Past Papers

بسم الله الرحمن الرحيم

DOPAMINE SCIENTIFIC TEAM

MID – Lecture 5 to 6

Cytology

﴿ وَإِن تَتَوَلَّوْا يَسْتَبْدِلْ قَوْمًا غَيْرَكُمْ ثُمَّ لَا يَكُونُوا أَمْثَالَكُم ﴾

اللهم استعملنا ولا تستبدلنا

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First we will start with (15) past Qs

then there will be (7) test bank Qs

(all Qs will be by default past unless it is written to be test bank)

Q1：Which of the following organelles has the ability to oxidize very-long-chain fatty acids?

A. Golgi complex.
B. Smooth endoplasmic reticulum.
C. Lysosomes.
D. Peroxisomes.
E. Late endosomes.

Answer : D

Q2 : Which of the following organelles has the ability to break down Hydrogen peroxide?

A. Mitochondria.
B. Smooth endoplasmic reticulum.
C. Peroxisomes.
D. Lysosomes.
E. Late endosomes.

Answer : c

Q3 :What is not correct about peroxisomes acids?

A) Can synthesize some of their proteins

B) Contain the enzyme catalase

C) involved in toxins detoxification

D) Are site of oxidative catabolism

E) involved in metabolism of long chain fatty acids

Answer : A

Q4 :A transport receptor that moves molecules from the nucleus to the cytoplasm is called:

A) exportin

B) receptin

C) exhalin

D) importin

E) transportin

Answer : A

Q5 : What is not correct about mitochondrion?

A)Is self replicative

B) Can synthesize all of its proteins

C) Its outer membrane contains porins

D) Electron transport chain is located in its inner membrane

E) Inner membrane has 3:1 protein to lipid ratio

Answer : B

Q6 : A transport receptor that moves molecules from the nucleus to the cytoplasm is called:

A) exportin

B) receptin

C) exhalin

D) importin

E) transportin

Answer : A

Q7 : The thin filamentous meshwork within the nucleus that is bound by integral membrane proteins of the innersurface of the nuclear envelope in animal cells is called the:

A) Nuclear lamina

B) Basement lamina

C) Nuclear limulus

D) Nucleon

E) Basal lamina

Answer : A

Q8 : What advantage do the cristae confer on the mitochondria?

A. They allow the mitochondria to shrink.

B. They greatly increase the surface area for aerobic respiration machinery.

C. They confer resiliency on the cells.

D. They allow swelling of mitochondria.

E. They activate the matrix.

Answer : B

Q9 : The number of mitochondria in our cells:

A. Small and differ from one cell to another.

B. Large and differ from one cell to another.

C. The same number in all cells.

D. It depends on function of the cell.

Answer : D

Q10: The inner boundary membrane is particularly rich in which of the following?

A. protons

B. proteins responsible for the import of mitochondrial proteins

C. Krebs cycle enzymes

D. enzymes of the glycolytic pathway

E. glycosaminoglycans

Answer : B

Q11: Peroxisomal enzymes _____.

- A. Produce hydrogen peroxide
- B. Break down hydrogen peroxide
- C. Include catalase
- D. A and B

A. E. A, B and C

Answer : E

Q12 : Which genetic disorder is associated with dysfunction of peroxisomes?

A. Prkinson's disease

B. Down's syndrome

C. Premature aging phenotype

D. Zellwager syndrome

E. Bubble boy syndrome

Answer : D

Q13. Human mitochondrial DNA encodes for:

A. 2 rRNAs

B. 5 rRNAs

C. 1 rRNAs

D. 3 rRNAs

E. 4 rRNAs

Answer : A

Q14 : What is the name of the protein that make up the nuclear lamina and of what protein superfamily are they a member?

A. Actin, microfilaments

B. Lamins, intermediate filaments

C. Lamins, laminins

D. Keratin, laminins

E. Keratin, intermediate filaments

Answer : B

Q15 : porins are present in:

A. outer membrane
B. inner membrane
C. intermembrane space
D. both inner and outer membrane
E. matrix

Answer : A

Test bank Qs

Test bank Q

Q16 : choose the incorrect statement:

A. Edosymbiont theory is mainly related to mitochondria
B. All mitochondrial protein are synthesized in inner membrane
C. Mitochondrial DNA can encode tRNA and rRNA
D. Outer mitochondrial membrane is mostly made of proteins
E. 2 or more are incorrect

Answer :E

Test bank Q

Q17 : choose the correct statement:

A. Mitochondria can't fuse and divide
B. Inner mitochondrial membrane is permeable
C. (NES)/(NLS) are important sequences in mitochondrial transport
D. Mitochondrial synthesized proteins can be inserted in the inner membrane
E. All are incorrect

Answer :D

Test bank Q

Q18 : where can Phosphatidylserine be synthesized and it is a derivative of what molecule:

A. Mitochondria, phosphatidylethanolamine
B. Nucleus, Phosphatidylserine
C. Nucleus, phosphatidylethanolamine
D. Mitochondria, Phosphatidylcholine
E. Lysosomes, Phosphatidylcholine

Answer :A

Test bank Q

Q19 : what best describes Cardiolipin:

A. It is a sphingolipid
B. The unusual phospholipid, cardiolipin, which contains four fatty acid chains
C. synthesized in the in ER
D. it is a molecule that can't be found in the body and it has many effects
E. 2 or more are correct

Answer :B

Test bank Q

Q20 : choose the correct statement:

A. Converting pyruvate to Acetyl CoA is reversible.
B. a defective in aconitase enzyme can cause encephalomyopathy.
C. Peroxisomes can divide but can fuse.
D. Internal peroxisomal proteins are made in cytosol.
E. Peroxisomes can synthesize cardiolipin and Blie duct.

Answer :D

Test bank Q

Q21 : choose the incorrect pair:

A. XALD: Defective transport of very long-chain fatty acid
B. MERRF: caused by a mutation in one of the mitochondrial transfer RNA genes
C. Zellweger syndrome: is a peroxisomal disease
D. LHON: blindness because of degeneration of the optic nerve.
E. Luft's disease: hypermetabolism and hypothermia

Answer :E

Test bank Q

Q22 : choose the incorrect statement:

A. The nuclear lamina is made of a fibrous meshwork of lamins.
B. Outer mitochondrial membrane is permeable to small molecules.
C. Emerin and LBR can bind lamin to inner membrane.
D. Prenylation and LINC complex are both associate lamins with outer nuclear membrane.
E. lamin polypeptides form dimers with the central α-helical regions.

Answer :D

For any feedback, scan the code or click on it.

Corrections from previous versions:

Versions	Question #	Before Correction	After Correction
V1 → V2			
V2 → V3			