sub>2</sub>

- H<sub>2</sub>O
- iron
- Hemoglobin ✓
- chlorophyll -

اسئله مراجعه لشابتر ال gas exchange

دعواتكم 🌟🙌

## Chapter 9 :

❄️ ..... diffuses into the blood

- O<sub>2</sub> ✓
- CO<sub>2</sub>
- H<sub>2</sub>O
- HCL

❄️ ..... diffuses out the blood

- O<sub>2</sub>
- CO<sub>2</sub> ✓
- H<sub>2</sub>O
- HCL

❄️ ..... Where the exchange of gases takes place

- Bronchus
- bronchioles
- alveoli
- air sacs
- 3 & 4 ✓

ملاحظه : ب دا السؤال ممكن يقولنا alveoli يعني حويصلات وممكن يقولنا Air sacs يعني اكياس هوائيه وكلها صحيحة وتحدث فيها عملية تبادل الغازات

❄️ The pharynx is also called.....


- Throat ✓
- Trachea
- air sacs
- bronchus

❄️ Amphibians have .....


- small lungs ✓
- large lungs
- simple lungs
- complex lungs




## Chapter 5 :

 ..... Enables cells to produce ATP without O<sub>2</sub>

- Fermentation ✓
- Glycolysis
- photosynthesis
- cellular respiration

 ..... And..... Provide energy for life.

- Photosynthesis
- , Cellular respiration ✓
- Photosynthesis, Glycolysis
- Cellular respiration, Glycolysis
- Fermentation , Calvin cycle

 ..... Fermentation, oxidizing of NADH by muscle and bacteria

- lactic acid ✓
- alcoholic
- glycolysis
- Calvin cycle

 glycolysis occurs in the.....

- Chloroplasts
- Cytoplasm ✓
- Mitochondria
- Nucleolus

❄️ ..... Harvest chemical energy from food.

- Chloroplasts
  - mitochondria ✓
  - Nucleolus
  - Cell wall
- 

Chapter 4 :

❄️ Water moves across semi-permeable by .....

- Osmosis ✓
- diffusion
- active transport
- passive transport

❄️ Break down a complex molecule called .....

- catabolism ✓
- anabolism
- metabolism
- Pinocytosis

❄️ Block substrate from entering enzyme active site called.....

- competitive inhibitors ✓
- non- competitive inhibitors
- osmosis
- Active transport

❄️ ..... is the capacity to perform work

- Gas
  - Co<sub>2</sub>
  - Water
  - energy ✓
-

## Chapter 3 :

❄️ ..... are the photosynthesizing organelles of all photosynthetic eukaryotes.

- stroma
- thylakoids
- Chloroplasts ✓
- granum

❄️ specimens can be magnified up to ..... Times in light microscope.

- 1000 ✓
- 10000
- 1000000
- 10

❄️ The full name for TEM

- Scanning electron microscope
- light microscope
- Scanning light microscope
- Transmission electron microscope ✓

❄️ The ..... is the cell's genetic control center

- chlorophyll
- Chloroplasts
- Nucleus ✓
- Nucleolus

جاني سؤال في الميد

الصبغة المسؤولة الحماية من الضوء الزائد

-صبغة caretenoids

.... is not component of endomembrane system?

A. plasm membrane

B. Ribosomes

الإجابة رايبوزومات

احنا متعودين إنها الميتوكوندريا والبلاستيدات الخضراء فانتبهوا لها

---

الجزيئات الكبيرة تسمى :  
micro molecules  
macro molecules

---

Macro

---

Glycoprotein >>>> with membrane protein  
Glycolipid >>>>> with membrane lipid

---

ECM function : ✨  
- protect nucleus  
- maintain cell movement  
- protect cell membrane ✓

---

✨chloroplasts :

- An energy converting organelle
  - found in plant cell
  - double membrane Organelle
  - All answers are correct ✓

✨To connected sacs inside chloroplast called :

- Thylakoids ✓
- inner membranes
- outer membranes
- inter membranes

---

✨سؤال بمعناه الهواء اللي نتنفسو والطعام اللي ناكلو يعتمد على :

- البناء الضوئي. ✓
- التنفس الخلوي

✨ Chlorophyll :

-absorbs oxygen

-absorbs sunlight ✓

- absorbs CO<sub>2</sub>

-absorbs water

✨ ECM function :

- protect nucleus

-maintain cell movement

-protect cell membrane ✓

-all answer are correct

✨ Reactions which happened Soon after absorption  
of sun light:

Light dependent ✓

Light independent



Microscope which can resolve cell organelle clearly ✨  
are called :

- light microscope
- Dissecting microscope
- All answers are correct
- Electron microscope ✓

✨ The pigment absorbs excessive light which damage  
chlorophyll:

- Chlorophyll a
- Chlorophyll a+b
- carotenoid ✓
- Chlorophyll c

---

Continuity of life is based on heritable information in  
the form of DNA

---

وظيفة Extracellular

الخيارات

يحافظ عالنواة

يحافظ عالعضيات

يحافظ ع حركة الخلية او شي كذا ناسية

جميع ما ذكر

---

الاجابة جميع ما ذكر

---

the science that names and classifies species into

: groups

a) biology

b) botany

c) taxonomy

c) zoology

---

مهم السؤال ذا

والاجابة C

---

Making polymers :dehydration by removing water

Breaking polymers: hydrolysis by adding water

---

: To connected sacs inside chloroplast called

Thylakoids -

inner membranes -

outer membranes -

inter membranes -

---

inner space هنا يكون

منني عارفه الاجابه !

---

سؤال تناول الطعام و تنفس الاكسجين هل هو تنفس خلوي ولا بناء ضوئي و

---

تنفس خلوي

---

40) Large solid particles enter the cell by a process called: A. Exocytosis B. Phagocytosis C. Pinocytosis D. Polycytosis

-----  
B

---

من ATB الى ADB جاء سؤال كمان مشابه ، انو الالكترونات اللي حولت ال  
فين جات ؟

الماء - اكسجين - خيارات مستبعده

-----  
الماء

---

the lowest level of organization that can perform all  
:activities required for life

- a) atom
- b) cell
- c) organ
- d) tissues

-----  
B

كان فيه سؤال انو اش الي يوصل للاتزان مدري يحتاج اتزان

Active/Passive/Divisions/Osmosis

Passive الصح

جانني سؤال يقول

Reactions which happened Soon after absorption of  
:sun light

Light dependent ✓

Light independent

endocytosis انا جانني ايش الجزئيات القبيره اللي يحدث لها


انتبهو polysaccharides الجواب طلع

انا جانني سوال يقول ايش اللي ليست عضو

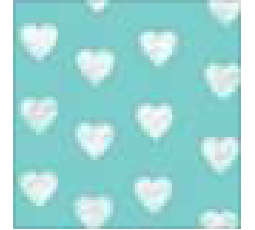
DAN والاجابه 

34) which of the following organelles is not found in  
plant cells?

Lysosomes and centrioles

الاجسام الهاجمه والمريكزات 

B ◀ Sa Sa



24 ديسمبر، 2015، الساعة 02:44 مساءً .

Signal celled amoeba and bactria different domains  
because :

A- bacteria prokaryotic

B - both unicellular

إشارة ال أميبا و خلية ا مختلف المجالات لأن:

A-prokaryotic البكتيريا

ب - كلانا وحيد الخلية

تمت الترجمة من الإنجليزية

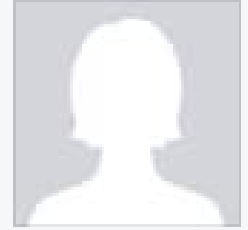
**Uytu Hygj**



المرحلة التي تحدث قريبا بعد امتصاص البلاستيكية للضوء؟ المرحلة الأولى.

