

Course No: PHRM1301
Course Title: General Biology
Date: 28 /11/2016
No. of Questions: (3)
Time: 1 hours
Using Calculator & Dictionary (No)

University of Palestine



Second Midterm Exam
2016/2017
Total Grade: 10

Instructor Name: Ismail Mezher
& Abd El Rahman Hamad

Student No.: _____

Student Name: _____

College Name: _____

Dep. / Specialist: _____

Class No: _____

Question One: (10 points)

Multiple choose question:

1) The function of A granular endoplasmic reticulum is to:

- a) Detoxify drugs
- b) Store Ca^{+2}
- c) Synthesize phospholipids
- d) All of the above

2) Which of the following has the cell-cell recognition function:

- a) phospholipids
- b) Glycoprotein
- c) Glycogen
- d) cholesterol

3) The monomers of polypeptides are joined together by-----bond:

- a) Ester
- b) peptide
- c) glycosidic
- d) Phosphodiester

4) The most acceptable model for membrane structure is:

- a) Sandwich
- b) Fluid mosaic
- c) Unit membrane
- d) One piece of lipids

5) kinetochores start to appear in which of the following stages of Mitosis:

- a) Prophase
- b) Prometaphase
- c) Anaphase
- d) Telophase

6) Centrioles is a term specific to:

- a) Plants.
- b) Animals.
- c) Bacteria.
- d) None of the above.

7) The function of cell division:

- a) Reproduction
- b) Repair of tissues
- c) Growth and development
- d) All of the above

8) At which phase of the cell cycle are chromosomes duplicated:

- a) G1
- b) S
- c) G2
- d) Mitotic phase

9) The nuclear envelope break down during:

- a) Prophase
- b) Prometaphase
- c) Anaphase
- d) Telophase

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10) Movement of molecule from their lower concentration to their higher concentration is called:

- a) Diffusion
- b) Facilitated diffusion
- c) Active transport
- d) Osmosis

11) The uptake of liquid droplets into cells by vesicle formation is called :

- a) Phagocytosis
- b) Pinocytosis
- c) Receptor-mediated endocytosis
- d) Exocytosis

12) Carrier proteins in the plasma membrane are required for:

- a) Active transport
- b) Facilitated diffusion
- c) Osmosis
- d) Both in active transport and facilitated diffusion

13) One of the function of cholesterol in animal cell membrane is to:

- a) Facilitate transport of ions
- b) Store energy
- c) Phosphorylate ADP
- d) Maintain membrane fluidity

14) A cells total hereditary content of DNA is called:

- a) Chromatin
- b) Chromosome
- c) genome
- d) gene

15) In order for a protein to be an integral membrane protein it would have to be;

- a) Hydrophilic
- b) Hydrophobic
- c) Amphipathic, with at least one hydrophobic region
- d) Lipid

16) A protein that spans the phospholipid bilayer one or more times is:

- a) A transmembrane protein
- b) An glycoprotein
- c) A peripheral protein
- d) A glycolipid

17) Which of the following is a possible reason for grouping the peroxisomes with chloroplasts and mitochondria?

- a) They are all involved in ATP synthesis.
- b) They are all part of the plastid family of organelles
- c) None of these organelles are part of the endomembrane system
- d) They all contain two or more membranes.

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18) Which of the following is false?

- a) The folds of the inner mitochondrial membrane are called cristae.
- b) The mitochondria possess their own DNA.
- c) Mitochondria contain ribosomes in the intermembrane space.
- d) Mitochondria are involved in energy metabolism.

19) All this reasons are causes sexual genetic variation except one:

- a) Dependant assortment
- b) Random fertilization
- c) Crossing-over
- d) Independent assortment

20) If a pair of homologous chromosomes fails to separate during anaphase of meiosis I, what will be the chromosome number of the four resulting gametes with respect to the normal haploid number (n)?

- a) $n + 1$; $n + 1$; $n - 1$; $n - 1$
- b) $n + 1$; $n - 1$; n ; n
- c) $n + 1$; $n - 1$; $n - 1$; $n - 1$
- d) $n + 1$; $n + 1$; n ; n
- e) $n - 1$; $n - 1$; n ; n

Question Two:

(10 points)

A- Fill the correct word in blank:

- 1) The cell cycle consists of phase (..... and cytokinesis) while, **Interphase** (divided into,.....,.....)
- 2) The is a structure made of microtubules that controls chromosome movement during mitosis
- 3) In animal cells, cytokinesis occurs by a process known as, forming a **But** In plant cells, aforms during cytokinesis.
- 4)egg called zygote.

B- True or False :

- 1-() In anaphase I, pairs of homologous chromosomes separate while In anaphase II, the sister chromatids separate
- 2-() Synapses is homologous chromosomes come together as pairs
- 3-() All somatic cells of the body take its genetics from zygote genes by the process of meiosis
- 4-() A karyotype is an ordered display of the pairs of chromosomes from a cell
- 5-() The diffusion of a substance across a biological membrane is active transport
- 6-() All cell division results in genetically identical daughter cells
- 7-() Lysosomal enzymes work best in the acidic environment inside the lysosome .
- 8-() Aster is a radial array of short microtubules extends from each centromere.
- 9-() Fertilization is the union of gametes while formation of zygote is not.
- 10-() diploid cell can go meiosis and mitosis while haploid go only meiosis.

