



Final semester examination of first semester 2017-2018.

Q 1/ complete the punnett squar for following cross and mention mendilian ratio:

TtYy x TtYy

	TY	Ty	tY	ty
TY				
Ty				
tY				
ty				

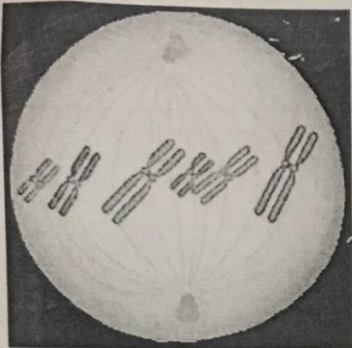
Mendilian ratio = ??

: Q 2/ Numerat the Methods of Cell Breaking

Q 3/ Mention the sex of Drosophilla, A & B



Q4/ what's the phase of cell division ? what's the type of cell division?



Q 5/ A) In this figure leg of Drosophila , identify what sex is it?



Q 6/ Crossing over takes place during

- a) meiosis b) mitosis c) segregation d) linkage

Q 7/ If a father have type A blood and the mother has type AB, they would NOT have a child with which of the following blood types?

- a) O b) A c) B d) AB

Q 8/ Color blindness, a sex linked trait, appears more often in _____ than in _____

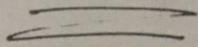
- a) males, females b) females, males c) dogs, cats d) neither

Q9/ Complete the punnett squar for crossing of:

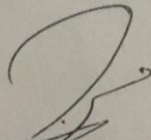
Parents $I^A i$ X $I^B I$

Q 10 / If you crossed two heterozygous plants, how many of the offspring will also be heterozygous?

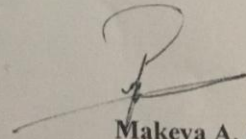
Best wishes



Departmenthead of M. BTc.



Departmenthead of A. BTc.



Makeya A. H.

Examine



Final semester examination of first semester 2017-2018

Note : Answer (4) question , (10 M) For each question

Q1 / Define all the following terms :

cytosol - L-form - B-lactam - cytoskeleton - macronutrient - quarm sensing - capsid -
viroid - Antony van - Histone

Q2 / A : Classified the viruses according to their host .

B: Explain the structure of cell wall in Gram positive Bacteria .

C : Enumerate the Bacterial Resistance to anti microbial drug .

Q3/ Mention the function of all the following :

- 1- fimbriae 2- Axial filament
- 3- capsule 4- lipoprotein
- 5- porins 6- envelop in virus

Q4/ A : How can you classified the plasmid according to function ?

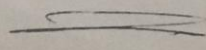
B: Explain the fungal cell wall .

Q5/ A : What the different between all the following :

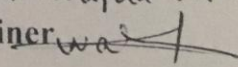
Broad spectrum drug - Narrow spectrum
Bacteriocidal drug - Bacteriostatic drug
synergisum - antagonism
virus - viroid

B: Enumerate the Genetic basic of bacterial resistance and explain one of them .

Best wishes


Department head



Name: D. wafaa alkabi
Examiner 



Final examination of first semester 2017-2018

Q1/Answer two of the following branches: (15 Marks)

A-Explain the characteristics of ideal vaccine ?

B-Some vaccines need more than one dose?

C- What is Toll-like receptors, explain its importance?

Q2/ Answer one of the following: (15 Marks)

A-you are biotechnologist working in a team to prepare a vaccine from a given bacteria? How can you decide which antigen (immunogen) could be use?

B-List the main differences between the T-dependent and independent vaccines?

Q3/Answer the following branches: (15 Mark)

A-Explain the applications of vaccines ?

B-What are the immunization programs aims?

Q4/Answer only two of the following: (15 Marks)

A-Give an example for the following vaccines with the details of its nature :

1-Tetanus

2-Whooping cough

2-Polio

4-Tuberculosis

5-Candida albicans

B-Draw the clonal selection of the immune cell upon second exposure to the antigen?

C- Are vaccines completely safe ?

Best Wishes

Prof. Dr. Ziad M. Alkhozai
Lecturer

Dr. Mohamed M.

Dr. Nazar A. Hamza
Head of Dept.

QIII// Answer one of the following branches:

(10 Marks)

A- You are working in a science laboratory, and you have been asked to improve a strain of bacteria that used in protease production, what are the methods that used in the improvement of microbial strains which you can use?

