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Biology

Sara is a chemistry who is carrying out an experiment in the

laboratory. The product formed at the end of the

reaction is Glycogen and water

or Glucose and oxygen

or amino

acids

The membrane foldings which are formed by inner membrane of mitochondria are called:

or Ribosomes

or Matrix

or Porin

or Cristae

The main neurotransmitter for synapses is ----- which lie outside the central nervous system.

or Acetylcholine

or Acetaldehyde

or Choline

☐ Phosphatidylcholine

The structure present in a present eukaryotic cell but absent in prokaryotic cells is

e DNA

☐ Ribosomes

☐ Cell surface membrane

animals

☐ With the release of large nA atts ~4 Small amount of heat loss can take place

o With the water vapours, a great amount of heat loss can take place

will be high.

a with . release of even large amount of water vapours

Sit anelle is responsible for cell secretion?

Chloroplast

e Golgi body

e Ribosomes

e Mitochondrion

Now a days every new born gets regular shots of vaccine for polio. it contains ----- for polio to make

a

child immune against this disease.

e Antibiotics

e Antibodies

e Antigens

e Antisera

Change in frequency of alleles that occurs by chance is called as:

e Genetic drift

e Mutation

☐ Migration

e Natural selection

Lipids contain double amount of energy as compare to carbohydrates due to the presence of: which

✓ Nucleus A contains

If water has high latent heat of vapourisation, it helps in plants and

✓ Higher proportion of C-C and C-H-bond

tion of C-H bonds

The stages of mitosis in which sister chromatids move towards opposite poles:

✓ Anaphase

✓ Metaphase

✓ Prophase

✓ Telophase

Starch is present in tubers, fruits and grains but absent in animal cells instead animals have a substance

stored in liver and muscles known as:

✓ galactose

✓ glucagon

✓ glycogen

✓ glucose

Thin filament of muscles contain ---- chains of actin molecules,

✓ Two

✓ One

✓ Three

✓ Four A\ CO

The reflex action is the phenomena which is at

° com

© receptors, effect

Brain. is ml ish

. new urons, a

Com ntary DNA molecules is:

DNA from mRNA

An artificial DNA

e Single stranded DNA

¢ Asmall segment of chromosomal DNA

What is common in both competitive and non- competitive inhibition?

¢ Feedback inhibition

¢ ? Irreversible inhibition

¢ Non-Reversible inhibition

e Reversible inhibition

Meselson and Stahl transferred few bacteria grown in N° medium to N'° medium for replicating their DNA. What would be the result after two rounds of replication?

100% heavy duplex

e 100% hybird duplex

50% hybird duplex and 50% heavy duplex

50% hybird duplex and 50% light duplex

In an action potential, the permeability of sodiy um io. ee u Ka Go

¢ ? Repolarization ou

ic |

iui!

° eter reli cae

0 Ae fat gen

© Sodium ions a

° nee Ne i

e Teac ae snesterat enzyme

In wit | u ih enes are not assorted independently during meiosis in a chromosomes?

When genes are linked and their loci are close to each other.

Ø When some genes have mutated on the chromosomes

e When there too many genes on a chromosomes

Ø When genes are not linked and their loci are far apart

During spermatogenesis, the ----, which are haploid cells eventually mature into spermatozoa sperms:

Ø Spermatogonia

e Primary spermatocytes

e Spermatids

e Secondary spermatocytes

Site of protein synthesis is:

e ?Lysosomes

Ø Ribosomes

° Golgi body

e thet

. The photosynthetic pigments of plants are arrange wl in Vion e reaction

centers of these clusters consist of mo

ule)

° ee

: re

o saa S

agate nd Novdenaie are two types ----- of used in our nervous system.

e Enzymes

e Channel and carrier proteins in the cell membrane of Neurone

e Neurotransmitters

Ø Hormones

The types of energy reduced by the enzymes for biological reaction to occur is called the

☐ ? Light energy

e Heat energy

e Active energy

e Activation energy

The prokaryotes possess small ribosomes of size:

e 70S

e 65S

e 60S

e 40S

Homozygous means: both

☐ Alleles is an organism's

☐ Two different alleles of a gene (\)

© Having two alleles

Having two identical alleles ?

