

المرحلة : الثانية
المادة : تصنيف النبات
الوقت : ثلاث ساعات
التاريخ : 2024/5/23



وزارة التعليم العالي والبحث العلمي
جامعة المنيا
كلية العلوم
قسم : علوم الحياة

23 MAY 2024(2024 - 2023) أسئلة الامتحان النهائي للفصل الدراسي الثاني للسنة الدراسية

44

(10 درجات)

س1/ عرف عشرامما يأتي من المصطلحات:

- | | | | |
|--------------------------|--------------------|--------------------------|------------------|
| 1. Marginal Placentation | 2. Epipetalous. | 3. Rhizome | 4. Obscure style |
| 5. Suckers | 6. Fertile Stamens | 7. Capitata Stigma | 8. Apomixes |
| 9. Synstemony | 10. Gynophore | 11. , Benthan and hooken | 12. Carpel |

(10 درجات)

س2/ أ. اعط تعليلا لخمسا لكل مما ياتي :

1. Adventitious embryonic تعطي اجنة تشبه الام 100%؟
2. اضمحلال او اختفاء النواة الانبوبية عند بدأ عملية التلقيح ؟
3. حبوب اللقاح Pollen grains في بعض النباتات الصحراوية تزود بز غابات ؟
4. وجود Prop roots في نباتات الذرة ؟ ؟
5. تعتبر الورقة التوجيهية سداة عقيمة Sterile ؟
6. يعد الساق اعتد تركيبا تشريحيا من الجذر ؟

ب. ناقش علميا خمسا مما يأتي:

1. تحتوي الازهار على الغدد الرحيقية Nectar glands ؟
2. لانواع من البذور تراكيب ذات شكل يشبه القارب؟
3. قديما لتكون طبيبا ماهرا ينبغي ان تكون عالما عارفا بعلم النباتات؟
4. الصفات الخضرية Vegetative features لا يعدد بها في علم التصنيف ؟
5. اختفاء النواة الانبوبية بعد التلقيح ؟
6. تعطي الفسيلة off shoot الماخوذة من الام تطابقا كاملا لكل صفاتها في النخيل ..

(10 درجات)

س3/ وضح اثنان ما يأتي :

1. حالات اتصال المتك anther مع الخويط filament ، مع الرسم ؟
2. يقسم جهاز التأنيت من حيث عدد الكرايل المكونة له الى عدة اقسام.
3. تقسم الأزهار حسب موقع المبيض ovary position وموقع الأعضاء الأخرى للزهرة إلى عدة اقسام ماهي ؟ مع الرسم

(10 درجات)

س4/ أ. بين اثنين مما يأتي :

1. الصفات المعتمدة كأساس في تصنيف النباتات .
2. وظائف الكأس Calyx في الزهرة Flower.
3. وضح (Aestivation) وعدد انواعه.

ب. ارسم مع التاشير كل مما يأتي:

2. زهرة ناقصة Incomplete flower ...

1. مدقة Pistil

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قسم علوم الحياة
الجنة الامتحانية
السانية
رئيس القسم
د. هناء علي عزيز

كلية العلوم
قسم علوم الحياة
الجنة الامتحانية
السانية
استاذ العادة
د. فائق حسن الراضي



((Assessment of the final exam for the 2nd semester))
Academic year 2023-2024

45

Answer All Questions

Q1: Answer Two Branches: (10 markers)

- A- Explain: 1- Heredity, 2- Telomere, 3- Autosomal chromosomes, 4- homologs, 5- ploidy
B- What is studied in population genetics?, and explain the importance of genetic diversity in health.
C- Explain sex determination of sex in turtles and crocodiles.

Q2: Answer All Branches: (10 markers)

- A- Draw a figure and describe the Genes linked together.
B- What is the principle of independent assortment?

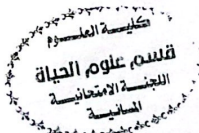
Q3: Answer Two Branches: (10 markers)

- A- Why does the female body produce one egg cell and three polar bodies?
B- Draw and describe crossing-over creates unique combinations of alleles during meiosis.
C- Explain 'The differences in shapes and sizes of chromosomes are easy to see, but the most important differences between chromosomes are hidden deep inside the DNA'.

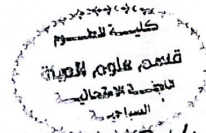
Q4: Answer All Branches: (10 markers)

- A- What means 1-dominance, 2-mono hybrid crosses, 3-segregation alleles, 4-independent assortment, 5-genotype.
B- Explain incomplete dominance with an example.

Good Luck



Lecturer
Prof. Dr. Nihad A.M. Al-Rashedi



Handwritten signature of the Head of Department.

Head of Department
Asst. Prof. Dr. Hanan Ali Aziz

المرحلة : الرابعة
المادة : أخلاقيات المهنة
الوقت : ثلاث ساعات
التاريخ : 2024/5/21



وزارة التعليم العالي والبحث العلمي
جامعة المثني
كلية العلوم
قسم علوم الحياة

21 MAY 2024

((أسئلة الامتحان النهائي للفصل الدراسي الثاني للسنة الدراسية 2023-2024))

44

ملاحظة : أجب عن أربعة أسئلة فقط

س1 / خلال فترة المشاريع البحثية العملية ينبغي التقيد ببعض المعايير ، ماهي هذه الأخلاقيات عددها مع شرح واحده فقط . (15 درجة)

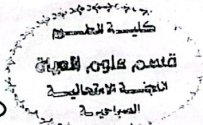
س٢ / ميز بين أخلاق المهنة والسلوك الوظيفي . (15 درجة)

س3 / تأتي التزامات حماية البيانات و الخصوصية من ثلاث مصادر رئيسية اذكرها بالتفصيل . (15 درجة)

س4/ ماهي أهمية أخلاق المهنة بالنسبة للفرد والمجتمع . (15 درجة)

س5/ ماهي المبادئ الاساسية لاخلاقيات البحث العلمي عند إجراء البحوث العلمية من قبل الباحثين؟ (15 درجة)

أمنياتنا لكم بالنجاح والتوفيق



رئيس القسم
أ.م.د. هناء علي عزيز

أستاذ المادة
م.د. أريج شاكر جاسم



أستاذ المادة
أ.م.د. محمد قاسم وهيب



((Assessment of the final exam for the second semester))
Academic year 2023-2024

19 MAY 2024

45

Q1: Choose the right answer for the following sentence (each point 1 Mark) (10 Marks)

1. Why recombinational repair system is called double strand break repair

- a) Both strands are broken, b) One strand is broken, c) No strand is broken, d) Both strand act as template

2-Linking number is the sum of which geometric components?

- a) Twist and writhe, b) Toroid and writhe, c) Twist and wrap, d) Twist and crossover

3- Which special enzyme introduces negative supercoils in DNA?

- a) Gyrase , b) Type II topoisomerase, c) Type I topoisomerase, d) Helicase

4.Which of the following RNA constitutes 90 percent of the total cellular RNA?

- a) rRNA, b) tRNA, c) mRNA, d) hnRNA

5. X rays causes mutation by

- a) deletion, b) transition, c) transversion, d) base substitution

6.What is the main function of tRNA in relation to protein synthesis?

- a) Inhibits protein synthesis
b) Proof reading
c) Identifies amino acids and transport them to ribosomes
d) all of these

7. Which of the following is responsible for the initiation of RNA polymerase activity?

- a) initiation site, b) promoter region, c) sigma factor, d) rho factor

8. Direct repeats in the IS element are present _____

- a) Within the transposon, b) Upstream the inverted repeat, c) Within the inverted repeat, d) Downstream the inverted repeat

9. Which of the following is a non-composite transposon?

- a) Tn5, b) Tn10, c) Tn3, d) Tn9

10-Which of the following is responsible for the initiation of RNA polymerase activity?

- a) initiation site, b) promoter region, c) sigma factor, d) rho factor

Q2:- Answer all of the following questions

(10 Marks)

A- How does the presence of other molecules in the cell affect the structure of DNA? (5 Marks).

B- How do σ -factors operate within bacterial transcription, and what roles do they play in various bacterial pathways? (5 Marks)



((Assessment of the final exam for the second semester))

19 MAY 2024

45

Academic year 2023-2024

Q3:- Answer all of the following questions

(10 Marks)

A- Describe the role of the general secretory pathway (GSP) in protein transport across the cytoplasmic membrane and highlight the differences in protein export mechanisms between Gram-positive and Gram-negative bacteria. (5 Marks)

B- How does a point mutation impact DNA sequences and protein synthesis, provide an explanation, including examples and potentially a figure, to illustrate this concept. (5 Marks)

Q4: Answer Two of the following questions

(10 Marks)

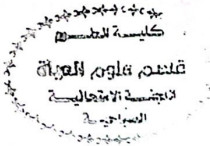
A- Describe the three fundamentally distinct mechanisms of genetic transfer in bacteria: transformation, conjugation, and transduction. Provide specific examples of bacterial species that exhibit each mode of genetic transfer. (5 Marks)

B- How does the arabinose operon in *E. coli* demonstrate both positive and negative regulation?

