مدرس بيولوجي

	Tanta University - Faculty of Science - Botany Department **Examination for 2nd level Students of special Microbiology**			
	COURSE TITLE	**Soil science** **علـــم التربـــــة**		COURSE CODE BO2109
Date, 5	January 2014	TERM: First	TOTAL ASSESSMENT MARKS: 100	TIME ALLOWED: 2 HOURS

أجـــــب عـــــن الأسئلـــة التاليـــة

السـؤال الأول : وضح كلٍ ممايأتى: (٢٧ درجه)

١ – نشأة الشحنات الكهربية على سطح حبيبات الطين والدبال. (١٠ درجات)

٢ – تكون نطاقات التربة **Soil profile** . (١٠ درجات)

٣ - خصائص منطقة الجذور النباتيـة فـى التربـة. (٧ درجات)

السـؤال الثانى : اكتب ما تعرفه عن: (٢٧ درجه)

١ – مرحلة الـ **Pedogensis** لتكوين التربة . (٩ درجات)

٢ – أهمية الدبـــــال فى التربـــة. (٩ درجات)

٣ - محلـــــــول التربـــــة. (٩ درجات)

السـؤال الثالث: أشرح كلٍ مما يأتـــــى (١٨ درجة)

١- مصدرالمادة العضوية بالتربـة ومراحل تحلليها (١٠ درجات)

٢– التركيب الكيميائى لمعادن التربة الثانوية . (٨ درجات)

السـؤال الرابع: اكتب ما تعرفه عـــــن: (٢٨ درجة)

a – دور الكائنات الحيوانية فى التربة. (٩ درجات)

b - صور الماء فى التربة (٩ درجات)

c - العمليات الكيميائية التى تؤدى الى تكون التربة. (١٠ درجات)

أ د / أحمـــد شـــرف الديـــن

ميكروبيولوجى ٢

	Tanta University Faculty of Science Botany Department	
Theoretical exam.	Assessment = 100 marks.	Time allowed: 2 hours.
Course Title = Instrumental Methods in Microbiology.		Course code = MB 2105.
Microbiology special program.		Academic year: 2016/2017.
Sophomores (Level: 2 – Semester: 1)		12/1/2017. الإختبار فى ورقة واحدة

Answer the following questions (with fully labeled diagram, if possible):	**Mark**
1- Explain in brief the progress of PCR and its components.	20
2- Mention the experimental parameters and principle of affinity column chromatography.	20
3- Explain the principle of light absorption in the spectrophotometer and how it can be used to determine the type and concentration of materials.	20
4- Illustrate the microbial growth curve of a static culture.	20
5- Compare between the principles and vision pathway of SEM & TEM.	20
Total marks of written exam:	100

Best wishes..... Examiner:	Dr.: Anwer S.M. El-Badry.

TANTA UNIVERSITY, FACULTY OF SCIENCE, BOTANY DEPARTMENT		
Examination for level 2 Students (Special Microbiology)		
Course title: PRINCIPLES OF MYCOLOGY		Course Code: BO2103
DATE: 29 / 12 / 2016	TERM: FIRST	TOTAL ASSESSMENT MARKS: 150	Time Allowed: 2 hours

(Q1) Write on **three** of the following: (50 mark)

1- Key to classes of Myxomycota and Mastigomycotina.
2- Stages of life cycle of *Claviceps purpurea.*
3 -Classification of *Saprolegnia sp.* and *Physarum* sp.and describe the life cycle of **one** of them .
4-Formation of ascocarp (Apothecium) in Discomycetes.