أعجبنى · رد · المزيد · 16 ديسمبر، 2015

**Wejdan Alsehli**



المواد التي تدخل بسهولة عبر الغشاء ولا تحتاج الى طاقة؟؟

أعجبنى · رد · المزيد · 16 ديسمبر، 2015

**Mlak Alj**

محولات الطاقة ؟ بلاستيديات الخضرا والميتوكوندريا



أعجيني · رد · المزيد · 9 ديسمبر، 2015

**Mlak Alj**

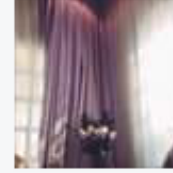
مصنع الاغشيه ؟



أعجيني · رد · المزيد · 9 ديسمبر، 2015

**اسما الحربي**

منتج دورة كالفن إيجاني ثاني اكسيد الكربون والجلاكوز ؟ حطيت  
الجلامكوز لاني ثاني اكسيد الكربون مدخل



أعجيني · رد · المزيد · 10 ديسمبر، 2015

**Abdulaziz Alharbi**

منتجات و مدخلات الدورات ( المتطلبة للضوء وغير المتطلبة كدارة كلفن  
(



أعجيني · رد · المزيد · 11 ديسمبر، 2015



اسرار الهلال

ATP is : بروتين او انزيم او كونزيم ومافتكر الخيار الرابع

أعجبي . رد . المزيد . 8 ديسمبر، 2015



Leena Sur

النسخ والترجمه للdna

أعجبي . رد . المزيد . 8 ديسمبر، 2015



RoRo ALshareef

which of the following organisms is photoautotrophic?

- A.Archaea
- B.Fungi
- C.plants and algae ✓
- D.All eukaryotic organisms

عرض الترجمة

أعجبي . رد . المزيد . 8 ديسمبر، 2015



Hanouf MH

جاني انو مصنع البروتين هوا الرايبسوم ، وتحصل الخليه على الطاقه من الميتوكوندريا وايش العنصر المشترك بين الخليه الحيوانه والنباتيه ، برضو جاني تعرفين لنوعين من الابتلاع الخلوي ، جاني عن تفاعل الظلام ، جاتني اشياء كثيره عن جزئيه البناء الضوئي ، جاني عن الكاروتين التعريف ، برضو جاني انو اشياء في الخليه النباته غير موجوده في الخليه الحيوانيه .

أعجبي . رد . المزيد . 8 ديسمبر، 2015



## Sura Salem



الجلوكوز جا من ثاني اكسيد الكربون و اش الاسهل ف المرور الاكسجين و لا الماء و لا البروتين حطيت البروتين و تركيب الغشاء وحدة من الخيارات غلط اللي هيا الرايبوزوم وظائف الشبكة الخشنة توزيع البروتين و فالنقل مين هوا المذاب اللي يمشي عكس الخيارات يا اما الاسموزية او النقل النشط حنقول نشط لانو مذاب لو قال مذيب يسير اسموزية و عمليات البناء ف الايض انابوليزم و اش هيا عمليات الهدم والبناء الايض و الاشعة تمتص فالكوروبلاست ايوة واش هوا التركيب اللي يستخدم ف النقل النشط من الخيارات الغشاء او الميتوكوندريا نختر الميتوكوندريا لانو نحتاج طاقة بالنقل النشط و بس هذا اللي افكرو .

أعجبنى · رد · المزيد · 8 ديسمبر، 2015

## RoRo ALshareef



Cells import fluids by  
A.phagocytosis  
B.pinocytosis ✓  
C.Exocytosis  
D.passive transport

عرض الترجمة

أعجبنى · رد · المزيد · 8 ديسمبر، 2015

## Abdulaziz Alharbi



ميزات الانتشار - البلاستيدات الخضراء ماهي وظائفها - الميكوندريا و البناء الضوئي - واغلب الاسئلة ٦٠٪ من البناء الضوئي شابت ٦

أعجبنى · رد · المزيد · 8 ديسمبر، 2015

## Afrah Albakri

الاوكسجين في البناء الضوئي يصير ماء

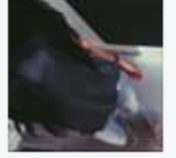
أعجبنني · رد · المزيد · 8 ديسمبر، 2015



## Afrah Albakri

ال ATP لما يصرلو تحلل مائي من نواتجو ال ADP

أعجبنني · رد · المزيد · 8 ديسمبر، 2015



## Afrah Albakri

ال phago وال pain و الابتلاع بمستقبل كلها تندج تحت endo

أعجبنني · رد · المزيد · 8 ديسمبر، 2015



## Afrah Albakri

تندرج\*

أعجبنني · رد · المزيد · 8 ديسمبر، 2015



## Afrah Albakri

تعريف الخاصيه الاسموزيه + جاني اختاري الصح الانتشار ما يحتاج وسط

أعجبنني · رد · المزيد · 8 ديسمبر، 2015



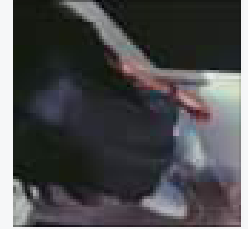
## Ghidaa AlRuhaily

حركة الاهداب والاسواط

أعجبنني · رد · المزيد · 8 ديسمبر، 2015



## Afrah Albakri



جاني cell wall موجود ف ( النبات ) + المجهر الضوئي يمبر ١٠٠٠  
مره + الكلوروفيل يعطي اللون الاخضر للورقه - البلاستيدات الخضراء  
تمتص الضوء فالنبات - حلقة كلفن يدخل فيها ديوكسي رايبوز و  
الكتورن و ATB + تعريف bound رايبوسوم + النبات والحيوان  
حقيقي النواة + مرور الموتد الكبيره بالفاقوسايتويسز

## نايف الرحيلي



مما الاسواط والأهداب تتكون ...الجواب الميتوكوندريا + المجهر  
الضوئي قادر ع رؤية... وخيارات الأصح النواه + سؤال عن DNA +  
عن الATP ...+وكم مرحله للبناء الضوئي..مرحلتين + سؤال عن  
البروتينات energy + جاء سؤال كمان عن غشاء الخلية ما اتذكر  
السؤال بضبط + سؤال عن الرؤوس \*فراغ\* الخيار محبه للماء  
+وكمال جاء سؤال عن الفسيفساء المائية 😊 ليه تسمى كذا..+جاء  
سؤال طويل عن الأكسجين وانا اخترت الماء أتوقع ان الأكسجين مخرج  
لي ... just this 😁 تذكرت بعد ما عصرت مخي ...والله يوفق  
الجميع 😊

أعجبنى . رد . المزيد . 8 ديسمبر، 2015

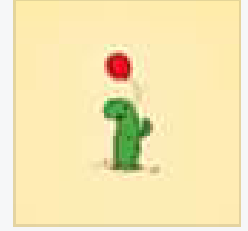
إياس الرحيلي



سؤال عن ال atb إذا صارلو هايديو ليسيز اش ينتج الجواب adb

أعجبنني . رد . المزيد . 8 ديسمبر، 2015

## أمجاد الحربي



سؤال عن مصطلح تثبيت الكربون \* fixation  
تكرر تقريبا بكل النماذج..

منتجات الطاقة في النبات الكربوهيدرات وايش؟؟الدهون ولا المعادن! و  
الهيموجلوبين بروتين معقد له تركيب ثانوي ولا اولي ولا ايش؟

---



Is programmed by discrete unit of inheritance called :

- gene

- DNA

- nucleotide

??????

**Question:**  
Inputs of photosynthesis equation are .....

**Options:**

- Glucose and oxygen
- Water and glucose
- Oxygen and lactic acid
- Carbon dioxide and water

**Question:**

Extracellular matrix (ECM) is functioning in.....

**Options:**

- Maintains cell movement
- All these correct
- Protects cell membrane
- Protects nucleus

**Question:**

The molecule that do NOT cross the plasma membrane easily is —

**Options:**

- Oxygen
- Water
- Protein
- Carbon dioxide

**Options: ATP composed of .....**

- Guanine, ribose, and two phosphate groups
- Adenine, deoxyribose, and three phosphate groups
- Adenine, ribose, and three phosphate groups
- Cytosine, deoxyribose, and three phosphate groups

**INSTRUCTION:** Please choose the BEST answer from the given options for each question.

**Question:**

The plasma Membranes are composed mainly/largely of \_\_\_\_\_

**Options:**

- Steroids
- Carbohydrates
- Triglycerides
- Phospholipids

**Question:**  
ATP molecules are needed in the transport of .....

**Options:**

- Water
- Carbon dioxide
- Polysaccharides to areas of higher concentrations
- Oxygen

**INSTRUCTION:** ~~add~~ Please choose the BEST answer from the given options for each question.

**Question:**

Which of these is NOT correct about photosynthesis?