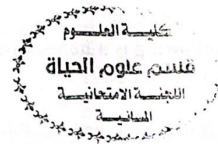
(5 Marks)

C- Describe the process of conjugal analysis in gene mapping in bacteria.

(5 Marks)



Good luck



Lecturer
Asst. Prof. Dr. Yasir Adil Alabdali

Head of Department
Asst. Prof. Dr. Hanaa Ali Aziz



((Assessment of the Final exam for the 2^{ed} semester)) 18 MAY 2024
Academic year 2023-2024

45

Q1:: Define for each of the following: (Answer 5 only) (10 Marks)

- 1- Global dimming. 2- Solid Waste. 3- PAHs. 4- Alpha radiation. 5- Stratosphere.
6- Threshold effect.

Q2:: Compare between each of the following: (8 Marks)

- 1- Noise emission and noise immission
2- Water borne and water washes diseases.

Q3:: Match for each of the following: (6 Marks)

- | | |
|---------------------|-------------------------------|
| 1- Anemia | a- Solid waste |
| 2- CFC _s | b- Ozone hole |
| 3- Herbicides | c- Cu |
| 4- Refineries | d- Induction of birth defects |
| 5- Rubbish | e- Smog |
| 6- Teratogenicity | f- Oil Pollution |
| | g- Elements |
| | h- Weeds |

Q4:: Answer for each of the following: (Answer 2 only) (10 Marks)

- 1- What are the sources and effects of SO₂ emissions?
2- Explain the effects of global warming.
3- Enumerate the sub-lethal effects of heavy metals on aquatic organisms.

Q5:: Give example for each of the following: (6 Marks)

- 1- Radiation have sufficiently great energy to ionize atoms and molecules.
2- Inorganic pesticides.
3- BTEX compounds.

Best of luck

Lecturer

Prof. Dr. Ali Abdulhamza Obaid

Head of Department

Assist. Prof. Dr. Hanaa Ali Aziz



16 MAY 2024

((أسئلة الامتحان النهائي للفصل الدراسي الثاني للسنة الدراسية ٢٠٢٣-٢٠٢٤))

٤٤

السؤال الأول / اكتب التركيب الكيميائي للأحماض الأمينية التالية موضحا نوع كل منها (لخمسة فقط): (10) درجة
الليوسين (Leu)، الكلوتاميك (Glu)، الميثيونين (Met)، السيرين (Ser)، السيستين (Cys)، فيل الانين (Phe)

السؤال الثاني / اجب عن كل مما يأتي:

١- هناك بعض التغيرات التي قد تحدث للزيوت والدهون أثناء التخزين، ما هي أهم أنواع هذه التغيرات؟ وكيف تمنع أو تقلل حدوثها؟ (5) درجة

٢- قارن بين تحلل الدهون في الوسط الحامضي وتحلل الدهون في الوسط القاعدي؟ (4) درجة

٣- ما المقصود بالدهون المشتقة وما هي أنواعها؟ (5) درجة

السؤال الثالث / اجب عن اثنان فقط:

١- ما المقصود بكل من: رقم اليود، حوامض واملاح الصفراء، الدهون المتعادلة؟ (3) درجة

٢- اذكر أصناف البروتينات؟ (3) درجة

٣- ما المقصود بالفعالية البصرية للحوامض الأمينية مع توضيحها بمثال؟ (3) درجة

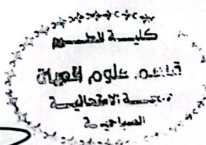
السؤال الرابع / اجب عن كل مما يأتي:

١- اذكر أهمية وصفات الليسيثين. (5) درجة

٢- صنف الاحماض الدهنية مع التوضيح وذكر مثال لكل صنف؟ (3) درجة

٣- ما هي الشموع ومم تتركب كيميائيا؟ اذكر اهم نقاط الاختلاف مع الدهون (2) درجة

تمنياتي لكم بالنجاح والموفقية



رئيس القسم
أ.م.د. هناء علي عزيز



أستاذ المادة
أ.م.د. شيماء حسن ملاح



18 MAY 2024

كلية العلوم
قلمكم علوم الحياة
اللجنة الامتحانية
المسألة

(Final exam for the second semester)
Academic year 2023 - 2024

كلية العلوم
قلمكم علوم الحياة
اللجنة الامتحانية
المسألة

Q1\ Select the correct answer of the following:

(12 mark)

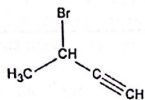
1- What compounds contain higher carbon atoms than C_5H_{10}

- a) C_4H_8 b) C_3H_6 c) C_2H_4 d) not all above

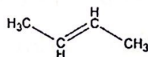
2- Complete the equation $(CH_3)_2C=CH_2 + Br_2 \rightarrow$:

- a) $(CH_3)_2CBrCH_2Br$ b) $(CH_3)_2CHCH_2Br_2$ c) $(CH_3)_2CBrCH_3 + HBr$ d) CH_3CBrCH_2Br ,

3- Classify each compound as saturated or unsaturated



A



B

- a) A saturated & B unsaturated c) A unsaturated & B unsaturated
b) c) A unsaturated & B saturated d) Not all above

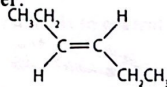
4- The common name of compound $CH_3CH_2CH_2Br$ is:

- a) Propyl bromide b) 1-bromo propane c) Iso-propyl propane d) butyl bromide

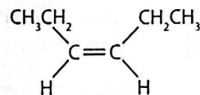
5- Which member of each pair has the higher boiling point? (1-pentene or 1-butene) & (3-heptene or 3-nonene)

- a) 1-pentene & 3-nonene b) 1-butene & 3-nonene c) 3-heptene & 1-butene
d) 1-pentene & 3-heptene

6- Classify each compound as a cis isomer or a trans isomer:



A



B

- a) Both A&B are trans b) Both A&B are cis c) A cis & B trans d) A trans & B cis

7- Which compounds can exist as cis-trans (geometric) isomers?

- a) $CHCl=CHBr$ b) $CH_2=CBrCH_3$ c) $(CH_3)_2C=CHCH_2CH_3$ d) all above compounds

8- How many carbon atoms are present in each molecule? (A: 2-methylbutane) & (B: 3-ethylpentane)

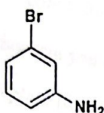
- a) A=6 & B= 10 b) A=5 & B= 7 c) A=6 & B= 9 d) A=5 & B= 10



18 MAY 2024

(Final exam for the second semester)
Academic year 2023 - 2024

Q2/ Give IUPAC names of the following Compounds: (four only) (8Marks)



1



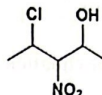
2



3

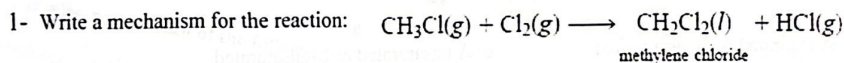


4



5

Q3/ Answer as required: (five only) (15 mark)



2- Arrange the following alkenes in order of increasing boiling point: 1-butene, ethene, 1-hexene, and propene.

3- Write the equation for the reaction between $\text{CH}_3\text{CH}=\text{CHCH}_3$ and H_2O (H_2SO_4 catalyst)

4- Compare between Ethylene and acetylene.

5- Draw the structure for each compound: a) Toluene b) 4-methyl-2-hexyne c) aniline

6- What is the molecular formula for the member just above C_7H_{16} ?



Lecturer

Hawraa AbdulKadhim Mazyed



Head of Department

Dr. Hana Ali AZI2



((Assessment of the final exam for the 2st semester)) 16 MAY 2024

Academic year 2023-2024

45

Q 1: (A): Scientifically discussed for each of the followings: (4 Marks)

1. α -Amylase producing bacteria.
2. Transfer of genetic information between different microorganisms.
2. Types and nature of industrial culture media.
4. Cell permeability modifiers of industrial microorganisms.

(B): How can you explain biosynthesis of penicillin industrially? (4 Marks)

Q 2: Explain (four only) for each of the followings: (8 Marks)

1. Criteria do manufacturers use in selecting fermentation media.
2. Characteristics of industrial microorganisms.
3. The most important methods used to preserve Cultures of Interest for Industrial Microbiology and Biotechnology.
4. The main factors that affect the final choice of individual raw materials are as follows.
5. What are the methods used in the genetic manipulation of industrial microorganisms? And What is the purpose of using it?

