



جامعة طنطا
كلية الصيدلة

Tanta University
Faculty Of Pharmacy
Department Of Pharmaceutical Microbiology

Examination For (First level Year) Pharmacy Students


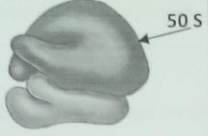



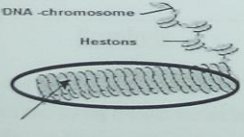
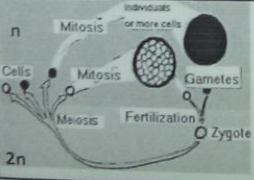
Course Title:	Cell Biology		Course Code: MD102
Date:	15 / 1 / 2014	Term : first	Total Assesment Marks: 65 Total pages: 6
			Time Allowed hours: 1 hour

I. Please mark the correct statement at the corresponding number in the following answer sheet. Answers elsewhere are NOT going to be considered..... (30 marks, 24 min)

N0.	a	b	c	d	N0.	a	b	c	d
1					16				
2					17				
3					18				
4					19				
5					20				
6					21				
7					22				
8					23				
9					24				
10					25				
11					26				
12					27				
13					28				
14					29				
15					30				

- The structural and functional unit of all living organisms is the
 - Ribosome
 - Organ
 - cell
 - organelle
- Endoplasmic reticulum with ribosomes attached to it is called
 - smooth ER
 - nodular ER
 - dendritic ER
 - rough ER

ii. Complete the missing parts in the following table.....(21 marks, 21 min)

No.	Figure	Figure identification	Complete as required
1		gastrula	Part 1 is responsible for formation of germ cells; ova, sperm
2		Bacterial ribosome (70 S)	Application is 16SRNA for identification of microorganisms
3		Apoptosis	Two major changes could be detected, which are; nuclear chromatin condensation, cytoplasmic shrinking, dilated endoplasmic reticulum, and membrane blebbing
4		anaphase	Before this phase, chromosomes will migrate to the equator of the spindle
5		Polyploidy = endomitotic cell	This cell must undergo apoptosis otherwise it will be converted into cancerous cell.
6		chromatin	There are two major types: 1- Euchromatin, 2-heterochromatin
7		Zygotic life cycle	Fungi and protozoa are examples of the members of this life cycle.

iii. Mention one major difference between the following pairs:

(14 marks, 15 min)

<p><u>Cellular senescence</u></p> <p>is a state that occurs in response to DNA damage or degradation that would make a cell's progeny nonviable; it is often a biochemical alternative to the self-destruction of such a damaged cell by apoptosis</p>	<p><u>Cellular quiescence</u></p> <p>Cells that have temporarily or reversibly stopped dividing are said to have entered a state of quiescence Go resting stage</p>
<p><u>Benign tumor</u></p> <p>are self-limited, and do not invade or metastasize.</p>	<p><u>Malignant tumor</u></p> <p>metastasis uncontrolled growth, invasion,</p>
<p><u>Kinetochores</u></p> <p>is the point where microtubules of the spindle apparatus attach</p>	<p><u>Centromere</u></p> <p>The area where both chromatids are in contact with each other is known as the centromere.</p>
<p><u>Secretory vesicles</u></p> <p>Synaptic vesicles located at presynaptic terminals in neurons and store neurotransmitters.</p>	<p><u>Lysosomes</u></p> <p>are vesicles which contain digestive enzymes used to "break down" substances in the cell into smaller compounds. They are involved in cellular digestion via the process called phagocytosis</p>
<p><u>Turner Syndrome</u></p> <p>lacking of one X chromosome in females - ie XO</p>	<p><u>Edward Syndrome</u></p> <p>- trisomy of chromosome 18</p>
<p><u>Pluripotent stem cells</u></p> <p>descendants of totipotent cells and can differentiate into nearly all cells</p>	<p><u>Totipotent stem cells</u></p> <p>Stem cells can differentiate into embryonic and extra embryonic cell types (placenta)</p>
<p><u>Prophyta</u></p> <p>Fungus like -Form plasmodium, a mass of cytoplasm containing diploid nuclei but no cell walls or membranes. Moves/creeps over surfaces of decaying organic material</p>	<p><u>Protohyta</u></p> <p>Plant-like protists: have chloroplasts – get their food by photosynthesis. May or may not have other plant-like properties</p>

GOOD LUCK