Most proteins are made up of

wee Ni Ne eter > urinary bladder > urethra

r

urinary bladder = kidney ? ureter > urethra

e Kidney > urethra ~ urinary bladder > ureter

e Kidney > ureter > urethra > urinary bladder >

Most proteins are made up of:

© 10 types of amino acids

e 20 types of amino acids

☐ 170 types of amino acids

e 16 types of amino acids

In genetics, the term locus refers to the ----- of the gene on the chromosome,

e Position



® Frequency

© Copy

e Inversion

Glycolysis takes place in the ---- of cell

e Nucleus a cout

¢ Mitochondria iW

¢ Golgi complex io

© Cytoplasm QO (ran

A disease ne by gra the thin walls of alveoli is --.

t) sla

e Prions

if a carrier haemophilic female ( $X^H X^h$ ) is married to a haemophilic male ( $X^h Y$ ). What will be the ratio of

presence of haemophilic in the children

¢ 100% all females and males will be haemophilic

e Females have 50% chance of getting haemophilic and males will be 100% haemophilic

¢ carrier female 25% haemophilic female 25%, 25% normal male and 25% haemophilic male

¢ females and males both have 50% chances of getting haemophilic

Substances responsible for increasing the set point of the hypothalamus are called:

e Androgens

© Pyrogens

e Pepsin

© Prions

DNA polymerase enzyme for PCR is isolated from bacteria thermos aq areol

e ? It can work at high speed fe)

e It can withstand high denaturation WE

° It can be reused a Ase

It can be used

Which of the following is involved in cyclic photophosphorylation?

none

@ = PSII

© Silane

Which hormonal pair would maintain the endometrium of

embryo?

e ? Luteinising hormone

e Estrogen

° ANF is a hormone

ing hormone and follicle stimulating hormone

The thick filaments in a myofibril of muscles are made of -----

¢ Myoglobin

e Myosin

e Actin

e Haemoglobin

Messenger RNA after transcription? iW Aycoll

© GGG AUCUC al

e GGGATCTC (

¢ GGG AUCUC

° 6666 en

In chloroplasts, ATP synthase moves from -----,

e ~ Stroma to lumen

¢ ? Cytoplasm to Stroma

¢ lumen to Stroma

¢ Stroma to cytoplasm

ou subunits 6 \$ an in  $\rightarrow$  CaN

o

e

ø

How many molecules of ATP would be utilized for photophosphorylation of one glucose molecule during glycolysis?

e 3

e 2

eo 4

e 1

The function of calcium ions in muscle contraction is to:

ø Polarize visible light

ø Aid in the transmission of nerve impulse

ø ? Bind to troponin molecule and cause them to move

e Bind to tropomyosin molecule and cause them to form cross bridges

According to the theory of natural selection organisms produce:

ø ? Offspring according to the resources available

ø ? Less Offspring than supported cori

© Offspring to create resources fe)

ø More Offspring than supported ANI

A person married to meee na aoe s-f6F sickle cell anemia, Among their four kids

what will be NT \

e An

we

© 25%

The major function of basophils is to:

e Destroy small particles by phagocytosis

e Release heparin to prevent blood clotting

ø Transport oxygen

e ? Inactivate inflammation producing substances

Which enzymes is administered to the patients to severe combined immunodeficiency disease (SCID)?

e Adenosine deaminase (ADA)

ø Pancreatic enzyme

° B-galactosidase

e f-lactamase

What is name of part C?

