**Question of chapter : Ch. 4: Cells**

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**لا تنسوني من دعواتكم لي بالتوفيق و النجاح**

1. Cell Theory states that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

all cells come from other pre-existing cells by cell division
All organisms are composed of only one cell
all cells come from tissues
none of the above

1. In light microscope \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

maximum magnification is up to 1,000 times
All organisms are composed of only one cell
electrons are used to view the image
none of the above

1. Organisms made of many cells \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

animals cells is an example
is Prokaryotic
like bacteria
none of the above

1. Prokaryotic cells \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Genetic material is not surrounded by a nuclear membrane
Possess organelles surrounded by membranes
plants cells is an example
fungi cells is an example

1. Organelles \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are the basic unit of life
are found in cell membrane
Found in the cytoplasm
are made of cells

1. Animal cells comparing with plant cells \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Relatively smaller in size
Relatively larger in size
contain Cell wall
all of the above

1. The Phospholipids tails \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are made of fatty acids
point inward toward each other
are hydrophilic
a and b

1. Cytoplasm \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are enclosed by cell membrane
are enclosed by nuclear membrane
contain phosphate
none of the above

1. Nucleus \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

contain nucleoplasm
contain cytoplasm
contain lysomes
a and b

1. CHROMOSOMES \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

carry genes
are made of DNA only
are made of protein
a and b

1. Chromatin \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

appear in non-dividing cells
are made of DNA only
are made of protein
all of the above

1. Genes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are a piece of Chromatin
are a sequence of nucleotides
code for different carbohydrates
a and b

1. Nuclear Envelope \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

is Double membrane
is connected to the rough ER
is not connected to other organelles
a and b

1. Ribosomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are protein factories for cell
are lipid factories for cell
are made of one unit
none of the above

1. Endoplasmic Reticulum (ER) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

functions in Synthesis of cell products
functions in cellullar respiration
functions in cell breakdown
a and b

1. Smooth ER \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

lacks ribosomes
has ribosomes on its surface
modifies proteins
none of the above

1. The Golgi apparatus \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

functions in conjunction with the ER
receive proteins made by ER
functions in conjunction with the nucleus
a and b

1. Lysosomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are a membranous sac
contain synthetic enzymes
enzymes are produced by the Golgi apparatus and processed by ER
a and b

1. Vacuoles \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are membranous sacs
make proteins destined for secretion outside the cell
are found in the side of the plant cells
are digestive compartments

1. The endomembrane system includes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Vacuoles
Mitochondria
Ribosomes
a and b

1. Mitochondria \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are the powerhouse of the cell
are the house of digestive enzymes
are found in bacteria
a and b

1. Chloroplasts \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Contain pigments for Photosynthesis
are found in animal cells
have no DNA
a and b

1. endosymbiosis hypothesis proposes that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

mitochondria were formerly small prokaryotes that began living within larger cells
chloroplasts were formerly small prokaryotes that began living within larger cells
chloroplasts were formerly small prokaryotes that began living in bacteria
a and b

1. Cytoskeleton \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

contains Microfilaments
contains Microtubules
is a network of DNA fibers
a and b

1. Intermediate filament \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

reinforce cell shape
is the smallest Cytoskeleton fiber
act as a track for motor protein
none of the above

1. flagella \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are composed of microfilament
are composed of nine microtubule triplets
anchored on a basal body
are shorter than Cilia

1. basalBody \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

is composed of nine microtubule triplets arranged in a ring
is composed of three kinds of fibers
contains Microfilaments
none of the above

1. Extracellular matrix \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

is made of intermediate filaments
integrin binds collagen to the connecting glycoprotein
functions in movement
collagen span the plasma membrane

1. Tight junctions \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are channels between cells
allow molecules to flow between cells cytoplasm
similar to plasmodesmata in plants
none of the above

1. plasmodesmata \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are similar to Tight junctions in animal tissues cells
are found in animal tissues cells
are found in plant tissues cells
are similar to Anchoring junctions in animal tissues cells

1. Cell Theory states that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

all cells come from other pre-existing cells by cell division
All organisms are composed of only one cell
all cells come from tissues
a and b

1. In electrons microscope \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

maximum magnification is up to 100,000 times
electrons are used to view the image
maximum magnification is up to 1,000 times
a and b

1. Organisms made of many cells \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

is called Unicellular
is Prokaryotic
like bacteria
none of the above

1. Prokaryotic cells \_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Simple and small
No membrane-bounded organelles
Possess organelles surrounded by membranes
a and b

1. Organelles \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are Microscopic
May or may not be membrane-bound
are made of cells
a and b

1. Animal cells comparing with plant cells \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Relatively larger in size
contain achloroplasts
carry photosynthesis
Relatively smaller in size

1. The plasma membrane \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are mosaic
are made of protein bilayers
are rigid (not fluid)
none of the above

1. Cytoplasm \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are enclosed by cell membrane
contain organelles
are enclosed by nuclear membrane
a and b

1. Nucleus \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

contain chromosomes
are bounded by single membrane nuclear envelope
contain lysomes
none of the above