**Options:**

- Occurs within the chloroplast
- Produce oxygen gas
- Produce carbon dioxide gas
- Uses light energy



**INSTRUCTION:** ~~ask~~ Please choose the BEST answer from the given options for each question.

**Question:**

Chemo-autotrophs are organisms which.....

**Options:**

- Can't make food
- Make their food using chemical compounds
- Depend on others food
- Make their food using light

**Question:**  
Water moves through a semi-permeable membrane by.....

**Options:**

- Active transport
- Diffusion
- Endocytosis
- Osmosis

**Question:**

The molecule that do NOT cross the plasma membrane easily is .....

**Options:**

- Oxygen
- Water
- Protein
- Carbon dioxide

**INSTRUCTION:** Please choose the BEST answer from the given options for each question.

**Question:**

Chloroplast is.....

**Options:**

- all answers are correct
- Found in plant cells
- a double membrane organelle
- An-energy converting organelle

**INSTRUCTION:** ~~ask~~ please choose the **BEST** answer from the given options for each question.

**Question:**

The pigment that absorbs excessive light that would damage chlorophyll is called?

**Options:**

- Caretenoid
- Chlorophyll c
- Chlorophyll a + b
- Chlorophyll a

**Question:**  
Ribosomes attached to the endoplasmic reticulum are called.....

**Options:**

- Endosed ribosomes
- Bound ribosomes
- Free ribosomes
- None of them

**Question:**  
Ribosomes that are suspended in the cytoplasm are called.....

**Options:**

- Bound and free ribosomes
- Bound ribosomes
- Free ribosomes
- None of these

**Question:**  
Extracellular matrix (ECM) is functioning in.....

**Options:**

- Maintains cell movement
- All these correct
- Protects cell membrane
- Protects nucleus



**Question:**  
Organelle that accounts for more than half of total cell's membranes is.....

**Options:**

- Lysosomes
- Plasma membrane
- Golgi apparatus
- Endoplasmic reticulum

**INSTRUCTION:** Please choose the BEST answer from the given options for each question.

**Question:**

What is the microscope used to study the internal cell structures?

**Options:**

- Scanning electron microscope (SEM)
- Transmission electron microscope (TEM)
- Light microscope
- All the three microscopes are used

**INSTRUCTION:** Please choose the best answer from the given options for each question.

**Question:**

Electron microscopes magnify specimens up to.....

**Options:**

- 100 times
- 10 times
- 100 000 times
- 1000 times

**INSTRUCTION:** ~~ask~~ Please choose the BEST answer from the given options for each question.

**Question:**

Which structure is absent in plant cells?

**Options:**

- Centriole
- Chloroplasts
- Cell wall
- Central vacuole

**INSTRUCTION:** Please choose the BEST answer from the given options for each question.

**Question:**

Which structure is common in animal and plant cells?

**Options:**

- DNA
- Cell membrane
- Nucleus
- All answers are correct

**INSTRUCTION:** ~~ask~~ please choose the BEST answer from the given options for each question.

**Question:**

Cellular drinking is called.....

**Options:**

- All the answers are correct
- Pinocytosis
- Exocytosis
- Phagocytosis

**INSTRUCTION:** ~~Ask~~ Please choose the BEST answer from the given options for each question.

**Question:**

Cells import large solid particles through .....

**Options:**

- Phagocytosis
- Exocytosis
- Pinocytosis
- Diffusion

INSTRUCTIONS: Please choose the best answer from the options given.

**Question:**

Exocytosis is a mechanism used by the cell to .....

**Options:**

- Controls protein pumps
- Maintains equilibrium
- Export molecules out of the cell
- Import molecules to the cell



**INSTRUCTION:** Please choose the best answer from the options given.

**Question:**

The ..... law of thermodynamics states that energy is constant, can be transf

**Options:**

- Second
- First
- Fourth
- Third

**Question:**  
Enzyme maintains.....

**Options:**

- All these correct
- Quaternary shape
- Three-dimensional shape
- Two-dimensional shape

INSTRUCTION: please choose the best answer from the given options for each question.

**Question:**

Chloroplast and mitochondria are enclosed by .....

**Options:**

- Four layered membrane
- Single membrane
- Double membrane
- Three layered membrane

**Question:**  
Which one of the following is NOT an organelle?

**Options:**

- DNA
- Golgi apparatus
- Lysosome
- Mitochondria

**Question:**  
The structure that holds animal cells together is called?

**Options:**

- Cell wall
- Extracellular matrix
- Centriole
- Lysosome

**Question:**  
Carbon dioxide, ATP and electrons

**Options:**

- Play a role in glucose breakdown
- Are inputs to Calvin cycle
- Are products of the Calvin cycle
- Are inputs of light reactions

**Question:**  
Inputs of photosynthesis equation are .....

**Options:**

- Glucose and oxygen
- Water and glucose
- Oxygen and lactic acid
- Carbon dioxide and water

**Question:**  
The oxygen produced in photosynthesis comes from a stage called.....

**Options:**

- Light reactions
- Citric acid cycle
- Calvin cycle
- Glycolysis



**Question:**  
During Calvin cycle, Carbon dioxide is incorporated into organic compound

**Options:**

- Carbon fixation
- Carbon generation
- Carbon evaporation
- Carbon hydrolysis

**Question:**

The thermodynamics are .....

**Options:**

- Capacity to perform work
- Quantity of food eaten
- Laws that study cell movement
- Laws that study energy transformations

28) In photosynthesis, the Light reactions produce:

- A. Sugar molecule from  $\text{CO}_2$
- B.  $\text{O}_2$  from water
- C. Amino acids
- D. Lipids

29) Which of the following is a product of Calvin cycle?

- A. Carbon dioxide
- B. Water
- C. Glucose
- D. All of the above

30) Light-dependent reactions take place in \_\_\_\_\_

- A. Mitochondria
- B. Cytoplasm
- C. Chloroplast
- D. Endoplasmic reticulum

23) Which of the following organisms is photoautotrophic?

- A. Archaea
- B. Fungi
- C. Plants and algae
- D. All eukaryotic organisms

24) Cells import fluids by \_\_\_\_\_

- A. Phagocytosis
- B. Pinocytosis
- C. Exocytosis
- D. Passive transport

25) Organelle that accounts for more than half of total cell's membranes is?

- A. Lysosome
- B. Endoplasmic reticulum
- C. Golgi apparatus
- D. Plasma membrane

26) Which one of the following are Energy-Converting Organelles?

- A. Mitochondria & Ribosome
- B. Ribosome & Chloroplasts
- C. Ribosome & Mitochondria
- D. Mitochondria & Chloroplasts

27) Which of the following is common organelle between plant and animal cells?

- A. Mitochondria
- B. Chloroplast
- C. Centriole
- D. Cell wall

17) Processes of Endocytosis can occur through

- A. phagocytosis
- B. pinocytosis
- C. receptor-mediated endocytosis
- D. All of the above

18) Extracellular matrix (ECM) is made up \_\_\_\_\_

- A. Cellulose
- B. Glucose
- C. Fats
- D. Collagen fibers

19) Which of the following are produced during the light reactions?

- A.  $CO_2$ , electrons and ATP
- B. Glucose, electrons and ATP
- C. Oxygen, electrons and ATP
- D. Water

20) The source of oxygen released in photosynthesis is \_\_\_\_\_

- A. Water
- B. Glucose
- C. Carbon dioxide
- D. Pyruvate

21) The nucleolus is the site of synthesis for \_\_\_\_\_

- A. Proteins
- B. DNA
- C. RNA
- D. All of the above

22) Which of the following describes the fluid-mosaic model of the plasma membrane structure?

- A. phospholipid monolayer with embedded proteins
- B. phospholipid bilayer with embedded proteins
- C. phospholipid trilayer with embedded proteins
- D. triglyceride bilayer with embedded proteins

11) Organelle called the membranes factory for the cell?

- A. Rough ER
- B. Lysosomes
- C. Smooth ER
- D. Cell wall

12) Ribosomes on the rough endoplasmic reticulum are called.....

- A. Free ribosomes
- B. Smooth ribosomes
- C. Bound ribosomes
- D. Vacuoles

13) Plants have \_\_\_\_\_ while animals lack it.