Q 3: Briefly answer each of the followings: (8 Marks)

1. How can you classified of protease?
2. Compare between Mutagens and Protoplast fusion.
3. Uses of α -Amylase in different industries.
4. Mechanism of action Microbial Penicillin.

Q 4: (A): What are the conditions to be taken into account in the design and construction of industrial fermenters? (4 Marks)

(B): What is the chemical composition of the starch molecule? And What mechanism does microbial enzymes produce in their analysis? (4 Marks)

Q 5: (A): What is foam? And what are the most important methods to control it ?indicating the Ideal Properties of anti-foam? (4 Marks)

(B) : Summarized the technology of producing a genetically engineered bacterium . (4 Marks)

Best of luck
كلية العلوم
اللجنة الامتحانية
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Head of Department
Assist.Prof . Dr. Hanaa.Ali.Aziz

كلية العلوم
قسم علوم الحياة
اللجنة الامتحانية
المسائية

Lecturer
Assist.Prof.Maitham.A.Makei



15 MAY 2024

((أسئلة الامتحانات النهائية) الفصل الدراسي الثاني السنة الدراسية (2023-2024))

44

س1) غالباً ما يستخدم اختبار معدل ترسب (التثقل) كريات الدم الحمراء لعينة الدم كتشخيص للاضطرابات المناعية للجسم وبعض الامراض الاخرى. بافتراض ان كريات الدم الحمراء هي عبارة عن كرة قطرها تقريباً $(5\mu\text{m})$ وكثافتها (1.125g/ml) وكثافة ولزوجة البلازما التي تستقر بداخلها كريات الدم الحمراء (1025 Kg/m^3) ، $(1.5 \times 10^{-3}\text{ Pa.s})$ على الترتيب والتعجيل (10m/s^2) أوجد: (4درجة)
1- معدل ترسيب (سرعة الاستقرار) لكريات الدم الحمراء؟
2- الزمن اللازم لتسقط كريات الدم الحمراء (15cm) أسفل انبوب الاختبار؟

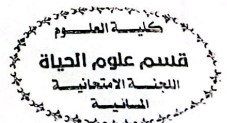
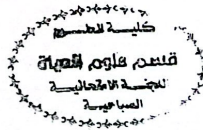
س2) ما المقصود بالامتزاز؟ وما الفرق بين الامتزاز الفيزيائي والامتزاز الكيميائي؟ (5 درجة)

س3) حول القيم التالية الى الوحدات المقابلة لكل منها :
1) 40 Psi \rightarrow torr 2) 2520 mmHg \rightarrow Psi

س4) وضع بالتفصيل الية الانتشار عند وضع قطرة سائل مثل (A) على سطح سائل اخر مثل (B)؟ (5 درجة)

س5) تم حقن دواء في ذراع مريض بمعدل تدفق (500mL/min) من خلال ابرة بقطر داخلي 1.2mm ، علماً ان كثافة الدواء 1040kg/m^3 ولزوجة $8.4 \times 10^{-4}\text{ Pa.s}$ فهل التدفق صفائحي ام مضطرب؟ (10 درجة)

تمنياتي لكم بالنجاح



أ.م.د. هناء علي عزيز
رئيس القسم

أ.علي سلمان علي
أستاذ المادة



14 MAY 2024

((Assessment of the final exam for the second semester))

45

Academic year 2023 -2024

Q1/ Define the following for **five** only: (10 mark)

- | | | |
|--------------|--------------------|-----------------------------|
| 1) Chiasmata | 2) Metamorphosis | 3) Phylogenetic development |
| 4) Morula | 5) Corpus albicans | 6) sertoli cells |

Q2/ Answer each of the following? (10 mark)

- A/ What are the branches of embryology ?
B/ Explain the effect of estrogen production ?

Q3/ Mention **in detail** the phases of fertilization? (5 mark)

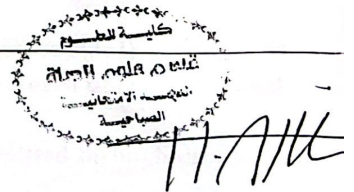
Q4 / Choose one for the following : (10 mark)

- 1- The pair of homologous chromosomes nears each other to form -----
a- Zygote -b- Synapses c- Haploid
- 2- Crossing over happened in -----
a- Pachytene -b- Leptotene c- Metaphase
- 3- ----- take place from puberty to death.
-a- Oogenesis b- Ovulation c- Spermatogenesis
- 4- Testis is ----- organ
a- Endocrine b- Exocrine -c- Mixed
- 5- Leydig cell produce -----
-a- Testosterone b- Luteinizing H. c- Estrogens

Q5/ Enumerate the external events that regulate the cell cycle? (5 mark)



Lecturer
Ass.Prof. Dr. Wafaa Abdulmutalib Naji



Head of Department
Ass.Prof. Dr. Hanaa Ali .



Q1//A- Choose the correct answer (4M)

- 1- The third line of immunity is called -----
a- innate immunity b- natural immunity c- adaptive immunity d- Macrophages
- 2- ----- is the molecular study of genomes
a- Gene b- Genome c- Genomics d- Genetics
- 3- According to the Typical Water Quality Standards, the acceptable number of fecal coliforms/100 ml in the fish and wildlife habitat is -----
a- 200 b- 500 c- 14 d- 100
- 4- -----E. coli, which cause hemorrhagic colitis and hemolytic uremic syndrome.
a- Enteroggregative b- Enteroinvasive c- Enterotoxigenic d- Enterohemorrhagic

B- Differentiate between the following? (4M)

- 1- Passive immunity & Active immunity
- 2- Naturally acquired immunity & Artificially acquired immunity

Q2// A- Define the following: - (6M)

- 1- Xanthan 2- Probiotic 3- Fermentation

B- Describe the following in detail? (5M)

- 1- DNA semiconservative 2- Fecal Coliforms

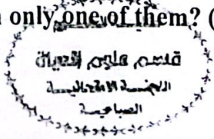
Q3// Explain the following questions. (12M)

- 1- Characteristics of bacterial chromosome
- 2- Functions of microbes in soil
- 3- Applications of genetic engineering
- 4- The presence of fungal in the air

Q4// A- How do we get the gene during recombinant DNA? (3M)

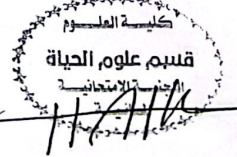
B- When the industrially useful metabolite is produced during the growth cycle? (3M)

C- What are the most common pathogens transmitted through the soil and explain only one of them? (3M)



Lecturer
Asst. Prof. Dr. Noor Sami About

Best of luck



Head of department
Asst. Prof. Dr. Hanaa Ali Aziz



13 MAY 2024

((Assessment of the final exam for the second semester))
Academic year 2023-2024

45

Q1\ Choose the correct answer (5 M)

1-Cell wall is present only in

a-plant b-fungi c-bacteria d- all of these

2Cell membrane composed from

a-cellulose b- lipid c- protien d- lipid & protien

3-Plastid have

a-two type b- one type c- three type d- four type

4- Disadvantage of transpiration is

a-wasted energy b- loss of water c- increase acidity d- all of these

5- Hypotonic solution is

a-heigher osmotic pressure b- lower osmotic pressure c- Neutral osmotic pressure d- all of these

Q2\What is the main function for these organs (mention four function only) (8 M)

Cell wall , Nucleus , Chloroplast , Ribosome

Q3A- Mention affecting factors on plant transpiration (5M)

B-What is important of diffusion in plants (5 M)

Q4A-Clarify light dependent reaction (4 M)

B-What is meaning of isotonic solution and hypotonic solution (4 M)

Q5\ Choose two only (9 M)

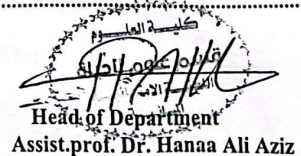
A-Explain opening and closing of stomata

B-Effect of osmosis on cells

C-What is layer of cell wall and what is mechanical properties of primary wall

Good Luck


Lecturer
Assist.prof.Dr. Ibtehal Aqeel Abdulmuneem


Head of Department
Assist.prof. Dr. Hanaa Ali Aziz



10-Each English public school had the same rules for playing football.

1-True 2-False

Q3: Read the following passage and answer carefully the following questions. (Choose 5 points only and each point 2 Marks).

(10 Marks)

No single invention changed the landscape and the character of the American West as much as barbed wire. After the Civil War, the western territories began to fill up with homesteaders—small ranchers and farmers whose livelihood depended on keeping free-roaming herds of cattle off their property. Split-rail fences of the type that were used back east were impractical on the treeless plains, and experience demonstrated that simple wire fences could not discourage a determined cow.

In 1874 a clever Illinois farmer named Joseph F. Glidden devised an efficient method of attaching pointed bars to interwoven strands of ordinary wire. Soon other inventors were developing variations on his idea. Their combined efforts had a momentous effect: The wide-open plains could now be fenced economically and subdivided into small parcels.