B- How can microbes use feedback mechanisms to control their metabolic pathways and what are these types?

QIV/Answer two of the following branches:

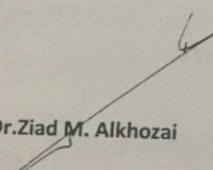
(10 Marks)

A-What are the main types of metabolic products, and what are the methods that used to separate the product yield?

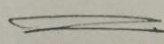
B- Explain by drawing the upstream and downstream processes in the field of industry?

C-Different techniques are used to preserve the microbial strains , What are they explain in details?

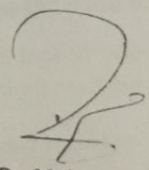
Best Wishes


Prof. Dr. Ziad M. Alkhozai

Lecturer


Dr. Nazar A. Hamza

Head of Dept.


Dr. Mohand M. Sahib

Head of Dept.

University of Al-Qadisiyha

Faculty of Biotechnology

Dept. of Agricultural Biotechnology

Industrial microbiology

الميكروبيولوجيا الصناعية



Examination:

Time: Two hours

Stage: 2 years

Date :- / / 2018

Final semester examination of first semester 2017-2018

Note : Answer only (4) question

Q1/ Define

Sterilization

Microbiology

Q2/ what are important of probiotic in stimulate of immunization?

Q3/ Fill the blanks

1-Of safety rules laboratory _____

2- staph .aureus bacteria take _____ stain while E.coli bacteria take _____ stain

3-Colony are _____

4- Microscope is define _____

5- There are two type of incubater _____ , _____

Q4/ Compare between Oven and Autoclave ?

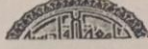
Q5/ what is Fermentation?

A handwritten signature in black ink, likely belonging to Dr. Muhannad.M.Sahib.

Head of Department
Dr. Muhannad.M.Sahib

A handwritten signature in black ink, likely belonging to the Examiner.

Examiner



University of Al-Qadisiyah
Faculty of Biotechnology
Dept. of Agricultural Biotechnology



Examination:

Examination: human rights

Time: Two hours

Stage: 2^{ed} years

Date :- / 1 / 2018

Final semester examination of first semester 2017-2018

ملاحظة : الاجابة عن ستة اسئلة فقط (لكل سؤال ١٠ درجات)

س١/ كيف كانت حقوق الإنسان في ظل الحضارة العراقية ؟

س٢/ ماذا نعني بكلمة حقوق في اللغة ؟ وما هي تقسيمات الحقوق ؟

س٣/ ما هي خصائص حقوق الانسان ؟ عددها فقط ؟

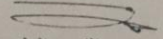
س٤/ ما هي اقوال الامام علي (ع) في مجال حقوق الانسان ؟

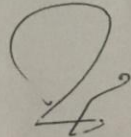
س٥/ ماذا نعني بحرية الإقامة والتنقل ؟ بين ذلك ؟

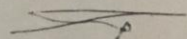
س٦/ ماذا نعني بالحقوق السياسية ؟ وبماذا تمثلت ؟ بين ذلك ؟

س٧/ ما هي صفات حقوق الانسان ؟ عددها فقط

مع تمنياتي لكم بالنجاح


رئيس القسم الطبي
أ.م.د نزار عبد الأمير


رئيس القسم الزراعي
أ.م.د مهند محمد صاحب


مدرس المادة
م.م جبان باهل جدعان

University of Al-Qadisyiah
College of Biotechnology
Dept. of Agr./Med. Biotechnology



Examination: The.Molecular Biology
Time: Two hours
Stage:2nd

Final semester examination of first semester 2017-2018

Note: Answer five questions only, 8 marks for each question.

Q1: How can you prove DNA is the genetic material in Virus?

Q2: What is the correct mechanism of DNA replication?

Q3: Compare between Transposons and Retoposons .

Q4: Define the genetic mutation, what are the main types of mutations?

Q5: Explain the site specific recombination.

Q6: Define the following terms:-

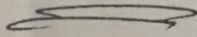
1- Transposase

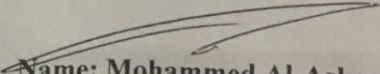
2-Helicase

3- Spontaneous mutations

4- Lagging strand

Best wishes


Department head


Name: Mohammed Al-Askeri
Examiner



Q1/ Fill in the following blanks . (5M.)

- 1- The and are necessary for the action of many enzymes including DNases .
- 2- SAS is used in
- 3- Lithium borate buffer used in For the
- 4- Deep freeze used to storage until application of the experimental .
- 5- measure nucleic acid concentrations .