- A. cell wall
- B. central vacuole
- C. chloroplasts
- D. all of the above

14) Exocytosis is a process by which cells

- A. pass substances out of the cell in vesicles
- B. pass substances out of the cell through the membrane by osmosis
- C. release substances directly through a pore
- D. pass substances out of the cell through the membrane by diffusion

15) All of the following about Mitochondria are correct except

- A. They contain DNA
- B. They are found only in animal cells
- C. They carry out cellular respiration
- D. They are found in both plant and animal cells

7) The \_\_\_\_\_ assist in facilitated diffusion.

- A. Enzymes
- B. ATP

C. Transport proteins

D. Semi-permeable membrane.

8) Diffusion includes the movement of particles from an area of \_\_\_\_\_ of \_\_\_\_\_ to an area of \_\_\_\_\_.

- ~~A. high concentration, high concentration~~
- B. low concentration, low concentration
- C. high concentration, low concentration
- D. low concentration, high concentration

9) \_\_\_\_\_ use enzymes to recycle the cell's organelles.

- A. Lysosomes
- B. Golgi
- C. Chloroplast
- D. All of the above

10) Plants differ from animals, only plant cell has \_\_\_\_\_.

- A. Endoplasmic reticulum
- B. Cell wall
- C. Mitochondria
- D. Nucleus

1) RNA is synthesized from DNA by the process of—

- A. translation
- B. transcription
- C. transgenic
- D. duplication

2

2) Photosynthesis is \_\_\_\_\_

- A. Only a reduction process
- B. Only an oxidation process
- C. Oxidation + reduction processes
- D. Hydrolysis + oxidation

3) All food chains begin with \_\_\_\_\_

- A. Animals
- B. Plants and Algae
- C. Archae and Bacteria
- D. All of the above

4) Which best describes Calvin cycle?

- A. It is the first stage of photosynthesis
- B. It uses  $\text{CO}_2$  to produce proteins
- C. It gives energy-rich ATP
- D. It uses the energy stored in ATP and NADPH

5) Potential energy" is the-----

- A. ATP molecule
- B. Stored energy
- C. Wasted energy
- D. Energy of motion



17) Which of the following supply energy?

- A. fats and minerals
- B. carbohydrates and vitamins
- C. minerals and vitamins
- D. carbohydrates and fats

18) The backbone of the DNA is made of:

- A. sugar-phosphate
- B. nitrogenous base
- C. sugar-nitrogenous base
- D. phosphate-nitrogenous base

19) Taxonomy is the science which .....

- A. Study organisms at the cell level
- B. Group and classify organisms
- C. Study the ecosystems
- D. None

20) Eukaryotic cells are .....

- A. Cells that have Nucleus without DNA.
- B. Cells that have true Nucleus containing their DNA
- C. Cells that do not have true Nucleus
- D. Cells that do not have DNA

13) Tissues are made up of-----

- A. Cells
- B. Organs
- C. Organ system
- D. none of the above

14) Eukaryotes composed of-----

- A. Single cells organisms only
- B. Multicellular organisms only
- C. Bothe single cell or multicellular organisms
- D. None of these

15) A saturated fatty acid contains more \_\_\_\_\_ atoms than the same unsaturated fatty acid.

- A. Carbon
- B. Oxygen
- C. Phosphorous
- D. Hydrogen

16) Lipids

- A. do not mix with water
- B. insoluble in water
- C. hydrophobic
- D. All of the above

9) Ecosystems have energy flows, where energy enters into the system as---

A. Heat energy.

B. Light energy.

C. Chemical energy.

D. Kinetic energy.

10) The major components of cell membranes are the:

A. proteins

B. carbohydrates

C. phospholipids

D. Cholesterol

11) Life is divided into-----

A. 2 domains

B. 3 Domains

C. 4 Domains

D. 5 Domains

12) A group of organisms belonging to the same species forms----

A. A community

B. A population

C. An ecosystem

D. Biosphere

5) Protists are a diverse collection of

- A. unicellular prokaryotes
- ~~B. unicellular eukaryotes~~
- C. unicellular and multicellular eukaryotes
- D. None of the above

6) The simple unit of carbohydrate is .....

- A. Monosaccharide
- B. Fatty acid
- C. Amino acid
- D. Nucleic acid

7) The three basic structural differences between DNA and RNA are

- A. RNA has the base uracil instead of thymine in DNA.
- B. DNA has the sugar deoxyribose but RNA has the sugar ribose.
- C. DNA is double stranded while RNA is single stranded.
- D. all of the above

8) The two major processes in ecosystem dynamics are---

- A. Matter and energy
- B. Reproduction and adaptation
- C. Water and nutrients
- D. None of these

1) The seven common properties of living organisms don't include:

A. Growth and Development

**B. Movement**

C. Biological Adaptation

D. Order

2) Water-loving molecules are called:

**A. Hydrophilic**

B. Hydrophobic

C. Hydrocarbons

D. Hydrolytic

3) Plants synthesise protein from

A. starch

B. sugars

**C. amino acids**

D. fatty acids

4) Which part distinguishes amino acids?

A. amino group

B. carboxyl group

**C. side chain (R-group)**

D. all of the above

**Question:**

Exocytosis is a mechanism used by the cell to .....

**Options:**

- Controls protein pumps
- Maintains equilibrium
- Export molecules out of the cell
- Import molecules to the cell

**Question:**

The molecule that do NOT cross the plasma membrane easily is —

**Options:**

- Oxygen
- Water
- Protein
- Carbon dioxide

**Question:**  
Inputs of photosynthesis equation are .....

**Options:**

- Glucose and oxygen
- Water and glucose
- Oxygen and lactic acid
- Carbon dioxide and water



**Question:** Chloroplast and mitochondria are enclosed by .....

**Options:**

- Four layered membrane
- Single membrane
- Double membrane
- Three layered membrane

C

INSTRUCTION: Please choose the BEST answer from the given options for

**Question:**

The fluid-mosaic model of the cell membrane is a .....

**Options:**

- Tri-layer of phospholipid with embedded proteins
- Bi-layer of primary proteins with embedded lipids
- Mono-layer of phospholipid with embedded proteins
- Bi-layer of phospholipid with embedded proteins

4

تسليم الإجابة  
Submit Answer

All 8

**Question:**  
Carbon dioxide, ATP and electrons

**Options:**

- Play a role in glucose breakdown
- Are inputs to Calvin cycle
- Are products of the Calvin cycle
- Are inputs of light reactions

2

Instructions: please choose the BEST answer from the given options for each question.

**Question:**

The plasma Membranes are composed mainly/largely of \_\_\_\_\_

**Options:**

- Steroids
- Carbohydrates
- Triglycerides
- Phospholipids

F

**Question:**  
Which one of the following is NOT an organelle?

**Options:**

- DNA
- Golgi apparatus
- Lysosome
- Mitochondria



**Question:**  
Water moves through a semi-permeable membrane by.....

**Options:**

- Active transport
- Diffusion
- Endocytosis
- Osmosis

4

**INSTRUCTION:** ~~and~~ please choose the BEST answer from the given options for each question.

**Question:**  
Which structure is common in animal and plant cells?

**Options:**

- DNA
- Cell membrane
- Nucleus
- All answers are correct

F

**Question:**  
Enzyme maintains.....

**Options:**

- All these correct
- Quaternary shape
- Three-dimensional shape
- Two-dimensional shape

3



INSTRUCTION: Please choose the best answer from the options given.

**Question:**

The ..... law of thermodynamics states that energy is constant, can be transf

**Options:**

- Second
- First
- Fourth
- Third

2

**INSTRUCTION:** ~~ask~~ Please choose the BEST answer from the given options for each question.

**Question:**

Chemo-autotrophs are organisms which.....

**Options:**

- Can't make food
- Make their food using chemical compounds
- Depend on others food
- Make their food using light



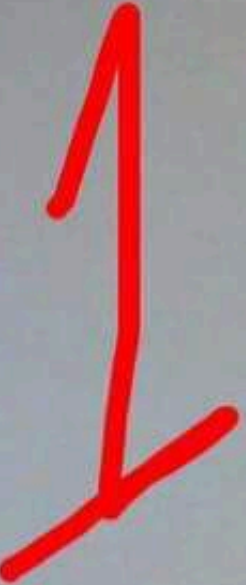
**INSTRUCTION:** Please choose the BEST answer from the given options for each question.