1. CHROMOSOMES \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

carry genes
are made of DNA only
appear in non-dividing cells
none of the above

1. Chromatin \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are made of protein
are decondensed chromosome
are made of RNA and protein
appear in dividing cells

1. Genes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are a piece of Chromatin
are a sequence of nucleotides
are a sequence of amino acids
a and b

1. Nuclear Envelope \_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

is Double membrane
is continous and contains no pores
is not connected to other organelles
none of the above

1. Ribosomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are protein factories for cell
are made of large and small subunits
are made of Proteins and DNA
a and b

1. Endoplasmic Reticulum (ER) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

functions in Synthesis of cell products
functions in cellullar Transport
functions in cellullar respiration
a and b

1. Smooth ER \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

has ribosomes on its surface
makes proteins destined for secretion outside the cell
transported vesicles to other parts of the endomembrane system
none of the above

1. The Golgi apparatus \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are Stacks of flattened sacs
functions in conjunction with the nucleus
are involved in lipid metabolism
a and b

1. Lysosomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are a membranous sac
enzymes are free in the cytoplasm
enzymes are produced by the Golgi apparatus and processed by ER
a and b

1. Vacuoles \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

have hydrolytic functions
are attached to plasma membrane
are found in the side of the plant cells
all of the above

1. The endomembrane system includes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Golgi Apparatus
Plasma membrane
Mitochondria
a and b

1. Mitochondria \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

have folded inner membrane
outer membrane is smooth
inner membrane is smooth
a and b

1. Chloroplasts \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

use energy from sunlight to make glucose
harvest food energy
site of cellular respiration
a and b

1. endosymbiosis hypothesis proposes that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

mitochondria were formerly small prokaryotes that began living within larger cells
chloroplasts were formerly small prokaryotes that began living within larger cells
chloroplasts were formerly small prokaryotes that began living in bacteria
a and b

1. Cytoskeleton \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

helps move organelles inside the cell
is composed of two kinds of fibers
prevents organelles movement inside the cell
all of the above

1. Intermediate filament \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

reinforce cell shape
is the smallest Cytoskeleton fiber
is called tubulin filament
a and b

1. flagella \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are important in locomotion
are composed of microfilament
are composed of nine microtubule doublet
a and b

1. basalBody \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

contains Microfilaments
contains Intermediate filaments
is composed of nine microtubule doublet arranged in a ring
none of the above

1. Extracellular matrix \_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

functions in support
is composed of connecting proteins
integrin binds collagen to the connecting glycoprotein
a and b

1. Anchoring junctions \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are found in plant tissues cells
fasten cells together into sheets
allow molecules to flow between cells cytoplasm
similar to plasmodesmata in plants

1. plasmodesmata \_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

allow communication between plant cells
are found in animal tissues cells
allow communication between animal cells
a and b

1. Cell Theory states that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

All organisms are composed of one or more cells
All organisms are composed of only one cell
all cells come from tissues
a and b

1. In light microscope \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Light is used to view the image
All organisms are composed of only one cell
electrons are used to view the image
none of the above

1. Organisms made of many cells \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

plants cells is an example
is Prokaryotic
like bacteria
all of the above

1. Eukaryotic cells \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

plants cells is an example
No membrane-bounded organelles
Bacteria cell is an example
all of the above

1. Organelles \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are Microscopic
are made of cells
are found in cell membrane
a and b

1. Plant cells comparing with Animal cells \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

contain Cell wall
contain achloroplasts
No cell wall
a and b

1. The plasma membrane \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are made of phospholipids
are permeable
are made of protein bilayers
are semipermeable

1. Cytoplasm \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

contain nucleolus
are solid
contain phosphate
none of the above

1. Nucleus \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

control the normal activities of the cell
are bounded by double membrane nuclear envelope
contain cytoplasm
a and b

1. CHROMOSOMES \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are made of DNA and protein
are made of DNA only
appear in non-dividing cells
a and b

1. Chromatin \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

carry genes
are made of RNA and protein
are made of DNA only
a and b

1. Genes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are a piece of chromosome
are a piece of protein
are a sequence of amino acids
a and b

1. Nuclear Envelope \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

is Double membrane
contains nuclear pores
is not connected to other organelles
a and b

1. Ribosomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are synthesized in the nucleolus
are made of Proteins and DNA
make proteins for external use only
all of the above

1. Endoplasmic Reticulum (ER) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

functions in cellullar Transport
functions in cellullar respiration
functions in cell breakdown
none of the above

1. Rough ER \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

is involved in lipid synthesis
is involved in Steroids synthesis
is involved in destruction of toxic substances
none of the above

1. The Golgi apparatus \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

modify proteins made by ER
functions in conjunction with the nucleus
receive proteins made by smooth ER
all of the above

1. Lysosomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

contain digestive enzymes
are digestive compartments
are attached to plasma membrane
a and b

1. Vacuoles \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are digestive compartments
are attached to plasma membrane
are found in the side of the plant cells
none of the above

1. The endomembrane system includes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Lysosomes
Mitochondria
Ribosomes
a and b

1. Mitochondria \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are found in plant cells
have no DNA
outer membrane has cristae
all of the above