Q2/ Explain with drawing DNA extraction by phenol - chloroform . (5M.)

Q3/ A. Explain how to clean DNA . (5M.)

B. Mention the name & the purpose of use . (5M.)

(1)



(2)



(3)

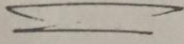


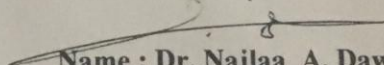
(4)



(5)




Dr. Nazar A. A. Hamzah
Department head


Name : Dr. Najlaa A. Dawood
Examiner



Final examination of first semester 2017-2018

Note: answer (4) question only 10 mark for each question

Q1/ full the blanks with the suitable words.

- 1- Water ----- of hydrogen in which the two hydrogen atoms are joined to oxygen atom by covalent bonds forming an angle of 105°.
- 2- In lyophilic there is ----- between the particles of dispersed phase and dispersion medium.
- 3- Water has a tendency to expand as it freezes and its density is -----.
- 4- Osmotic pressure is directly proportional to the ----- in the solution.
- 5- The chlorophyll appears green to our eyes because -----.

✓ Q2/ A/ enumerate the Importance of water to plant life.

— B/ describe the mechanisms of photophosphorylation in higher plants.

✍ Q3/ A/ what are the importance of Krebs cycle? Enumerate

✓ B/ The rate of diffusion increases if? Enumerate.

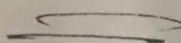
Q4/ A/ what are the evidence which is support the carrier concept of active absorption of mineral salts? Enumerate

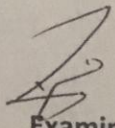
B/ Explain and enumerate the Factors affecting transpiration.

✍ Q5/ A/ enumerate the significance of osmosis in plants.

✓ B/ draw schematic represent the C4 photosynthetic carbon cycle.

Good luck


Head of Department
Dr. Nazar .A.Hamza


Examiner
Dr. Muhannad.M.Sahib

University of Al-Qadisyiah

College of Biotechnology

Dept. of Agricultural Biotechnology



Examination: practical biochemistry

Time: Two hours

Stage: 2nd years

Final semester examination of first semester 2017-2018

Q1 - fill in the blanks using the words between brackets (thromboplastin , Ca²⁺, chromatography ,oxalate ,8.6, fibrinogen, hypoglycemia, refrigeration)

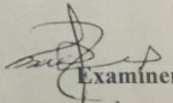
- 1- Glycolysis and other enzymatic and bacteriological processes are slowed down in blood when using
- 2- The conversion of pro-thrombin to thrombin depends on the action of
- 3-.....anticoagulant functions by precipitating calcium from the blood
- 4- When blood glucose decreases below 80 mg/dl, a medical condition results which is called
- 5- Method used for the bio separation of proteins is called
- 6- PH of the buffer that is used in electrophoresis is

Q2- list down the followings:

- 1- Types of anticoagulants with their mode of actions
- 2- Factors that affect migration in electrophoresis
- 3- functions of serum proteins
- 4- Methods for separating proteins
- 5- Functions of blood
- 6- - Types of support media
- 7-Steps of electrophoresis

Head of the department

Dr.Muhannad.M.Sahib


Examiner

Dr. jamal Nasser



Final semester examination of first semester 2017-2018

Q1/ Fill the blanks with suitable words. (10 Mark)

- 1- Water and dissolved minerals enter a plant through the root hairs and can follow two paths and
- 2- The molecule that gives up the electron is said to be
- 3- The cell membrane is it allow some molecules to enter and exit while blocking others.
- 4- is diffusion of water across a differentially permeable membrane.
- 5- The mechanism of water movement in plant is known as the
- 6- Colloidal solutions consist of two phases and
- 7- There are two ways in which substances can enter or leave a cell and
- 8- This is the uptake of solid particles.
- 9- is a substance usually a liquid in which a solute dissolves to form a solution.
- 10- In Solution, the vacuole and cytoplasm increase in volume while in solution, the vacuole and cytoplasm decrease in volume.

Q2/ Define the turgor pressure and the importance for the plant life? (4 Mark)

Q3/ Draw the noncyclic photophosphorylation? (6 Mark)

A handwritten signature in black ink, appearing to be 'M. Sahib'.

Department head

Muhannad. M. Sahib

Best wish

A handwritten signature in black ink, appearing to be 'Haneen Salim Bachei'.