**Question:**

Chloroplast is.....

**Options:**

- all answers are correct
- Found in plant cells
- a double membrane organelle
- An-energy converting organelle



احياء

هذي اسئلة ما عرفت فصولها ومعلومات

trachea is made of .. • ? ?

muscle and elastic fibres -

elastic fibres with rings of cartilage -

muscle and elastic fibres with rings of cartilage ✓ -

Heart is : ? ?

Skeletal muscle -

Cardiac muscle ✓ -

Somooth muscle -

Which one is true about Red blood: ? ?

Smooth -

Easy to flow through vessels -

Round -

All ✓ -

Function of skin; ? ?

Bind and support other tissues -

Protective barrier ✓ -

Provide movement -

Extracellular matrix of blood: ? ?

Collagen -

Plasma ✓ -

Rubbly -

Red blood cells are type of ? ?

Nervous tissue -

Connective tissue ✓-

Muscles tissue-

Note !

Endergonic reactions >>> require energy >>> usually associated with anabolism ●

Exergonic reactions >>> release energy >>> usually associated with catabolism

Hydrolysis) » (Dephosphorylation)  $ATP + H_2O \gg ADP + P$ ) ●

Dehydration) » (phosphorlation)  $ADP + P \gg ATP + H_2O$  )

احياء تجميع ٣

The membrane protein function as

🍏 The membrane protein function as

🍏 enzymes 🍏

🍏 cell

🍏 DNA

🍏 RnA

Transport low to high is

🍏 passive

🍏 active 🍏

Active transport needed

🍏 ATP 🍏

🍏 protein

🍏 ADP

Non polar molecules for example

🍏 glucose

🍏 sugars

🍏 carbon dioxide 🍏

Polar molecules for example

🍏 carbon dioxide

🍏 glucose 🍏

🍏 oxygen

Moves down a concentration gradient (from high to low)

🍏 active

🍏 passive 🍏

Facilitated diffusion a type of

🍏 passive transport 🍏

🍏 active transport

Water travels from lower to high

🍏 diffusion

🍏 active transport

🍏 osmosis 🍏

Solvent and solute particles move to equalize

🍏 diffusion 🍏

🍏 osmosis

🍏 passive transport

Only solvent particles move

🍏 diffusion

🍏 osmosis 🍏

🍏 active transport

🍏 passive transport

Used to export bulky molecules

🍏 endocytosis

🍏 exocytosis 🍏

🍏 pinocytosis

Used to import substance

🍏 endocytosis 🍏

🍏 exocytosis

🍏 phagocytosis

Cell drinking

🍏 phagocytosis

🍏 pinocytosis 🍏

🍏 exocytosis

All organisms require

🍏 DNA

🍏 RNA

🍏 energy 🍏

Break down a complex molecules

🍏 anabolism

🍏 metabolism

🍏 catabolism 🍏

Series of chemical reaction

🍏 metabolism 🍏

🍏 anabolism

🍏 catabolism

The energy currency of cells

🍏 ADP

🍏 ATP 🍏

🍏 AQP

Enzymes have unique shapes

🍏 3d 🍏

Chapter 4 🍏

🍏 cell

🍏 DNA

🍏 RnA

Transport low to high is

🍏 passive

🍏 active 🍏

Active transport needed

🍏 ATP 🍏

🍏 protein

🍏 ADP



Non polar molecules for example

🍏 glucose

🍏 sugars

🍏 carbon dioxide 🍏

Polar molecules for example

🍏 carbon dioxide

🍏 glucose 🍏

🍏 oxygen

Moves down a concentration gradient (from high to low)

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🍏 passive transport 🍏

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🍏 osmosis 🍏

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Only solvent particles move

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Used to export bulky molecules

🍏 endocytosis

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🍏 pinocytosis

Used to import substance

🍏 endocytosis 🍏

🍏 exocytosis

🍏 phagocytosis

Cell drinking

🍏 phagocytosis

🍏 pinocytosis 🍏

🍏 exocytosis

All organisms require

🍏 DNA

🍏 RNA

🍏 energy 🍏

Break down a complex molecules

🍏 anabolism

🍏 metabolism

🍏 catabolism 🍏

Series of chemical reaction

🍏 metabolism 🍏

🍎 anabolism

🍎 catabolism

The energy currency of cells

🍎 ADP

🍎 ATP 🍎

🍎 AQP

Enzymes have unique shapes

🍎 3d 🍎

Chapter 4

احياء تجميع ٤

ch4

The Fundamental function of cellular respiration ? ?

Releases CO<sub>2</sub>-

Releases O<sub>2</sub>-

Generating ATP ✓-

Generating ADP-

water split to provide ? ?

O<sub>2</sub> only -

O<sub>2</sub> & electrons ✓ -

electrons only -

water -

light reaction converted in the ? ?

Calvin cycle -

thylakoids membrane ✓ -

both -

all is incorrect -

There is \_\_\_\_\_ stage in photosynthesis ? ?

1 -

✓ 2 -

3 -

4 -

Chlorophyll contain of ? ?

chlorophyll A and B ✓ -

chlorophyll A, B and C -

chlorophyll A and C -

not of these -

Photosynthesis and cells respiration are ? ?

Redox ✓ -

reduced -

oxidation -

all ✓✓ -

Cellular respiration release ? ?

light energy -

chemical energy ✓ -

both -

CO<sub>2</sub> is reduced to ? ?

plant -

sugar ✓ -

water -

light -

Water molecules split by \_\_\_\_\_ ? ?

reduced -

oxidation ✓ -

both -

Absorb excessive light that would damage chlorophyll ? ?

carotenoids ✓ -

chlorophyll -

both -

photosynthesis -

Leaves are green because contain ? ?

carotenoids -

chlorophyll ✓ -

both -

Chloroplasts contain ? ?

chlorophyll -

carotenoids -

both 1+2 ✓ -

mesophyll -

Leaf absorbed sunlight, so it reflected \_\_\_\_\_ ? ?

blue light -

red light -

green light ✓ -

sunlight -

Thylakoids are concentrated in a STRUCTURE called \_\_\_\_\_ ? ?

granum ✓ -

stroma -

both 1 +2 -

membrane -

in the leaf in put \_\_\_\_\_ output \_\_\_\_\_ ? ? ?

Co<sub>2</sub>, h<sub>2</sub>o-

H<sub>2</sub>o , co<sub>2</sub>-

Co<sub>2</sub>, o<sub>2</sub> ✓-

O<sub>2</sub>, co<sub>2</sub>-

Chloroplasts are found in the mesophyll, ? ?

Mesophyll is

green pigment -

green tissue ✓ -

leaf -

tree -

Earth's plants produce 160 billion metric TONS of sugar each year through \_\_\_\_\_ ? ?

photosynthesis ✓ -

cellular respiration -

both -

ATP -

Photosynthesis make organic molecules Sugar Glucose out inorganic molecules ? ?

materials like-

Oxygen -

carbon dioxide -

water -

✓ 3+2 -

What of the following are Example for photoAutotrophs ( ? ?

- bacteria -
- bacteria and archae -
- plant -
- plant and algae ✓ -

Food chain level for Heterotrophs is ? ?

- secondary -
- primary -
- primary and secondary -
- secondary and tertiary ✓ -

Photo autotrophs make their own food by using \_\_\_\_\_ ? ?

- energy -
- ATP -
- light ✓ -
- lighting -

Enzymes also requires \_\_\_\_\_ for best results ? ?

- ATP -
- pH ✓ -
- hp -
- PTS -

Human enzymes function best at ? ?

- °36-
- °38-
- ✓ °37-
- °35-

Heterotrophs can produce organic compounds from inorganic ? ?



Sugar in photosynthesis made of ? ?