Cattle barons, who had long regarded the vast stretches of western rangeland as their private domain, did not take kindly to this development. Using hired guns to carry out their dirty work, they began a widespread campaign of vandalism, intimidation, and even murder against fence-building homesteaders. But they could not stem the tide of change: With the strength of numbers and the weight of the law on their side, the homesteaders prevailed.

1. The main point of this passage is that barbed wire fences

- A. made a huge impact on the make-up of the American West., B. ruined the land in the American West.
C. hurt the American economy., D. made inventors rich.

2. According to the passage, barbed wire fences

- A. was economical., B. replaced split-rail fences., C. were built by cattle barons., D. were against the law.

3. According to the passage, cattle barons

- A. believed rangeland belonged to them. B. were in favor of change. C. outnumbered homesteaders. D. preferred split-rail fences to barbed wire fences. E. were intimidated by homesteaders who used barbed wire fences.

4. In the context of the passage, the word "momentous" (line 9) most likely means

- A. a moment in time. B. comforting. C. significant. D. small.

5. This passage is primarily made up of

- A. generalizations B. comparisons. C. facts. D. arguments.

6. Which invention had the most significant impact on the American West's landscape and character?

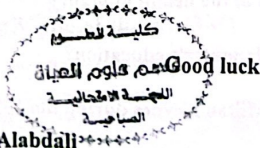
- A) Split-rail fences B) Simple wire fences C) Barbed wire D) Pointed bars

Q4: Write a paragraph on What are the pros and cons of bringing up a family in another country? Make two lists. The positive You get the best from two cultures. You don't feel completely at home in either of them?

(10 Marks)

Lecturer

Asst. Prof. Dr. Yasir Adil Alabdali



Head of Department
Asst. Prof. Dr. Hanaa Ali Aziz

Q1: Choose to correct answer for these sentences: (each point 2 Marks) (20 Marks)

1- I read a lot when I a child.

a) had to / had been, b) am used to / used to be, C) have / have been, D) used to / was

2-The sun ___ since dawn.

A) rises, B) is rising, C) rose, D) has risen

3-They ___ in the same neighborhood for ten years.

A) become, B) is, C) are, D) have been

4-The world a lot since the days we were children.

A. will change, B) should change, C) is changing, D) has changed

5-She is ___ student in ___ English class.

A) - / the, B) an / a, C) the / the, D) a / the

6-She _____ (practice) her presentation for tomorrow's meeting.

A) practices, B) practiced, C) will practice, D) is practicing

7-The trees in the park _____ by the gardeners every week.

A) is watering, B) are watering, C) waters, D) are watered

8-In 1969, Neil Armstrong and Buzz Aldrin _____ on the moon, and since then, only a few astronauts _____ the same feat.

A) landed / have accomplished, B) land / accomplished, C) were landing / have accomplished
D) have landed / accomplished

9-The Taj Mahal _____ by Emperor Shah Jahan.

A) is built, B) was built, C) built, D) has built

10-You should _____ the report by tomorrow morning.

A) have to, B) had to, C) must, D) have had to

Q2: Choose the True or False answer for the following sentence (each point 2 Marks) (20 Marks)

1-Prince Charles' bath towel is folded over a chair in a particular way for when he gets out of his royal bath

1-True 2-False

2-The Friar agreed to marry Romeo and Juliet in secret, hoping to end the feud between their families.

1-True 2-False

3- Juliet's father arranged for her to marry Paris, a nobleman.

1-True 2-False

4-The Chinese game called tsu chu is the earliest known form of football.

1-True 2-False

5- Van Gogh died by shooting himself in the chest.

1-True 2-False

6- Guests at Prince Charles' home are entertained in the height of luxury

1-True 2-False

7-Qu and Liu are saving every last yuan for their daughter's education?

1-True 2-False

8-Did Jon, the father, grow up in a large house in Milton Keynes during the 1970s?

1-True 2-False

9-Joanne's favorite subjects in school were mathematics and science.

1-True 2-False



Q1//A- Choose the correct answer (4M)

- 1- The third line of immunity is called -----
a- innate immunity b- natural immunity c- adaptive immunity d- Macrophages
- 2- ----- is the molecular study of genomes
a- Gene b- Genome c- Genomics d- Genetics
- 3- According the Typical Water Quality Standards, the acceptable number of fecal coliforms/100 ml in the fish and wildlife habitat is -----
a- 200 b- 5000 c- 14 d- 100
- 4- -----E. coli, which cause hemorrhagic colitis and hemolytic uremic syndrome.
a- Enterococci b- Enteroinvasive c- Enterotoxigenic d- Enterohemorrhagic

B- Differentiate between the following? (4M)

- 1- Passive immunity & Active immunity
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Q2// A- Define the following: - (6M)

- 1- Xanthan 2- Probiotic 3- Fermentation

B- Describe the following in detail? (5M)

- 1- DNA semiconservative 2- Fecal Coliforms

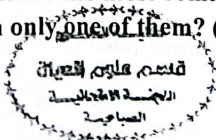
Q3// Explain the following questions. (12M)

- 1- Characteristics of bacterial chromosome
- 2- Functions of microbes in soil
- 3- Applications of genetic engineering
- 4- The presence of fungal in the air

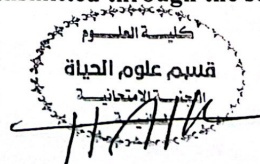
Q4// A- How do we get the gene during recombinant DNA? (3M)

B- When the industrially useful metabolite is produced during the growth cycle? (3M)

C- What are the most common pathogens transmitted through the soil and explain only one of them? (3M)



Best of luck





((Assessment of the final exam for the second semester)) 12 MAY 2024
Academic year 2023-2024

45

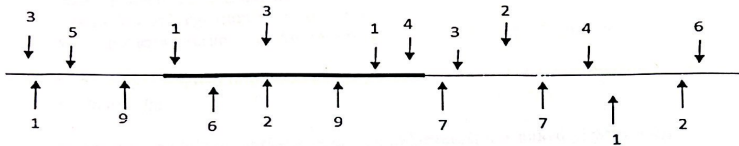
Q1- A- Explain each of the following: (4 marks)

Downstream processing, GMO, YAC, traditional biotechnology

B- Describe the basic steps of a bioengineered biotechnology process. (3 marks)

Q2-A- Describe the restriction endonuclease types. (2 marks)

B- a specific gene below (bold line) we need to cut it for the purpose of gene cloning, chose the correct number of RE (arrows) that is suitable to cut this fragment of gene. (6 marks)



Q3- A- There are tools necessary for gene cloning, explain these tools. (3 marks)

B- Explain the difference between: (3 marks)

cloning plasmid and expression plasmid, transfection and transduction

Q4- How can we ensure that cloned gene was ligated positively in case of cloning plasmid and expression plasmid? (5 marks)

Q5- I need to clone a gene for recombinant protein expression, so, is it better to use (Plac promoter or T7 promoter) and (PACYC plasmid or PSC101 plasmid) and explains why? (4 marks)

Q6- How we can induce recombinant protein expression in vitro? Explain in details. (5 marks)

Q7-A-What are the advantages and disadvantages of cytoplasmic and periplasmic proteins? (2 marks)

B- Describe the types of column chromatography. Talk about the most perfect column use for purification and why? (3 marks)

Professor
Dr. Laith AbdulHassan M. Jawad

قسم علوم الحياة
Head of Department
Assist. prof. Dr. Hanaa Ali Aziz



(Assessment of the final exam for the second semester)

11 MAY 2024

45

Academic year 2023-2024

Q1/ Choose the correct answer for all the following sentences: (8 Marks)

- The Standard Endings of Sub phylum in mycology is
A. Mycota B. Mycotina C. Mycetidae
- It is a Plasmodial remnant funning the base for one or more fruiting bodies, it is connect the stalk to the substrate.
A. Capillitium B. Hypothallus C. Peridium
- Zoospores are biflagellate, having one short posterior whiplash and another long anterior tinsel flagellum
A. Oomycota B. Hyphochytriomycota C. Labyrinthulomycota
- Sexual reproduction is oogamous. Oospore wall is smooth ornamented germinates by the production of large number of zoospores
A. Peronosporaceae B. Albuginaceae C. Saprolegniaceae
- Its branches inflated into bulbous apophyses on which sterigmata bearing a sporangium.
A. *Bremiella* B. *Plasmopara* C. *Bremia*
- It is reside as obligate parasite in mosquito larvae, it has naked plasmodium like thallus.
A. *Coelomomyces* B. *Allomyces* C. *Monoblepharis*
- They are commonly known as 'pin molds' because of their sporangia that appear as black dots in the cob-web like hyphae
A. *Endogonales* B. *Entomophthorales* C. *Mucorales*
- It is commonly called fly fungus, found on dead bodies of house fly
A. *Pilobolus*. B. *Entomophthora muscae* C. *Basidiobolus*

Q2/ Answer (TWO only) from the following : (8 Marks)

- What are the major Anatomical Characters used in the classification of fungi
- What are the main differences between between four orders of Trichomycetes
- Classify scientifically *Saprolegnia sp.* and explain with drawing only the life cycle pattern of this genus.