(Q2) Complete the following: **(50mark)**

1- Stages of life cycle in *Puccinia graminis*..., ...,...,...,...and types of spores...,...,...,...,....and classification .....
2- Orders of Oomycetes .....,.....,.....,..... and of Zygomycetes ...,...,....
3- In Oomycetes, meiosis division occurs after the formation of ..... and....
4- Classification of *Pythium sp.* ..... and general characters ...,...,...,
5- Classes of Deuteromycotina ....,...,.....and characteristics by...,...,....
6- Ascus wall of Ascomycotina may be ... or ... and asexual reproduction in *Taphrina sp.*by.....
7- Shapes of ascospores in yeasts .....,....,..... and classification of *Saccharomyces cerivisiae*.....
8- Classes of Ascomycotina ...,...,...,.. ,...and asexual reproduction by ...,...,...
9- Classification of *plasmodiophora* ..... which is present in the soil as ..... and inside the host cell as.....
10-Types of sporangia in *Allomyces* sp.....,.....and types of somatic structure in *Saprolegnia* sp.,.....

(Q3)- Compare between each of two of the following: (3only) **(50mark)**

1-Hypogean and Epigean Discomycetes.
2-Cleistothecium of Eurotiales and Erysiphales and ascocarp of *Claviceps* sp.
3-Different genera of Erysiphaceae.
4 - Homothallic and heterothallic species of *Rhizopus sp.*
5-Gymenocarpous and angiocarpous Basidiomycotina

Prof. Dr. Omyma Ahmed Awadalla Good luck.....

	TANTA UNIVERSITY, FACULTY OF SCIENCE, DEPARTMENT OF BOTANY			
	EXAMINATION FOR SOPHOMORES STUDENTS OF MICROBIOLOGY			
	COURSETITLE:	Actinomycetes		COURSE CODE: MB 2107
DATE: 3-1-2017	JANUARY, 2017	TERM: FIRST	TOTAL ASSESSMENT MARKS: 100	TIME ALLOWED: 2HOURS

Answer the following questions:

1-**Complete the following sentences**: (15 marks)

a- Nocardiosis primarily presents as a …. or ….., it is more frequently seen as the cause of …..

b- Mycobacterial growth ranged between …. and……..

c- Aerobic Actinomycetes with mycolic acids in their cell wall include the following … …. ,…..,……..

d-……is the characteristic form of *Corynebacterium* and *C. diphtheriae* causes a disease known as … …….

e-*Streptomyces* sp. characterized by production of……,like…,….,…

2- **Identify the following**: mycetoma, signature protein ,conserved endless

(15 marks)

3-**Mention** industrial importance of *Corynebacteria* and *Rhodococcus* sp.

(20 marks)

4-**Discus** pathogenicity of *Mycobacterium leprae* (10 marks)

5- Compare between laboratory diagnosis (culture, staining and microscopic features) and general characters of the following: *Corynebacteria* , *Mycobacteria* and *Nocardia* (20 marks)

6-**Detect** relation between pathogenicity and cell wall structure of *Mycobacteria* (20 marks)

Best wishes

Examiners: Dr. Nanis G. Allam, Prof. D r. Omyma Aud-Allah

	UNIVERSITY OF TANTA, FACULTY OF SCIENCE DEPARTMENT OF BOTANY		
	FINAL EXAMINATION FOR (SOPHOMERS) Second YEAR STUDENTS BOT. & MICRO .		
	COURSE TITLE: **Cell Biology**		COURSE CODE: Bo 2107
DATE: 10,JAN, 2017	TERM: FIRST	TOTAL ASSESSMENT MARKS: 100	TIME ALLOWED: 2 HOURS

Answer the following questions:

Question 1:

Wright shortly on the following with labeled drawings if possible **(30 marks)**

1) Functions of endoplasmic reticulum
2) Nucleosome.
3) Centromer composition and functions.
4) Chromosome banding
5) Protein fraction of plasma membrane.
6) Ultra structure of mitochondria.

Question 2:

Put (R) in front of wright sentences and (W) in front of wrong ones with correction **(15 marks)**

1) Nucleolus composed only of RNA. ( )
2) DNA replication proceeds in both directions. ( )
3) Plasma membrane contains nucleic acids. ( )
4) Leucoplasts contain xanthene. ( )
5) Nuclear sap contains nitrogenous bases and enzymes. ( )
6) Cristae are infoldings in both mitochondria outer and inner membranes. ( )
7) Production of RNA from DNA is called Transcription. ( )
8) Peroxisomes are filled only with peroxidase enzyme. ( )
9) Primary phagocytosis contains food material. ( )
10- Replication is the production of DNA from RNA. ( )