Carbo -

carbon dioxide only -

carbon dioxide and water ✓ -

water -

Plant need some only ( light energy +  $CO_2$  +  $H_2O$  ) to make ? ?

food -

sugar ✓ -

water -

fungi -

Begin all food chain ? ?

photosynthesis 1 ✓ -

gas -

cell -

all correct -

Mitochondria present in ? ?

animal cell -

plant cell -

both ✓ -

chlorophyll -

Chloroplasts are found in ? ?



mesophyll ✓ -

chlorophyll A -

chlorophyll B -

all -

Mesophyll is ? ?

blue tissue -

red tissue -

yellow tissue -

green tissue ✓ -

Chloroplasts consists of TWO membrane surrounding an inner room called ? ?

granum -

chlorophyll -

Thylakoids -

stroma ✓ -

Plant absorbed \_\_\_\_\_ and reflected green light ? ?

sunlight ✓ -

white light -

red light -

all -

Absorb excessive light that would damage chlorophyll ? ?

mesophyll -

cell membrane -

carotenoids ✓ -

all -

O<sub>2</sub> actually comes from ? ?

CO<sub>2</sub> -

H<sub>2</sub>O ✓ -

both -

Water molecules are split apart by oxidation that mean they \_\_\_\_\_ electron ? ?

gain -

lose ✓ -

both -

CO<sub>2</sub> reduced to ? ?

milk -

water -

protein -

sugar ✓ -

Light reaction light energy is converted to chemical energy and O<sub>2</sub> in \_\_\_\_\_ ? ?

thylakoid membrane ✓ - 1

cell - 2

stroma - 3

granum - 4

Water splits to provide ? ?

O<sub>2</sub> -

O<sub>2</sub> and electron ✓ -

O<sub>2</sub> and protein -

protein -

Produce ATP to use as fuel in ? ?

light reaction -

dark reaction ✓ -

cellular respiration -

The ATP which produce at the first stage uses in ? ?

Dark reaction ✓

Light reaction

Krebs cycle

During the Calvin cycle CO<sub>2</sub> incorporated into organic compounds a process called ? ?

carbon oxidation -

carbon reduced -

carbon fixation ✓ -

all -

Light independent reaction can occur in ? ?

light reaction -

dark reaction -

both ✓ -

Dark reaction happen when ? ?

light is present -

ATP is present ✓ -

sugar is present -

H<sub>2</sub>O is present -

احياء تجميع ٥

ch5

Stage 3 of cellular respiration happen in ? ?

Inner space -

Interspace -

Inner membrane ✓-

Inter membrane-

The scientist who discover the krebs sycle is: ? ?

Tom krebs-

Michael krebs-

Hans krebs ✓-

Adolf krebs-

The outputs of the first stage in cellular respiration are ? ?

ATP+2 pyruvate + 2NADH ✓2-

ATP+2 pyruvate + 2NADPH2-

ATP+2 pyruvate + 2NADH1-

ATP+1pyruvate + 2NADH2-

How many C atom does pyruvate have ? ?

2-

✓3-

6-

None-

In cellular respiration glucose H+ atom converted to... ? ?

H2O-

CO2 ✓-

Glucose -

ATP-

Cellular respiration equation is helpful to show the changes in ..... atom ? ?

O2-

H+ ✓ -

C -

H<sub>2</sub>O -

In what stage the CO<sub>2</sub> is considered as products in the cellular respiration ? ?

Krebs cycle ✓ -

Glycolysis -

Oxidation phosphorylation -

Light independent reaction -

NADH participates in \_\_\_\_\_ ? ?

And NADPH participates in \_\_\_\_\_.

catabolic reaction, anabolic reaction ✓ -

anabolic reaction, catabolic reaction -

Mitochondria generate ATP from ? ?

light -

water -

sugar ✓ -

all -

Cells breakdown glucose to ? ?

CO<sub>2</sub> -

water -

water and O<sub>2</sub> -

CO<sub>2</sub> and water ✓ -

ATP for work is exist as ? ?

light -

sugar -

heat ✓ -

pigment -

Mitochondria contain ? ?

cellular respiration -

respiration enzymes ✓ -

both -

In respiration- breathing supplies \_\_\_\_\_ to our cell and removes \_\_\_\_\_ ? ?

o<sub>2</sub>, 2 -

o<sub>2</sub>, co<sub>2</sub> ✓ -

co<sub>2</sub>, o<sub>2</sub> -

water, sugar -

Your body require a continuous supply of energy just to ? ?

sleep -

stay away -

stay alive ✓ -

play -

Your body require a continuous supply of energy just to ? ?

keep the heart pumping ✓ -

to breath ✓ -

stay alive ✓ -

to maintain body temperature ✓ -

Your brain require a large quantity of glucose that EQUAL ? ?

g 100 -

220 -

g 300 -

g✓ 120 -

The energy units are ? ?

ampere -

glucose -

kilocalories ✓ -

all -

Is a quantity of heat to rises the temperature of .1 kg of water to 1°C ? ?

Kcal ✓ -

lighting -

speed enzymes -

chemical energy -

احياء ٦

ch6

How pairs of chromosomes in human ? ?

46-

✓23-

32-

34-

Wich of the following are necessary for chromosomal organization ? ?

Nucleosome -

Chromosome -

Chromatin ✓-

DNA-

DNA is : ? ?

polynucleotide 1-

polynucleotide ✓ 2-

polynucleotide 3-

DNA replication happen in : ? ?

One direction -

Two directions ✓-

Three directors-

DNA replication proceed happen : ? ?

In several times-

One time -

simultaneously ✓-

The basic unit of chromatin is: ? ?

Chromosome -

Nucleotide-

Nucleosome ✓-

Nucleus-

DNA genetic information carried by ? ?

Chromosome -

Chromatin -

mRna ✓-

The new DNA molecules are similar to the parental DNA molecule : ? ?



%70-

%100-

✓%50-

%90-

- Cells import fluids by
- A. phagocytosis
  - B. pinocytosis ✓
  - C. Exocytosis
  - D. passive transport

ميزات الانتشار - البلاستيدات الخضراء ماهي وظائفها -  
الميكوندريا و البناء الضوئي - واغلب الاسئلة ٦٠٪ من  
البناء الضوئي شابت ٦

بروتين او انزيم او كونزيم ومافكر الخيار : ATP is  
الرابع

النسخ والترجمه لل dna

which of the following organisms is  
photoautotrophic?

- A. Archaea
- B. Fungi
- C. plants and algae ✓
- D. All eukaryotic organisms

جاني انو مصنع  
البروتين هو الرايبوسوم ، وتحصل الخلية على الطاقة من  
الميتوكوندريا وايش العنصر المشترك بين الخلية الحيوانه

جاني انو مصنع البروتين هوا الرايبسوم ، وتحصل الخليه على الطاقه من الميتوكوندريا وايشر العنصر المشترك بين الخليه الحيوانه والنباتيه ، برضو جاني تعرفين لنوعين من الابتلاع الخلوي ، جاني عن تفاعل الظلام ، جاتني اشياء كثيره عن جزئيه البناء الضوئي ، جاني عن الكاروتين التعريف ، برضو جاني انو اشياء في الخليه النباته غير موجوده في الخليه الحيوانيه .

محولات الطاقه ؟ بلاستيدات الخضرا والميتوكوندريا  
مصنع الاغشيه ؟

منتج دورة كالفن ايجاني ثاني اكسيد الكربون والجلاكوز ؟  
حطيت الجلامكوز لاني ثاني اكسيد الكربون مدخل

المواد اللتي تدخل بسهولة عبر الغشاء ولا تحتاج الى  
طاقه؟؟

المرحله التي تحدث قريبا بعد امتصاص البلاستيدة للضوء؟  
المرحلة الأولى.