Q3/ (A): Compare between : (4 Marks)

- Zoospores of in Labyrinthulales and Thraustochytriales
- Synchytrium* and *Rhizophyidium*.

المرحلة : الثانية
المادة : كيمياء حيائية II
الوقت : ساعة
التاريخ : 2023/ / 15. 09. 2023



وزارة التعليم العالي والبحث العلمي
جامعة المنيا
كلية العلوم
قسم علوم التربة والبيئة
البيئية

((أسئلة الامتحان النهائي للفصل الدراسي الثاني للسنة الدراسية 2022 - 2023))

45

س1/ أ- عرف رقم التصبن؟ واي الاحماض الدهنية ادناه تتوقع ان يكون اكبر رقم تصبن ولماذا ؟ (4 درجة)



س2/ أ- ما هو التزنخ Rancidity ؟ وما هو اهم اسبابه؟ وكيف يمكن منعه او التقليل منه؟ (4 درجة)

س2/ ب- ما هو محلول هانس وكيف يمكن تحضيره؟ (2 درجة)

س3/ احسب الرقم الحامضي لعينة من زيت الطعام وزنها نصف غرام تم تسحيحها ضد محلول KOH تركيزه 0.7 مولاري فكان الحجم النازل من السحاحة 2.5 مل ؟ (6 درجة)

س4/ ما هي النواتج الرئيسية والوسطية للتحلل بفعل الانزيمات التالية: (4 درجة)

1- الامليز؟

2- السكريز؟

تمنياتي لكم بالنجاح

رئيس القسم
ا.م.د. هناء علي عزيز

أستاذ المادة
م.م. مراد كدر مناحي



Q3: Read the following passage and answer carefully the following questions. (10 Marks)

"In Search of Our Mothers' Gardens" And I remember people coming to my mother's yard to be given cuttings from her flowers; I hear again the praise showered on her because whatever rocky soil she landed on, she turned into a garden. A garden so brilliant with colors, so original in its design, so magnificent with life and creativity, that to this day people drive by our house in Georgia—perfect strangers and imperfect strangers—and ask to stand or walk among my mother's art. I notice that it is only when my mother is working in her flowers that she is radiant, almost to the point of being invisible—except as Creator: hand and eye. She is involved in work her soul must have. Ordering the universe in the image of her personal conception of Beauty.

Her face, as she prepares the Art that is her gift, is a legacy of respect she leaves to me, for all that illuminates and cherishes life. She has handed down respect for the possibilities—and the will to grasp them. For her, so hindered and intruded upon in so many ways, being an artist has still been a daily part of her life. This ability to hold on, even in very simple ways, is work black women have done for a very long time.

1. The author's mother creates gardens because (2 Mark)

A. many people admire her flowers, B. her soul needs to create beauty, C. she likes to give her flowers away, D. she needs a hobby, E. the author likes to walk in her garden.

2. The tone of the passage is (2 Mark)

A. objective, B. respectful, C. bitter, D. ironic, E. sarcastic.

3. The reference to "Creator" in line 7. (2 Mark)

A. suggests that the mother credits God for her talent.,
B. suggests that the mother is God-like in her ordering of the universe
C. suggests that the mother is invisible when she is gardening.
D. explains the religious legacy which the mother has passed to the author
E. explains the supernatural source for the radiance which surrounds the mother.

4. In the last two lines, "work black women have done for a very long time" refers to (2 Mark)

A. persevering in the face of difficulty.
B. doing artistic yard work.
C. setting a good example for children.
D. sharing creations with others.
E. being expected to work very hard.

5. The legacy given to the author by her mother is respect for (2 Mark)

A. the will to grasp life's possibilities., B. the admiration of perfect strangers, C. all gardeners., D. her mother's religion., E. art as ornamentation.

Q4: Write an essay of about 150 words. The essay is about a time in your life when everything went wrong. Choose one of these subjects to write your essay. (10 Marks)

- The day you woke up late for an exam
- A terrible day at work
- An argument with your best friend
- Your worst birthday ever
- An awful wedding

Lecturer

Assist prof. Dr. Yasir Adil Alabdali

Good luck

Head of department
Prof. Dr. Faiq Hassan Ali



((Assessment of the final exam for the first semester))

45

Academic year 2022-2023

Q1: Choose to correct answer for these sentences:

(20 Marks)

1-Bill and Jane were very tired because they _____ on stage for hours.

(2 Mark)

A. have danced, B- were dancing, C-dance, D-had been dancing

2-George and Kate _____ their dog in the park _____ 10 o'clock.

(2 Mark)

A-are going to walk / still, B-are walking / yet, C-has walked / for, D-have been walking / since

3-Find out the Adjective 'Care'

(2 Mark)

A-Carelessness, B- carefulness, C-caringly, D- careful

4-If Poland's presidential election _____ as expected—with victory for a dull, worthy economic reformer—then the rest of Europe _____ up.

(2 Mark)

A-went / couldn't have looked, B-will go / haven't looked, C-went / wouldn't be looked, D-had gone / wouldn't have looked, E-had gone / shouldn't have looked

5- Thomas wants to travel to Europe next summer. He _____ his money.

(2 Mark)

A- should to save, B-shouldn't save, C- should saves, D- should save

6- Last year a lot of women preferred long skirts. But, this year short skirts are in _____ again.

(2 Mark)

A- fashion, B- absence, C- respect, D- popular

7- Eva, Thomas, and Robert _____ Hong Kong many times.

(2 Mark)

A- have been to, B- been to, C- have been, D- have been of

8- _____ at the moment, I'll go to the shops.

(2 Mark)

A- As it isn't raining, B-As it doesn't rain, C-For it isn't raining, D- For it doesn't rain

9- I pulled the handle _____, I could.

(2 Mark)

A-so hardly as, B-as hardly as, C- as hard as, D-so hard as

10-Taxi-driver Phil Young is celebrating a very special anniversary today. It is exactly one year since he _____ at St Bartholomew's Hospital.

(2 Mark)

A-Operated on, B- were operating to, C- was operated on, D- operates, E- are Operated on

Q2: Choose to correct answer for these sentences:

(20 Marks)

1- Are you attending the reception today

(2 Mark)

A-False, B- True

2- I didn't write it. That is not my signature on the cheque.

(2 Mark)

A-False, B- True

3- He has no luck of winning.

(2 Mark)

A-False, B- True

4-Jackson he is a sergeant that want to drink brandy with his husband Alice.

(2 Mark)

A-False , B-True

5-Russell was sleep when the thief enters the house and his parents were scream.

(2 Mark)

A-False , B-True

6-The things produced by Polish manufacturers so good as having very big mass.

(2 Mark)

A-False , B-True

7-The most of the people in the USA are immigrants.

(2 Mark)

A-False , B-True

8-Around 2900 AC, paper and hieroglyphics transformed Egyptian life.

(2 Mark)

A-False , B-True

9- He is not their salve; they don't own him this speech by Jane Sands London.

(2 Mark)

A-False , B-True

10-The first meeting between Donna and Terry was in first football match and they feel in love. (2 M.)

A-False , B-True



الامتحان النهائي للطلاب
الدرجة: 40
الوقت: 3 ساعة
(Assessment of the final exam for the Second semester)

45

Academic year 2022-2023

Q1/ A- Choose the correct answer (choose five only) (5M)

- 1 - ----- encodes many potentially oncogenic producers and cause Kaposi sarcoma (KS)
a- Herpes simplex virus type-1 (HSV-1) b- Cytomegalovirus (CMV)
c- Human herpes virus type-8 (HHV-8) d- Epstein-Barr virus (EBV)
- 2- The ----- vaccine is safer than other types of vaccines
a- Live attenuated b- childhood vaccines c- Killed d- Subunit
- 3- ----- antibodies are responsible for most antiviral activity in serum, while ----- is the most important antibody when viruses infect mucosal surfaces.
a- IgM, IgA b- IgG, IgA c- IgG, IgM d- IgA, IgG
- 4- The virus particle contains the host cell DNA instead of the viral DNA inside the capsid is called -----
a- viroid b- pseudoviruses c- virion d- prion
- 5- Indirect cell damage and death from viral infection may result from-----
a- Integration of the viral genome
b- Diversion of the cell's energy
c- Shut off of cell macromolecular synthesis
d- Competition of viral mRNA for cellular ribosomes
- 6- The ----- virus is assembled and obtains its envelope from the endoplasmic reticulum, not from the plasma membrane
a- Influenzaviruses b- Herpesviruses c- Coronaviruses d- Retroviruses

B- What are the mechanism of action of antiviral drugs?(3M)

Q2/A-Give a scientific reasons for the following questions (choose two only) (4M)

- 1- Why does not the antigenic change appear in the birds?
- 2- Why is the nucleic acid important part of virus structure?
- 3- Why do viruses consider linked between living and nonliving things?