1969	TANTA UNIVERSITY FACULTY OF SCIENCE DEPARTMENT OF BOTANY			
	EXAMINATION FOR (SECOND YEAR) STUDENTS OF CHEMISTRY & MICROBIOLOGY			
	COURSE TITLE:	DIVERSITY OF PROKARYOTES		COURSE CODE:MB2101
DATE:	17 ,JANUARY,2017	TERM: FRIST	TOTAL ASSESSMENT MARKS:150	TIME ALLOWED: 2 HOURS

Part II: (75 marks)

1- Write short note on: **(30 marks)**

a- Cell structure of Cyanobacteria.

b- Compare between: 1- *Stigonema* and *Scytonema.*

2- *Chroococcos* and *Gloeocapsa.*

c- Descried the different methods of reproduction in *Nostoc.*

2- Complete the following: **(30 marks)**

1- Storage food in Cyanobacteria is.....

2- Reproduction by fission mean.....

3- The different between Chl a in Cyanobacteria and in bacteria is.....

4- Cyanobacteria are.....

5- *Spirulina* is rich with ....., ... and.....

6- Movement of *Oscillatoria* by ..... and.....

7- Cyanobacteria reproduce asexually by.....,.....and.....

8- The branch of *Tolypothrix* is.....branch.

9- Cell wall of Cyanobacteria contain.....acid.

10- The position of heterocyst in *Rivularia* is .....

3- Answer the following questions with TRUE or FALSE and CORRECT the false one: **(15 Marks)**

1- All Cyanobacterial organisms have capacity to fix atmospheric nitrogen.

2- The DNA and ribosomal components of blue-green algae are similar of those bacteria.

3- Heterocyst is main sites of nitrogen fixation under anaerobic condition.

4- *Microcyst* is secreting toxic substances in water.

5- Reproduction in *Chroococcales* takes place by heterocyst.

6- Some species of Cyanobacteria can be movement by flagella.

7- All species of *Rivularia* can't form colony.

8- Reproduction by hormogonia takes place in non-heterocystous species.

9- Heterocyst functions as secondary reproductive organs.

10- *Oscillatoria* is true branched Cyanobacteria.

من فضلك انظر خلف الصفحة

الامتحان فى ورقتين

	BOTANY DEPARTMENT - **TANTA UNIVERSITY** - FACULTY OF SCIENCE			
	Examination / Second Year All Levels			
	Course Title:	**General Genetics**	Course Code: **BO2105**	
22 January **2017**	Term: **First**	Total assessment marks: **150**	Time Allowed: **2** hours	

ANSWER THE FOLLOWING QUESTIONS

1. **Write on the following with drawing if possible (120 Marks)**
   - **a.** Types of changes in chromosome number and structure.
   - **b.** Incompitability alleles in plants.
   - **c.** Genetic balance and sex determination.
   - **d.** Cell cycle and C-value.
   - **e.** Different types of chromosomal systems.
   - **f.** Genetic significance of mitosis and meiosis.

2. **Mark the correct answers with the sign (√) and the wrong answers with (X) (30 Marks)**

   - **a.** The coat color in rabbit is controlled by four alleles. ( )
   - **b.** Meiosis I is called a reduction division. ( )
   - **c.** The ABO blood groups are controlled by single gene with four alleles. ( )
   - **d.** The seed coat color in garden pea is controlled by pseudo-alleles. ( )
   - **e.** Meiosis keeps the number of somatic chromosomes constant across generations. ( )
   - **f.** Chiasma formation at meiosis is an indication of crossing over. ( )
   - **g.** The test cross involves two homozygous contrasting phenotypes. ( )
   - **h.** Genes must be transmitted from generation to generation via somatic cells. ( )
   - **i.** Quantitative traits are mostly affected by the accumulation of genes. ( )
   - **j.** Monohybrid cross involves contrasting expression of the same character. ( )

Examiners:

With our best wishes

Prof. Dr. Adel Elshanshory **Dr. Reda Gaafar**