## Chapter3

**1-Which of the following type of microscope is used to study the internal structure of the cell?**

- a) Light Microscope
- b) Scanning electron microscope
- c) Transmission electron microscopes
- d) None of the above

**2-Which one of the following is found in animal cells?**

- a) Central vacuole
- b) cell wall
- c) Lysosome
- d) Chloroplast

**3-Ribosomes are synthesized in**

- a) Nucleolus
- b) Nucleus
- c) endoplasmic reticulum (ER)
- d) Golgi apparatus

**4-Which one of the following organelles can digest macromolecules such as proteins, and use enzymes to recycle the damaged organelles?**

- a) Lysosome
- b) Ribosome
- c) Nucleus
- d) Mitochondria

**5- Which one of the following are Energy-Converting Organelles?**

- a) Mitochondria& Ribosome
- b) Ribosome& Chloroplasts
- c) Mitochondria & Chloroplasts
- d) Ribosome& Mitochondria

**6- Extracellular matrix (ECM) is made up of**

- a) Cellulose
- b) collagen fibers
- c) fats
- d) Glucose

**7- Which one of the following organelles is not a part of the endo-membrane system?**

- a) Lysosome
- b) Ribosome
- c) Chloroplast
- d) Golgi apparatus

**8-----is one of the Smooth ER functions**

- a) lipids synthesis
- b) Distribution of manufactured proteins
- c) protein synthesis
- d) None of the above

**9-The cells of Pancreas that secrete digestive enzymes have an abundance of....., which receive & pack these enzymes into transport vesicles to release their contents outside the cells.**

- a) Ribosome
- b) Chloroplast
- c) Golgi apparatus
- d) Mitochondria

**10- .....are the sites of protein synthesis.**

- a) Mitochondria
- b) Lysosomes
- c) Ribosomes
- d) Golgi apparatus

## Chapter 4

**1- The Cell membrane phospholipids have a..... head and two .....tails.**

- a) Hydrophilic& hydrophobic
- b) Hydrophobic& hydrophilic
- c) Hydrophilic& hydrophilic
- d) Hydrophobic& hydrophobic

**2- The cell membrane allows some substances such as ..... to cross more easily than others.**

- a) Oxygen
- b) Carbon dioxide
- c) Water
- d) All of the above

**3- Which one of the following mechanisms is used to export bulky molecules, such as proteins or polysaccharides?**

- a) Endocytosis
- b) Exocytosis
- c) Diffusion
- d) Osmosis

**4-..... is a biological process, which uses ATP to pump molecules AGAINST/UP the concentration gradient ( molecules move from a low concentration of solute to high concentration of solute).**

- a) Passive Transport
- b) Active Transport
- c) Osmosis
- d) Endocytosis

**5- ..... is the net movement of molecules from a region of higher concentration to a region of lower concentration.**

- a) Passive transport
- b) Osmosis
- c) Active transport
- d) Pinocytosis

**6- Which statement is CORRECT about osmosis?**

- a) It occurs only across a semi-permeable membrane
- b) Water travels from a solution of lower solute concentration to a solution of higher solute concentration
- c) A+b
- d) None of the above

**7- Which one of the following statement is TRUE about diffusion?**

- a) It involves movement of solvent molecules
- b) It occurs when particles move from a region of lower concentration to a region of higher concentration
- c) It does not require a semi-permeable membrane
- d) All of the above

**8- To block the enzyme action, the enzyme's active site interacts with**

- a) the enzyme's substrate
- b) competitive inhibitors
- c) non-competitive inhibitor
- d) All of them

**9- The study of energy relationships and their transformation is called**

- a) Photosynthesis
- b) Metabolism
- c) Thermodynamics
- d) Oxidation

**10- ATP is composed of adenine (a nitrogenous base), ribose (a five-carbon sugar), and .....**

- a) three phosphate groups
- b) two phosphate groups
- c) one phosphate groups
- d) none of the above

## Chapter 5

1. Which of the following statements is FALSE?

- a. Krebs cycle is also called citric acid cycle
- b. Krebs cycle occurs in the cytoplasm
- c. Krebs cycle produces 2 ATP
- d. Krebs cycle supplies the third of cellular respiration with electrons

2. The energy currency of the cell is \_\_\_\_\_.

- a. Glucose
- b. ATP
- c. Protein
- d. lipid

3. *Glycolysis begins respiration by breaking* \_\_\_\_\_.

- a. ATP
- b. Pyruvate
- c. Glucose
- d. Protein

4. Cellular respiration can produce up to \_\_\_\_\_ ATP molecules for each glucose molecule.

- a. 23
- b. 13
- c. 31
- d. 20

5. Cramps during exercise are caused by:

- a. Alcohol fermentation
- b. Lactic acid fermentation
- c. Glucose
- d. Glycolysis

6. The average adult human needs -----of energy per day.

- a. 2200 kj
- b. 2200 km
- c. 2200 kcal
- d. 2200 kg



**7. Which of the following is necessary for oxidative phosphorylation to occur?**

- a. ATP
- b. Oxygen
- c. Carbon dioxide
- d. Water

**8. During cellular respiration, glycolysis occurs in:**

- a. Cytoplasm
- b. Thylakoids
- c. Chloroplast
- d. mitochondria

**9. Fats are excellent sources of energy because they**

- a. Contain many hydrogen atoms
- b. yield more than twice as much ATP per gram than a gram of carbohydrate
- c. Yield more than twice as much ATP per gram than a gram of protein.
- d. All of the above

**10. Which one of the following are the products of the Krebs cycle?**

- a. ATP
- b. NADH
- c. FADH
- d. All of the above

**11. In eukaryotic cells, the ATP is produced by**

- a. Mitochondria
- b. Nucleus
- c. Cytoplasm
- d. Chloroplast

**12. Single-celled microorganisms that not only can use respiration for energy but can ferment under anaerobic conditions are called :**

- a. Yeasts
- b. molds
- c. Bacteria
- d. Protists

**13. The final electron acceptor in aerobic respiration is:**

- a. CO<sub>2</sub>
- b. O<sub>2</sub>
- c. NAD<sup>+</sup>
- d. ATP

**14. Which one of the following processes produces the most ATP?**

- a. Glycolysis
- b. Oxidative phosphorylation
- c. Fermentation
- d. Krebs cycle

**15. ATP can be generated from \_\_\_\_\_.**

- a. Lipids
- b. Carbohydrates
- c. Proteins
- d. All of them

**16. The role of cellular respiration is**

- a. Breaking down glucose to make ATP
- b. Forming glucose from carbon dioxide and water
- c. Forming water from glucose
- d. consuming ATP to form oxygen

## Chapter 6

1. The first stage of photosynthesis takes place in the.....

- a. Thylakoids
- b. Grana
- c. Stomata
- d. Stroma

2. Which of the following is not required during photosynthesis

- a. Water
- b. Carbon dioxide
- c. Oxygen
- d. Light

3. During what stage of photosynthesis is O<sub>2</sub> produced?

- a. Carbon fixation
- b. Light – dependent reactions
- c. Light – independent reactions
- d. Calvin cycle

4. In the process photosynthesis

- a. Carbon dioxide and water are oxidised
- b. Carbon dioxide is reduced and water is oxidized
- c. Carbon dioxide and water are reduced
- d. Carbon dioxide is oxidized and water is reduced

5. Both carotenoids and chlorophyll are \_\_\_\_\_.

- a. Coenzymes
- b. Organelles
- c. Pigments
- d. Cofactors

6. ATP is .....

- a. required for the Calvin cycle
- b. a product of the Calvin cycle
- c. required for the light reactions
- d. not required during photosynthesis

7. In the light reactions, solar energy is converted to chemical energy stored in both ATP and \_\_\_\_\_.

- a. AMP
- b. ADP
- c. NADPH
- d. NADH

8. The Calvin cycle occurs in the \_\_\_\_\_ of the chloroplast.

- a. Stroma
- b. Stoma
- c. Thylakoid
- d. The inner mitochondrial membrane

10. In the leaf, chloroplasts are concentrated in the \_\_\_\_\_.

- a. Epidermis
- b. Veins
- c. Mesophyll
- d. Thylakoids

11. In the leaf, the  $\text{CO}_2$  enters and the oxygen released through \_\_\_\_\_

- a. Stroma
- b. Stoma
- c. Granum
- d. Epidermis

12. Plants are \_\_\_\_\_.

- a. Autotrophs
- b. Prototrophs
- c. Heterotrophs
- d. Auxotrophs

13. The oxygen released during photosynthesis comes from:

- a. Carbon dioxide
- b. Carbon dioxide and water
- c. Water
- d. Glucose

14. What energy-rich organic compound is produced as a result of the Calvin cycle?

- a. ATP
- b. Sugar**
- c. NADPH
- d. O<sub>2</sub>

15. The chloroplast is the site of photosynthesis in a plant cell. It is enclosed by \_\_\_\_\_ membranes.

- a. One
- b. Two**
- c. Three
- d. Four

16- In plant cell, leaves are

- a. Responsible for storage
- b. Responsible for photosynthesis**
- c. Responsible for support
- d. None of the above

## Chapter 9

### 1-What is the function of DNA?

- a) to assist in cell division
- b) to control the heredity
- c) to help in the synthesis of protein
- d) All of them

### 2- Nucleic acids are composed of

- a) Nucleotides
- b) Only Cytosine
- c) Only ribose
- d) None of them

### 3- Which one of the following base is found in RNA but not DNA?

- a) Cytosine
- b) Adenine
- c) Uracil
- d) Thymine

### 4- Each nucleotide in a DNA molecule consists of -----

- a) a phosphate group, a hexose sugar and a nitrogenous base.
- b) a sulfanyl group, a pentose sugar, and a nitrogenous base.
- c) a phosphate group, a pentose sugar and a nitrogenous base.
- d) a phosphate group, glucose , and a nitrogenous base.