B- Explain the role of natural killer (NK) cells against viral infection? (3M)

Q3/A- What are the structure of Coronaviruses? (3M)

B- List the steps of replication in viruses, and explain the late events?(4M)

Q4/ Differentiate between the following? (10M)

- 1- Influenza types A & Mumps
- 2- SARS-CoV & SARS-CoV-2
- 3- Primary & Recurrent infection of Varicella-Zoster virus (VZV)
- 4- Icosahedral & Helical symmetry

Q5/ Describe the following: (8M)

- 1- General characteristics of Herpesviruses
- 2- Roles of immune functions during viral infections
- 3- Common types of cytopathic effect (CPE)
- 4- Importance of envelope for viruses

Lecturer

Asst. Prof. Dr. Noor Sami Aboud

Head of department

Asst. Prof Dr. Hanaa Ali Aziz



13.02.2023

((Assessment of the final exam for the 2^{ed} semester))
Academic year 2022-2023

45

Q1:: Explain the reasons for the increase in environmental pollution in recent decades. (6 Marks)

Q2:: Match for each of the following: (6 Marks)

- | | |
|------------------|---------------------------|
| 1- CN-Cd complex | a- Essential metal. |
| 2- Disinfectants | b- Environmental disaster |
| 3- Zn | c- Noise pollution |
| 4- Methane | d- IPM |
| 5- Pest control | e- HOCl |
| 6- Great smog | f- Synergism |
| | g- Global warming |

Q3:: Define for each of the following: (Answer 5 only) (10 Marks)

- 1- Troposphere. 2- Chlorofluorocarbons. 3- Isotopes. 4- TDS. 5- Water treatment.
6- Soil pollution.

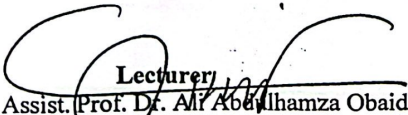
Q4:: Answer for each of the following: (Answer 2 only) (10 Marks)

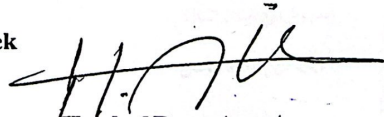
- 1- What do mean absorbed dose? Clarify.
2- Mention the main functions of soil.
3- Explain briefly the effects of solid waste pollution.

Q5:: Compare between each of the following: (8 Marks)

- 1- Classical smog and photochemical smog.
2- Polyhaline water and Oligohaline water.

Best of luck


Lecturer
Assist. Prof. Dr. Ali Abdulhamza Obaid


Head of Department
Assist. Prof. Dr. Hanaa Ali Aziz



س1: اختر الاجابه الصحيحه : (5 لفظ) (5 درجات)

1. تنتمي الاسكارس الى شعبه: ا- الابدانيات ب- الديدان المسطحه ج- الديدان الخيطيه د- كلما سبق
2. المضيف الوسيطى لدوده الاكياس المائيه ا- الانسان ب- الابقار ج- القطط د- اوب صحبه
3. تقسم الاصابه بالمalaria الى : ا- 3 انواع ب- بنوعان ج- 4 انواع د- ليس مما سبق
4. تكون البيوض في المنشقات : ا- مغطاة ب- ذات شوكة ج- مجننه د- ذات اظلفه
5. تحاط الديدان الخيطيه ب: ا- الجليد ب- كيوتكل ج- غشاء مهذب د- شعيرات
6. تختلف الديدان المسطحه حسب: ا- مضائق وسطيه ب- تفرعات الامعاء ج- اشكالها د- كل ما سبق

س2: اجب بصح او خطأ عن كل ممايتي : (5 لفظ) (5 درجات)

- 1- *Bulinus* Clonorchis sinensis المضيف الوسيطى له الفوق *Bulinus*.
- 2- *Fasciola hepatica* تحوي بيوضها على غطاء *operculum*
- 3- *Paragonium* Pulmonary distomiasis مرض يسببه
- 4- الاصابه بالمنشقات تكون على 3 مراحل
- 5- تعتمد وبائيه مرض النوم على تواجد الحشرات الناقله
- 6- من السوطيات التي تتكاثر في عضلات القلب *T. gambiense*

س3: علل ما ياتي : (5 لفظ) (10 درجات)

- 1- تسمى الديدان الخيطيه بهذا الاسم ؟
- 2- المنشقه اليباتيه اكثر ضرر من اجناس المنشقات الاخرى ؟
- 3- يعتبر التخلص من النواعم خطوه مهمه في عمليه السيطرة على انتقال الامراض ؟
- 4- تسمى الدوده *Diphyllobothrium latum* بالدوده العريضه ؟
- 5- يعتبر السيطرة على الديدان الخيطيه امر صعب ؟
- 6- لا تكون كل بيوض الاسكارس معيه ؟

س4: ا/ ماهي الاعراض المرضيه للاصابه بالمalaria ؟ (10 درجات)

ب/ وضح الاسباب الرئيسيه البعوض ناقل رئيس للمalaria ؟

س5: صمم مخطط للمنشقات الدمويه ذاكر ا صفات هذه الديدان والامراض التي تسببها وامان الاصابه والطور التشخيصي لكل

جنس ؟ (10 درجات)

رئيس القسم

امنياتنا لكم بالنجاح والتوفيق

اسم وتوقيع أستاذ المادة

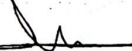
أ.م.د همام علي عزيز

أ.م.د نهى محمد موسى

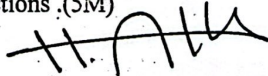


((Assessment of the final exam for the 2nd semester)) 5. 09. 2023
Academic year 2022-2023

- Q1-Draw the scheme of :- fructose metabolism(1M)
oxidative stage of HMP (2M) carnitine transport system (2M)
- Q2-Draw the structure of (5M):- UDP-glucose , MAG , DHAP, Lactate ,
PEP .
- Q3-Explain why:- a- cellulose is not digested(2M) b- action of salivary amylase
stops in stomach(1M) c- Lipids are transported(2M)
- Q4-How many ATP produced from oxidation of fatty acid (20 C) during B-oxidation
?Draw the reaction steps .(5M)
- Q5-Write short notes on :- pancreatic proteolytic enzymes (3M)
disease of carbohydrates metabolism(2M)
- Q6-Name the enzyme responsible for(5M) :-
I- phosphorylation of galactose , II- conversion of pyruvate to acetyl -CoA
III-Oxidation and phosphorylation of -glyceraldehyde -3-P
IV-phosphorylation of fructose V-isomerization of glucose to fructose in glycolysis
- Q7-Differ between (answer 5 only):- Aldolase A& aldolase B(1M)
glycogenesis & glycogenolysis(1M) , pepsin & trypsin (1M)
aerobic& cells anaerobic (1M) glucokinase& hexokinase (1M)
GLUT 3 & GLUT 5 (1M)
- Q8- Consider 8-glucose molecules .How much NADH and FADH₂ is yielded form
oxidation using Citric Acid Cycle? Draw krebs cycle reactions .(5M)


Instructor
Dr.Muna.H.Saoudi

((Good luck))


Head of Department
Dr.Hana Ali Aziz



((Assessment of the final exam for the first semester))