Examiner Name

Haneen Salim Bachei



Final semester examination of first semester 2017-2018

NOTE: Answer only (Five) questions (20 markers for each question).

Q1// Define the following term?

1- Fertilization, 2- Blastomeres, 3- Allantois sac, 4- Somite formation

Q2// Discussion of the Oocytogenesis?

Q3// Enumerates of the neurulation Steps?

Q4// Draw the sex determination chart?

Q5// Explain the origin (derived) of the skeletal muscle?

Q6// Complete the following sentence? (four only)

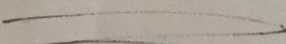
1- Angiogenesis begins in mesoderm of the yolk sac, in the form of blood islands composed of ----- and -----.

2- The intraembryonic cavity over it later develops into the -----.

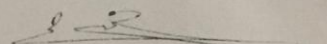
3- The visceral layers surrounding the gut origin from -----.

4- As a system it has contributions from all embryonic layers, and its consist of two layer -----and -----

5- Lateral UGR(nephrogenic plate) forms ----- and ----- ducts.


Dr. Nazar Abdulameer

Department head


Name: Alaa kamil Abdulla

Examiner



Final semester examination of first semester 2017-2018.

NOT- ANSWER FOUR QUESTIONS ONLY

Q 1/ Match the list (A) with list (B) (10 marks)

List (A)

- 1) Phenotype refers to the Of an individual
- 2) Co-Dominance
- 3) $TtYy \times TtYy$
- 4) complet dominance
- 5) $Tt \times Tt$
- 6) Gregor Mendel
- 7) An allele
- 8) Lethal gene is
- 9) Particular location of a gene on a chromosome
- 10) A sex cells

List (B)

- a) One of several possible forms of gene
- b) Actual physical appearance
- c) A homozygous genotype
- d) A biologist scientist who carried out genetics research
- e) A heterozygous genotype
- f) 1:3
- g) 1:3:3:9
- h) Mutant genes and result in the death of the individual which carries them
- i) Gene's locus
- j) Gametes heterozygous genotype

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Q 2/ Suppose the brown allele for eye color (B) is completely dominant over the blue allele for eye color (b), if two brown-eye parent produce a child that is blue-eye, what the genotype for parents? (10 marks)

Q 3/ Answer of the following: (10 mark)

A) Write expected genotype of chinchilla coat color in rabbit, when

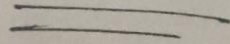
$$C > C^{ch} > C^h > c$$

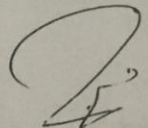
B) Mention the types of nitrogen bases

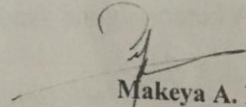
Q 4/ Anormal women whose father had haemophilia married anormal man , show if the first boy child will have haemophilia ? (10 marks)

Q 5/ Enumerate & explain by brief steps of protein synthesis . (10 marks)

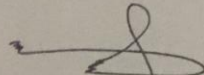
Best wishes


Departmenthead of M. BTc.


Departmenthead of A. BTc.


Makeya A. H.
Examine

The student


(ayan.m.)

زهره السريخالي

University of Al-Qadisyiah

College of Biotechnology

Dept. of Agricultural and Medical Biotechnology



Examination: English

Time: Two hours

A

Final Exam of First Semester 2017-2018

NOTE: ANSWER FOUR QUESTIONS ONLY

EACH QUESTION 15 MARKES.

Q1 . Fill the blanks between brackets with the verbs either in present or past state.

- 1- I always ----- (watch) it on Thursday evening .
- 2- (think) ----- that all doctors works hard .
- 3- (see) I ----- your problem, but I can't help you .
- 4- -Sammer can't come to watching film, he -----(have) dinner now .
- 5- Ramin and Vafa are Iranian , they -----(come) from Tehran.

Q2.A Put the words in the correct order to make questions then answer the questions about yourself.

- 1- play/any/ the /at / sport/weekend/you/do
- 2- moment/what/you/at/are/the/wearing.
- 3- father/look/your /you/like/do.
- 4- go/you/where/holiday/were/did/child/when/you/on/a.
- 5- person/famous/ever/a/have/met/you.

B. Match the topics from A to B to complete the meaning

A . international travel , Medical science , the internet , Agriculture , space travel

B . Famine , Website , Solar System , airline , drug abuse

Q3 . Draw Colum and Classify the following Nouns as (Art or literature)

Chapter ,poet , art gallery , sketch , exhibition , fairy tale , painter , act , brush, novel, biography, play ,brush, picture , author , sculpture.