### 5- Chromatin is a complex of

- a) DNA and protein
- b) RNA with protein
- c) Only DNA
- d) DNA and fat

**6- What is the process called when messenger RNA is synthesized to match a certain gene?**

- a) Replication
- b) Translation
- c) Transcription
- d) None of the above

**7- The Product of translation is**

- a) Glucose
- b) mRNA
- c) protein
- d) lipids

## Chapter 10

**1- Red blood cells are type of.....**

- a) Nervous tissue
- b) Connective tissue**
- c) Muscle tissue
- d) Epithelial tissue

**2- Ligaments connect**

- a) Ends of two bones**
- b) Muscles to bone
- c) Epithelia to underlying tissues
- d) None of them

**3- Which of the following has a single layer but appears stratified?**

- a) Stratified squamous epithelium
- b) Pseudostratified columnar epithelium**
- c) Simple squamous epithelium
- d) Simple cuboidal epithelium

**4-Which of the following tissue does cover the outside of the body and line organs and cavities within the body?**

- a) Muscle tissue
- b) Epithelial tissue**
- c) Nervous tissue
- d) Connective tissue

**5-Columnar epithelium is found in**

- a) Kidney
- b) Liver
- c) Capillaries
- d) Small intestine**



**6-Cardiac muscle is**

- a) Involuntary
- b) Voluntary
- c) A+b
- d) None of them

**7-What type of muscle is responsible for contractions of the stomach and small intestine?**

- a) Skeletal muscle
- b) Smooth muscle
- c) Cardiac muscle
- d) All of them

**8-Which of the following connective tissue is responsible for oxygen and nutrients transportation?**

- a) Bones
- b) Adipose
- c) Blood
- d) Cartilage

# Chapter 11

1 The largest organ that has the function of cleaning the blood is called the \_\_\_\_\_.

- a. Heart
- b. Liver
- c. Lungs
- d. Pancreas

2 - \_\_\_\_\_ helps regulate the glucose level in the blood stream

- a. Heart
- b. Liver
- c. Lungs
- d. Pancreas

3- The \_\_\_\_\_ is located near the junction of small intestine and colon.

- a. Gall bladder
- b. Pancreas
- c. Appendix
- d. Spleen

4- \_\_\_\_\_ emulsifies fat before they get attacked by pancreatic enzymes.

- a. Insulin
- b. Bile
- c. Adrenaline
- d. Gastrin

5- Tiny finger like projections in the small intestine.

- a. Villi
- b. Alveoli
- c. Pilli
- d. Cilia

6- \_\_\_\_\_ is a muscular hollow located between the esophagus and the small intestine.

- a. Gall bladder
- b. Liver
- c. Stomach
- d. Small intestine

**7- Small glands that begin digestion of starch.**

- a. Adrenal
- b. Thyroid
- c. Pineal
- d. Salivary

**8- An enzyme that begins the chemical digestion of proteins.**

- a. Pepsin
- b. Lipase
- c. Amylase
- d. Lactase

**9- Stomach cell wall secrete hydrogen & chloride ions, which combine to make \_\_\_\_\_.**

- a. Nitric acid
- b. Citric acid
- c. Hydrochloric acid
- d. Acetic acid

**10- A semi-liquid mass of partially digested food in the stomach**

- a. Bile
- b. Chyme
- c. Feces
- d. Bolus

**11- \_\_\_\_\_ is a muscular tube connects between pharynx and stomach.**

- a. Small intestine
- b. Trachea
- c. Larynx
- d. Esophagus

**12- Nutrient molecules enter the body cells by \_\_\_\_\_.**

- a. Ingestion
- b. Digestion
- c. Absorption
- d. Elimination

**13- Which of the following are meat-eaters?**

- a. Herbivores
- b. Omnivores
- c. Producers
- d. Carnivores

**14- \_\_\_\_\_ contributes to blocked blood vessels and high blood pressure.**

- a. HDL
- b. LDL
- c. DHL
- d. DSL

**15- Animals cannot produce \_\_\_\_\_ of the 20 amino acids named essential amino acids.**

- a. Six
- b. Eight
- c. Ten
- d. Twelve

**16- This organ produces a digestive juice that contains a wide array of enzymes to break down carbohydrate and protein in food.**

- a. Liver
- b. stomach
- c. gall bladder
- d. Pancreas

## Chapter 12

- 1. All gases exchanged between air and blood in mammals occurs across the walls of the \_\_\_\_\_.**
  - a. Bronchi
  - b. Bronchioles
  - c. Alveoli
  - d. Trachea
- 2. The most common gas found in air is \_\_\_\_\_.**
  - a. Oxygen
  - b. Hydrogen
  - c. Carbon dioxide
  - d. Nitrogen
- 3. Which of the following animals have tracheal system that provides direct exchange between the air and body cells?**
  - a. Reptiles
  - b. Amphibians
  - c. Insects
  - d. Fish
- 4. The majority of carbon dioxide is transported in the blood :**
  - a. attached to hemoglobin
  - b. bound to oxygen
  - c. as bicarbonate ions in the red blood cells
  - d. dissolved in the plasma
- 5. Mollusks have \_\_\_\_\_.**
  - a. no specialized respiratory organ
  - b. lungs
  - c. gills
  - d. tracheal system
- 6. The exchange of gases between interstitial fluid and the blood occurs in the:**
  - a. Arteries
  - b. Capillaries
  - c. Veins
  - d. Arterioles

**7. The urge to inhale results from:**

- a. Rising  $\text{PCO}_2$
- b. Rising  $\text{PO}_2$
- c. Falling  $\text{PCO}_2$
- d. Falling  $\text{PO}_2$

**8. During exhalation in humans, air moves from the bronchus into the:**

- a. Bronchioles
- b. Alveoli
- c. Pharynx
- d. Trachea

**9. Diffusion occurs when molecules move from an area of**

- a. High concentration to an area of low concentration.
- b. High concentration to an area of high concentration
- c. Low concentration to an area of low concentration
- d. Low concentration to an area of High concentration

**10. During exhalation the chest contracts and the diaphragm moves**

- a. downward
- b. upward
- c. to the left
- d. to the right

**11. The heart right side pumps \_\_\_\_\_ blood to the lungs.**

- a. nitrogen-poor
- b. nitrogen-rich
- c. oxygen-rich
- d. oxygen-poor

**12. Gases in the tissues have \_\_\_\_\_ than in the blood**

- a. more  $\text{CO}_2$  and less  $\text{O}_2$
- b. more  $\text{O}_2$  and less  $\text{CO}_2$
- c. more  $\text{N}_2$  and less  $\text{CO}_2$
- d. more  $\text{O}_2$  and less  $\text{N}_2$

**13. Hemoglobin in red blood cells carries up to 4 O<sub>2</sub> molecules.**

- a. One
- b. Two
- c. Three
- d. Four

**14. In the body tissues, blood**

- a. drops off CO<sub>2</sub> and picks up O<sub>2</sub>
- b. drops off N<sub>2</sub> and picks up CO<sub>2</sub>
- c. drops off O<sub>2</sub> and picks up CO<sub>2</sub>
- d. drops off O<sub>2</sub> and picks up N<sub>2</sub>

**15. \_\_\_\_\_ is an iron compound which constitutes the pigment portion of the hemoglobin molecule.**

- a. Hemolymph
- b. Heme
- c. Hematocrit
- d. Hemorrhoid