Academic year 2022-2023

13. 09. 2023 45

- Q1: Choose to correct answer for these sentences: (20 Marks)**
- 1- Tourists ---- when large numbers of middle-class people ---- to join the wealthier aristocratic travellers. (2 M)
A- have originated / had begun, B- had originated / began, C- could have originated / have begun
D- originated / began, E- were originating / are beginning
- 2- The wounded hunter ----- on the ground for almost an hour when, coincidentally, he ----- by another hunter, who must have keen eyes. (2 Marks)
A- has been lying / is spotting, B- has lain / will be spotted, C- will have lain / had been spotted, D- had been lying / was spotted, E- was lying / spotted
- 3- ---- you have made minimal progress, it is by no means the kind of progress that you need to make. (2 Marks)
A- What, B- Despite, C- In addition to, D- While, E- On behalf of
- 4- I'd like lemonade with sugar in it, please. (2 Marks)
A- the / the, B- a / a, C- some / a, D- a / some, E- a / the
- 5- She didn't want anything that would influence his decision. (2 Marks)
A- having said, B- saying, C- in order to say, D- to say, E- to be said
- 6- I'm sure we ___ on better terms with the manager if she ___ us so disrespectfully all the time. (2 M.)
A- would be / didn't treat, B- have been / weren't treating, C- were / hadn't been treating, D- will have been / isn't treating, E- can be / hadn't treated
- 7- If I had saved enough money last year, _____. (2 Marks)
A- I still can't pay the bill, B- I would have gone to Europe this April, C- we might even be able to buy a car, D- I was also working as a shop assistant, E- we had been staying in a big hotel
- 8- We invited _____ friends over to our house for a barbecue. (2 Marks)
A- Few, B- a few, C- much, D- few of
- 9- I like many of her songs, but not _____ of them are good. (2 Marks)
A- All of, B- all, C- all that, D- non
- 10- They _____ a big problem. (2 Marks)
A- have got, B- can, C- is, D- has got
- Q2: Choose to correct answer for these sentences: (20 Marks)**
- 1- Adultescent is a speech by Professor Furedi that discusses a social problem related to young people who are unemployed and suffer from job hunting. (2 Marks)
A- False, B- True
- 2- Mr. Serpe decided to put Redman in jail in order to control forest fires. (2 Marks)
A- False, B- True
- 3- Lydia was hanging by her hands from the balcony railings, while the man in the opposite direction was dancing and singing. (2 Marks)
A- False, B- True
- 4- Paul Burrell was a detector who revealed the entire truth about the Diana Conspiracy. (2 Marks)
A- False, B- True
- 5- Tarzan is a coffee shop where people can relax and unwind. (2 Marks)
A- False, B- True
- 6- Saroo's mother was particularly skilled at grasping. (2 Marks)
A- False, B- True
- 7- In Bangladesh, plastic bags have been phased out and replaced with natural carrier bags. (2 Marks)
A- False, B- True
- 8- When you go for a job interview, it's important to make a good impression. (2 Marks)
A- False, B- True
- 9- The primary distinction between the present simple and the present continuous is that the former is a permanent action, whereas the latter is temporary or ongoing. (2 Marks)
A- False, B- True



(Assessment of the final exam for the first semester)

45

Academic year 2022-2023

10- The introduction of the iMac in 1997 was done for controlling the dominance of Windows software. (2 M.)
A-False, B-True

Q4: Read the following passage and answer carefully the following questions. (10 Marks)

In a recent New York Times Sunday magazine article on school textbooks, writer Robert Reinhold described California's new history series as filled with colourful charts, graphs, time lines, maps, photographs in a format suggestive of the newspaper USA Today." There it is again. Since when did USA Today become the national design ideal? Everywhere you look you find USA Today used as an analogy to describe a noteworthy design format. Making Ideas "accessible" is the operative term for the information age. But too often information is drained of its significance in the name of accessibility.

Some things are designed for reading: scholarly journals, literary reviews, financial pages, and their ilk are fairly impenetrable to the casual page flipper. Other objects like USA Today, annual reports, fashion magazines, and so on are for looking. (Haven't you heard in the course of a design project someone say, only half in jest, no one actually reads the copy, just make it look good. Then there are the gravy areas. These include newsmagazines and textbooks, which imply reading but are increasingly about looking. If you compare Time or Newsweek or a fifth grade schoolbook of twenty years ago to their present incarnations, the change is remarkable. The headlines are bigger, the captions are bigger, the photographs, charts, and call-outs are all bigger. Something had to go, someone must have decided, and what went was the text.

1. Who is the most likely audience for this passage? (2 Marks)

A. Readers of USA Today. B. Public officials who regulate communication. C. People who design texts for publication. D. Reporters for USA Today. E. School administrators.

2. What is the best way to describe the effect USA Today has had on other publications, according to the author? (2 Marks)

A. It has made them more readable and interesting. B. It has caused newspapers and magazines to lose readers. C. It has lowered their standards to emphasize visual style over substance. D. It has suggested ways in which they can emphasize "reading" over "looking." E. It has forced them to become more competitive in order to stay in business.

3. What term best represents the meaning of "copy" (line 11)? (2 Marks)

A. design. B. captions. C. writing. D. imitation. E. pictures

4. Of the following types of publications, on which one has USA Today had the most visible impact, according to this passage? (2 Marks)

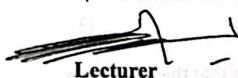
A. newspapers. B. fashion magazines. C. scholarly journals. D. textbooks. E. annual reports

5. The author is trying to draw attention to (2 Marks)

A. changes in the publishing industry due to technological innovation. B. the irresistible push for everything to be bigger and better. C. the importance of communicating ideas clearly to all readers. D. the problem of publications that sacrifice depth of ideas for readability. E. the impact of reading in our society in general.

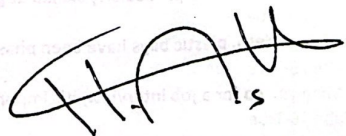
Q4: Write an essay of about 150 words. The essay is about where a good place would be to do these things good place would be to do these things. use these points to write your essay. (10 Marks).

- Have a holiday home
- Spend a relaxing weekend
- Have a picnic on a summer's day
- Escape from the world for a month.


Lecturer

Assist prof. Dr. Yasir Adil Alabdali

Good luck



Head of department
Prof. Dr. Faiq Hassan Ali



((Assessment of the final exam for the second semester))

45

Academic year 2022-2023

Q1\ Put True or False for each following (10 M)

- 1- The cell wall was first seen by Robert Hook
- 2- Diffusion play important role in photosynthesis
- 3- Transpiration is loss of water from roots
- 4- Plant cell is rectangular cell
- 5- Cell wall present in plants and animals
- 6- Two chemical reaction steps occur in dark reaction
- 7- Thickness of cell membrane between (7.5-10) nm
- 8- Photosynthesis is process occur in plant only
- 9- When cell placed in hypotonic solution called endosmosis
- 10- The energy used during absorption is wasted

Q2\ Mention four function for each following (choose five only) (10 M)

Nucleus, Chloroplast, Cell wall, Vacuole, Transpiration, Lysosome

Q3\ A- What is importance of diffusion for plants (five only) (5 M)

B- Clarify light –dependent reaction (5 M)

Q4\ Answer two branches only (10 M)

- A- Explain osmotic solution
- B- Clarify plasmodesmata
- C- Opening and Closing of Stomata

Good Luck

Lecturer

Assist.prof.Dr. Ibtehal Aqeel Abdulmuncem

Head of Department

Assist.prof. Dr. Hanaa Ali Aziz

المرحلة: الثانية
المادة: مجاميع نباتية
الوقت: 3 ساعات
التاريخ:



وزارة التعليم العالي والبحث العلمي
جامعة القادسيه
كلية العلوم
قسم: علوم الحياة

((أسئلة الامتحان النهائي للفصل الدراسي الاول للسنة الدراسية 2022-2023))

44

س١١ عرف مايتي (4 درجه)

1- البقعة العينية 2- المركز النشوي 3- الحويصلة المغايرة 4- دورة الحياة الاحادية

س١٢ اصنف الطحالب التالية تصنيف علمي كامل (8 درجة)

1- *Chlamydomonas* 2- *Nostoc* 3- *Cyclotella* 4- *Ulothrix*

س١٣ أ- ماهي صفات طحلب *Polysiphonia* مع ذكر اطوار دورة حياته (4 درجة)

ب- اذكر الاجابة الصحيحة (4 درجة)

1- يطلق على الغذاء المصنع من قيل الطحالب الحمراء

أ- *Cyanophycean starch* ب- *Floridin starch* ج- *Starch*

2- يتشابه *Chroococcus* مع

أ- *Lyngbya* ب- *Gloeocapsa* ج- *Microcystis*

3- ينتمي صف *Xanthophyceae* الى مجموعة الطحالب

أ- البنية ب- الذهبية ج- الخضراء

4- تقوم طبقة البشرة في طحلب *Fucus* بوظيفة

أ- البناء الضوئي ب- الخزن ج- الحماية

س١٤ أ- كيف يحدث التكاثر الجنسي في الدايتومات الريشية والمركزية (5 درجة)

ب- سمي الطحالب حسب الوسط الذي تلتصق عليه (5 درجة)

س١٥ أ- اجب عن فرعين فقط (10 درجة)

1- التركيب الخلوي الدقيق لطحلب اليوغلينا

2- الاشكال الخضرية لطحالب الخضراء

3- الصفات المميزة لطحالب البنية

مع تمنياتي لكم بالنجاح والموفقية

رئيس القسم: ا.د. فائق حسن علي

اسم وتوقيع
استاذ المادة: ا.م.د. ايهاب خليل عبد المعلم



((Assessment of the final exam for the second semester))

Academic year 2022-2023

45

Q1// Choose the correct answer (eight only) of the following:- (8M).