ø Collecting tubule

e Proximal tubule ar cout

ø Distal tubule Ny

© Loope of henle qo

Inside ovary primary ori NG élotic division forming two haploid cells, secondary oocytes ?

an cell

e Polar body

Transgenic mice have been used to produce

e Extra hair

e Agrowth hormone

ø Protein rich milk

ø Protein rich meat

In plant which sugar is transported from source to sink through sieve tubes?

ø Glucose

e Sucrose

e Fructose

e Starch

Which of the following hormone stimulates the ovulation from follicle into oviduct?

e Estrogen

e Progesterone

o Luteinizing hormone ei cot

ø Follicle stimulating hormone iW

Which one is an crane of-nucleotide au

e Adenosine ia

e NAD

st Ws i

Capsid the protective coat of a virus is made up of subunits known as capsomeres,

e DNA

e RNA

e Protein

° Lipid

If stimulation is above ---- impulses travel to the brain along the sensory neuron.

ø Recovery period

ø ? Resting potential

ø Action potential

e Threshold

The covalent bond between two monosaccharides to form a disaccharide is called a:

e Hydroxyl bond

ø Hydrogen bond

e = Carboxyl bond

° Glycosidic bond

The structure of a fibrous protein comprises of:po mee s\in\t Gs

e Custer

@ Spherical or curlé ?FA

° Longs INP rfl

we Fain

ro ncludes the arrangement of organisms into different taxa,

Species, genus family, order class, phylum

ø Order, family, class, phylum, kingdom

ø Species, genus family, class, order, phylum

© Species, genus, order, family, class, phylum

The plasmid pBR322 has antibiotic resistance genes for:

e Streptomycin

ø Ampicillin and tetracycline

e Tetracycline and Doxycycline

© Doxycycline and Ampicillin

Which of the following blood vessels contain semilunar valves?

e Arteries

e Capillaries

° Veins

e Arterioles

The main nitrogenous excretory product of human is: or EO |

e Ammonia iW

ø Urea al

e Ammonium magi

° Uric Acid

If 15 wl Nivea ved under light microscope using 5X eyepiece and 10X objective its image

size aid

e aie pm

© 500 ym

e 504m

e© 250 pm

A person got an infection, he became ill but then he survived describe his developed immunity?

e Active immunity

ø Artificially induce active immunity

@ Passive immunity

e Naturally induce active immunity

The nitrogen containing bases in nucleotide are two types

e Adenine, Guanine and cytosine

e Guanine and cytosine

e Adenine and Guanine

ø Adenine and thymine

The process in which a complementary copy of the code from a Mitochondrion is made in the nucleus:

) Transcription

° Translation

e Proof reading

Which cellular organelle contains circular DNA similar to those found in bacteria?

o Lysosome

e Nucleus

e Chloroplast

o Ribosome

Large lymph vessels ultimately from large lymph duct which drains into:

e Carotid and Aorta

ø Subclavian Artery

e Vena cava and Aorta

e Subclavian Vein

Xerophytes have small thick leaves to:

- e Help the float on water
- e Limit water loss by increasing the surface area
- e Help them survive in salty environment
- e ? Limit water loss reducing the surface area

Passive processes for the movement of molecules across iW surface(Temb we Ou

- e Osmosis and phagocytosis
- e Pinocytosis and as diff us)9 sn
- ° facilitated ah al
- ° era id

During the.G

ane number is duplicate

The Chromosome are left with only one chromatid

- o Energy is stored for Chromosome movement and mitotic specific proteins are produced
- © Specific enzymes are synthesized and DNA base units are accumulated

During inspiration the space inside the chest cavity is increased due to:

- e The relaxation of the muscles of the diaphragm
- e Relaxation of the external intercostal muscles
- © Increase pressure
- e The contraction of the muscles of the diaphragm

Which is an example of a disaccharide

- e Starch
- ° Lactose
- ø Fructose
- e Glycogen

In glycine R is -----

- e Ethane



e Fatty acid aye: ool

e Hydrogen Na (\)

e Methane \\\

Blood group AB is an al

° .

Atl egestas