Q4. Do as requires to the following sentences.

- 1- -----jogging(do ,go, play) .choose .
- 2- He was born in Iraq in 1984. (where and when)
- 3- What did you do last night ? (stay at home).
- 4- ----- your father do ?ask in present tense
- 5- We are enjoying the lesson very much . Correct

Q 2
alle
ger

Q5 A .Choose One

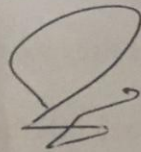
- 1- Talk in details about the tale of gluskap and the baby.
- 2- Describe atypical working day for Lucy (the Clown doctor).

Q

B - Answer the questions with a short answer and some more information.

- 1- Are you having a holiday soon?
- 2- Do you speak three language?
- 3- Does your best friend sometimes go on holiday with you?
- 4- Have you ever been to USA?
- 5- Do you often travel abroad?

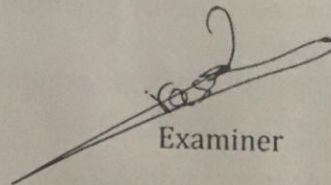
Best wishes



H. of the department.

أ.م.د. مهند محمد صاحب

أ.م.د. نزار عبد الامير



Examiner

Assist .L.Rasha.H.Abdullah

University of Al-Qadisyah

College of Biotechnology

Dept. of Med and Agr Biotechnology



B

Examination: English

Time: Two hours

Stage: Second

Final semester examination of first semester 2017-2018

Note: 1.5 point for each correct answer.

Q1: Complete the conversation with at, in, or on. If no preposition is needed, write ----.

Simon: What are you doing (1) ___ Christmas Day?

Joanna: Well, (2) ___ Christmas morning we always go to church. Then (3) ___ about twelve o'clock

We're going next door for lunch. There's a party (4) ___ the evening at the sports center. Are you going to Karen's party (5) ___ next week?

Simon: Do you mean the party (6) ___ the twenty first? I'm afraid I can't go We like going away (7) ___ December - in fact, (8) ___ tomorrow we're off to Bali for Christmas. See you (9) ___ three weeks, (10) ___ January!

Q2: Complete the text. Use the correct form of the Past Simple. (1.5 points for each correct answer)

I (1 visit) ___ Istanbul in 1995. I (2 go) ___ there with my friend. We only (3 speak) ___ English unfortunately! Sometimes people (4 not understand) ___ us, but it (5 not matter) ____. They (6 be) ___ very friendly. We (7 see) ----- many beautiful buildings including the Aya Sophia Mosque. We (8 not have) ___ much money so we (9 try) ___ to live cheaply. We (10 eat) ___ a lot of bread and cheese.

Q3: Ignore A or B.

A: Circle the correct word or words.

(1) Let's have ice-cream / an ice-cream. (2) I read paper / a paper every day. (3) Would you like coffee / a coffee? (4) They don't like chocolate / a chocolate. (5) I'd like glass / a glass of milk, (6) please have cake / a cake. (7) How often do you eat chocolate / a chocolate? (8) This table is made of glass / a glass. (9) I never drink coffee / a coffee. (10) Does he like cake / a cake

B: Complete the text with a, an, or the. If nothing is needed, write ----.

Shelley's a visitor from (1) ___ United States. She's in London visiting (2) ___ number of famous places. Shelley's (3) ___ architect so she enjoys looking at (4) ___ modern buildings. She knows she'll walk (5) ___ few miles today, so she's wearing (6) ___ good pair of (7) ___ comfortable shoes. She has (8) ___ old map with her. (9) ___ map's not very good, but Shelley says it's (10) ___ best one she's found.

Q4: Do as required.

(1) I (visited) have visited Paris in 1995. (2) We went / 've been camping here every summer. (3) They 've built / built it five years ago? (4) I hear you 'll leave / 're leaving your job. (5) What film will she watch / is she going to watch this weekend? (6) I need flour because I 'll bake / 'm going to bake a cake this afternoon. (7) Peter said he 'll not go / isn't going to work tomorrow. (8) Will he stay / Is he going to stay here all week? (9) Would you like to play / playing football with us? (10) I'd love going / to go with you. (11) Martin's hoping arriving / to arrive at six o'clock.

Head of Department

Best wishes

Examiner