1. Chloroplasts \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

have Thylakoids
are found in bacterial cells
stacks of thylakoids is called stroma
none of the above

1. endosymbiosis hypothesis proposes that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

chloroplasts were formerly small prokaryotes that began living within larger cells
chloroplasts were formerly small euokaryotes that began living within larger cells
mitochondria were formerly small euokaryotes that began living within larger cells
all of the above

1. Cytoskeleton \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

is a network of protein fibers
prevents organelles movement inside the cell
is made of vertebrates
all of the above

1. Intermediate filament \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

reinforce cell shape
is made of actain protein
is the largest Cytoskeleton fiber
a and b

1. flagella \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are important in locomotion
are composed of nine microtubule doublet
are shorter than Cilia
none of the above

1. basalBody \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

is found in the cytoplasm
is site for Cilia and flagella anchoring
is composed of nine microtubule doublet arranged in a ring
a and b

1. Extracellular matrix \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

functions in movement
the connecting glycoprotein binds collagen to integrin
Integrins span the plasma membrane
all of the above

1. Tight junctions \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are found in animal tissues cells
are channels between cells
similar to plasmodesmata in plants
all of the above

1. plasmodesmata \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

allow molecules to flow between cells cytoplasm
are found in animal tissues cells
allow communication between animal cells
a and b

1. Cell Theory states that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

all cells come from other pre-existing cells by cell division
All organisms are composed of only one cell
all cells come from tissues
a and b

1. In light microscope \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

All organisms are composed of only one cell
maximum magnification is up to 100,000 times
electrons are used to view the image
maximum magnification is up to 1,000 times

1. Organisms made of one cell \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

is called Unicellular
is called Multicellular
is bicellular
none of the above

1. Prokaryotic cells \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Simple and small
Genetic material is surrounded by a nuclear membrane
Possess organelles surrounded by membranes
a and b

1. Organelles \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are Microscopic
are made of cells
are the basic unit of life
all of the above

1. Plant cells comparing with Animal cells \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

do not contain Lysosomes and centrioles
contains Lysosomes and centrioles
No cell wall
all of the above

1. The plasma membrane \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

controls the movement of molecules into and out of the cell
are selectively permeable
are rigid (not fluid)
a and b

1. Cytoplasm \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

contain nucleolus
are solid
are enclosed by nuclear membrane
all of the above

1. Nucleus \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

control the normal activities of the cell
contain chromosomes
contain cytoplasm
a and b

1. CHROMOSOMES \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

carry genes
are made of DNA only
appear in non-dividing cells
a and b

1. Chromatin \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

appear in non-dividing cells
are made of DNA only
appear in dividing cells
none of the above

1. Genes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

control cell characteristics
code for different proteins
are a piece of chromosome
all of the above

1. Nuclear Envelope \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

is Double membrane
is continous and contains no pores
is not connected to other organelles
a and b

1. Ribosomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are made of Proteins and rRNA
are made of Proteins and DNA
are made of one unit
all of the above

1. Endoplasmic Reticulum (ER) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

functions in Synthesis of cell products
functions in cellullar respiration
functions in cell breakdown
a and b

1. Rough ER \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

has ribosomes on its surface
lacks ribosomes
is involved in destruction of toxic substances
is involved in lipid synthesis

1. The Golgi apparatus \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

functions in conjunction with the ER
modify proteins made by ER
functions in conjunction with the nucleus
a and b

1. Lysosomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

contain digestive enzymes
are attached to plasma membrane
contain synthetic enzymes
a and b

1. Vacuoles \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

have hydrolytic functions
are attached to plasma membrane
contain DNA
a and b

1. The endomembrane system includes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Golgi Apparatus
Plasma membrane
Ribosomes
a and b

1. Mitochondria \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

generate cellular energy
outer membrane is folded
inner membrane is smooth
a and b

1. Chloroplasts \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are found in bacterial cells
stacks of thylakoids is called stroma
have no DNA
none of the above

1. endosymbiosis hypothesis proposes that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

mitochondria were formerly small prokaryotes that began living within larger cells
chloroplasts were formerly small prokaryotes that began living within larger cells
chloroplasts were formerly small euokaryotes that began living within larger cells
a and b

1. Cytoskeleton \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

is a network of DNA fibers
contains Microtubules
is composed of two kinds of fibers
is made of vertebrates

1. Intermediate filament \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

reinforce cell shape
act as a track for motor protein
is called tubulin filament
a and b

1. Cilia \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

are composed of microfilament
are composed of nine microtubule doublet
are important in locomotion
have 9 triplets + 2 in the center pattern of microtubules

1. basalBody \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

is site for Cilia and flagella anchoring
is composed of three kinds of fibers
have 9 + 2 pattern of microtubules
a and b

1. Extracellular matrix \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

is composed of integrins
integrin binds collagen to the connecting glycoprotein
is made of microtubules
a and b

1. Gap junctions \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

allow molecules to flow between cells cytoplasm
fasten cells together into sheets
fasten cells together into sheets
none of the above

1. plasmodesmata \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

allow communication between plant cells
are similar to Gap junctions in animal tissues cells
are found in animal tissues cells
a and b