

 جامعة طنطا كلية الصيدلة	Tanta University Faculty of Pharmacy Department of Microbiology			
	Examination for Prepharmacy Students			
	Course Title:	Biology		Course Code: 1247
Date	21/1/2014	Term : First	Total Assesment Marks: 150 Total Pages: 11	Time Allowed: 2 Hours

إرشادات عامة :

- (1) الامتحان يتكون من ثلاث أجزاء (One, Two and Three) وعدد الصفحات (11) صفحة.
 أ- الجزء الأول Part One خاص بأسئلة أ.د/ طارق النينا (بمجموع درجات 75 درجة)
 ب- الجزء الثاني Part Two خاص بأسئلة أ.د/ هدى البحراوى (بمجموع درجات 37.5 درجة).
 ج- الجزء الثالث Part Three خاص بأسئلة أ.د/ نهلة العشماوى (بمجموع درجات 37.5 درجة).
 (2) تعقد الامتحانات الشفهية (عقب الامتحان مباشرة) بلجان الامتحانات الشفهية بالدور الثاني و الرابع.

Part One

- (1) تأكد أن الأسئلة تقع في (5) صفحات.
 (2) عند اكتشاف أى خطأ فى ترتيب الأوراق يجب الرجوع إلى أستاذ المادة.

ALL QUESTIONS ARE TO BE ATTEMPTED

1) Complete each of the followings (35 Marks, 30Min.)

- 1) Limitations of Whittaker' classification of living organisms (1969) are
 - a-
 - b-
- 2) Two characters of archaebacteria which are more similar to eukaryotes than to prokaryotes are
 - a-
 - b-
- 3) Two similarities between yeasts and plant cells are
 - a-
 - b-
- 4) Mutations of mitochondrial genes have been implicated in a number of genetic diseases, such as
 - a-
 - b-
 - c-
- 5) The interphase of *Escherichia coli* - cell cycle is
 and it depends on.....

6) The synaptic vesicles is located inand
its function is

7) Three types of the cells forming connective tissues are
a-
b-
c-

8) Three functions of smooth endoplasmic reticulum are
a-
b-
c-

9) Biological events in telophase I of meiosis are.....

10) During the mitosis the synthesis of microtubules is done in
phase(s) , while the synthesis of mRNA is done in phase(s)

11) The two types of mitosis are
a- which is occurred in.....
b- which is occurred in.....

12) Regulatory genes of eukaryotic cell cycle are
a-
b-

13) Terminal differentiation of stem cells means
.....
and the example of these cells is

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II) Explain how? (12 Marks,10 Min.)

1) Does Carl Woese classification (1990) of living organisms provide greater advantages over Whittaker and Margulis classification(1978)?

2) Could you determine the sizes of ribosomes of animal and bacterial cells?

3) Do certain viruses induce tumors?

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III) What are the? (12 Marks, 10Min.)

1) Mechanism of apoptosis

2) The structure (and biological roles) of nuclear envelop

3) Possible steps for production of farm animals (e.g. sheeps) by stem cell technology

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IV) How could you differentiate between..... (16 Marks, 10 Min.)

1) The bacterial and mammalian chromosomes

2) The *min* and *par* mutants of bacteria

3) Monosomy and endoploid cells

4) The amniotic and embryonic stem cells