- 1- Resemble tiny grapes clustered composed of simple squamous epithelium ----- .
a- bronchioles b- alveoli c- bronchi
- 2- The type O blood group contain -----in their plasma.
a- anti-A and anti-B antibodies b- A and B antigen c- anti-B antibodies
- 3- Transports urine during micturition and carries semen during ejaculation ----- .
a- urethra b- ejaculatory duct c- *vas deferens*
- 4- Associated with feelings of sexual pleasure ----- .
a- Clitoris b- vestibule c- vagina
- 5- The anterior palate that separate nasal cavity from oral cavity become----- .
a- soft b- hard c- smooth muscle
- 6- The thick layer of smooth muscle that forms most of the wall thickness ----- .
a- myometrium b- perimetrium c- endometrium
- 7- Nucleus composed of two lobed and cytoplasmic granules stain red ----- .
a- Basophils b- Eosinophil's c- Neutrophils
- 8- The volume of semen in duple ejaculation ----- .
a- 2 - 5 ml b- 50 -150 ml c- 4-10 ml
- 9- The sites of fertilization are ----- .
a- Uterus b- Uterine tubes c- Ovaries

Q2// Give scientific reason for the following (8M).

- 1- The walls of the atria are much thinner than the walls of the ventricles
- 2- The concentration of oxygen in blood triggers the negative-feedback mechanism with regulate EPO secretion.
- 3- The keratinocytes within both thin and thick skin are so named .
- 4- The compounds of oxyhemoglobin and Deoxyhemoglobin are formed in the blood.



Q3//A:- Mention the most important heart valves according to their location and function. (4M).

B:-What is the role of the skin in regulation temperature? (4M).

Q4// Answer the following questions: (8M).

1- Enumerate steps of coagulation.

2- Type of neuroglia provide support and protection for neurons.

Q5// Compare between:- (8M).

1- Inspiration and Expiration Process.

2- Spermatogenesis & Oogenesis

Good Luck

Lecturer and Head of Department
Assist. prof. Dr. Hanaa Ali Aziz



((Assessment of the final exam for the first semester))

Academic year 2022-2023

45

س ١/ اختر الاجابة الصحيحة لكل مما يأتي (١٠ درجة)

١- تكون *E. Coli* البرازية _____
أ- مخمرة للاكتوز وتنمو بدرجة ٣٧ ب- مخمرة للاكتوز وتنمو بدرجة ٤,٥ ج- غير مخمرة للاكتوز وتنمو بدرجة ٣٧

٢- من الانواع البكتيرية التي تزيد من خصوبة التربة هي
أ- *Bacillus* ب- *Clostridium* ج- *Thiobacillus*

٣- تعطي *Klebsiella* مستعمرات _____ على وسط EMB
أ- خضراء لامعة مخاطية ب- مخاطية ج- وردية مخاطية

٤- وجودها دليل على تلوث برازي قديم _____
أ- *E. coli* ب- *S. faecalis* ج- *C. perfringens*

٥- الغرض من زرع الميكروب على وسط الدم هو معرفة
أ- قابلية النمو ب- قابلية التحلل الدموي ج- شكل المستعمرات

٦- يستخدم Anaerobic Jar لعزل _____
أ- *Bacillus* ب- *Clostridium* ج- *Staphylococcus*

٧- الغرض من وضع عينة التربة في الحمام المائي قبل عملية الزرع هو _____
أ- القضاء على الاسواط ب- القضاء على الابواغ ج- الابقاء على الابواغ

٨- عند قياس الوقت الحراري المميت _____
أ- تثبت درجة الحرارة والوقت ب- يثبت الوقت فقط ج- تثبت درجة الحرارة فقط

٩- وسط Mannitol Salt Agar انتخابي لأحتواءه على _____
أ- Sodium Chloride ب- Phenol Red ج- Mannitol

١٠- الوسط selective _____
أ- يسمح بنمو جنس دون آخر ب- يميز بين الانواع ج- ينمي غالبية الاجناس

س ٢/ اختر الاجابة الصحيحة لكل مما يأتي (١٠ درجة)

١- ليس من الضروري احتواء الوسط الصلب على الاكار (صح ، خطأ)

٢- يستخدم وسط Broth للعزل الاولي للبكتريا (صح ، خطأ)



((Assessment of the final exam for the first semester))

45

Academic year 2022-2023

- ٣- الميكروب المحاط يكبسولة تسهل قابليته على الحركة (صح ، خطأ)
- ٤- تفضل بكتريا *S.feacalis* كدليل على التلوث البرازي بالمياه (صح ، خطأ)
- ٥- يستخدم وسط EMB في الفحص الفرضي للكشف عن بكتريا القولون باستخدام اختبار درهم (صح ، خطأ)
- ٦- يتم تعقيم الاوساط الزرعية داخل المختبر باستخدام الـ Oven (صح ، خطأ)
- ٧- اغلب الميكروبات المرضية هي Mesophiles (صح ، خطأ)
- ٨- كل انواع المطثيات محللة للدم (صح ، خطأ)
- ٩- الغرض من اليود في صبغة كرام هو الحفاظ على الصبغة المعاكسة وعدم زوالها بالغسل (صح ، خطأ)
- ١٠- يكون عدد الاحياء المجهرية عالي جدا عند عمق ٢ سم من التربة (صح ، خطأ)

Good Luck

Lecturer

MSc. Wafaa Ayad Abdulqader

Head of Department

Asst.Pro.Dr. Hanaa A. Azeez

المرحلة : الاولى
المادة : الكيمياء العضوية
الوقت : ساعة
التاريخ : 2023 / /



وزارة التعليم العالي والبحث العلمي
جامعة المنيا
كلية العلوم
قسم علوم النبات والبيئة

((أسئلة الامتحان النهائي للفصل الدراسي الثاني للسنة الدراسية 2022 - 2023))

45

(6 درجة)

س1/ مالمقصود بالتالي:

- 1- درجة الانصهار
- 2- المزيج الازيوتروبي
- 3- التقطير تحت الضغط المخلخل

س2/ أ- ماهي الطريقة المناسبة لفصل مزيج مكون من الميثانول(درجة غليانه 64) والماء (درجة غليانه 100) ؟ (2 درجة)

س2/ ب- أذكر أهم الشروط الواجب توفرها في المذيب المستخدم في عملية إعادة البلورة ؟ (4 درجة)

(4 درجة)

س3/ أعط سبب لكل مما يأتي:

- 1- مركب البنتان يمتلك درجة غليان اقل من الهكسان؟
- 2- يفضل ان يتم الترشيح بسرعة في عملية إعادة البلورة ؟

(2 درجة)

س4/ أ- ما هي أهم الفروق بين التقطير التجزيئي والتقطير تحت الضغط المخلخل ؟ (2 درجة)

(2 درجة)

س4/ ب- ماهو الغرض من قياس درجة الانصهار ؟

تمنيتي لكم بالنجاح

رئيس القسم
أ.م.د. هناء علي عزيز

أستاذ المادة
م.م. مراد كدر مناحي



((أسئلة الامتحان النهائي للفصل الدراسي الثاني للسنة الدراسية 2022-2023))

44

س1- اذكر الصفات المميزة لعائلة Grylloptidae وسبب التراكيب التي تظهر عليه والبيئة المفضلة له (3 درجة)

ب / صنف الاجناس التالية تصنيفا كاملا (أجب عن خمس فقط) : (5 درجة)

1- *Belostoma sp* 2- *Nezara viridula* 3- *Liogrillus bimaculatus*
4- *Culex sp* 5- *Labia minor* 6- *Blatta orientalis*

س2 / 1- اعط السبب في كل مماياتي: (4 درجة)

1- الاطوار غير البالغة تكون مشابهة للاطوار البالغة في ذبابة مايو ؟

2- بعض أنواع حشرة الثريس تتكاثر بكريا ؟

3- تصنيف Brauer كان مقبولا من معظم علماء التصنيف ؟

4- اختلاف الة وضع البيض في رتبة Orthoptera ؟

ب / اوجز المميزات العامة لكل مماياتي : (4 درجة)

1- Frenate 2- Ground beetle 3- Weeviles 4- السمك الفضي.

س3 / 1- عرف المصطلحات التالية : (4 درجة)

1- Beak 2- protunm 3- arolium 4- furcula

ب / على ماذا تعتمد الية التصنيف لكل مماياتي: (4 درجة)

1- نطاقات طويلة القرون 2- Mallophaga 3- Tubulifera 4- Cryptocerata

س4 / 1- قارن بين كل مماياتي: (4 درجة)

1- أنواع الصراصير الثلاثة 2- Zygoptera و Anisoptera

ب- بين وصف الجسم (الشكل الخارجي) للحشرات التالية (أجب عن اربعة فقط) : (4 درجة)

1- الحشرات العصوية 2- الارضة 3- السيكادا 4- المن 5- ذات الذنب الشعري.

س5 / 1- ناقش علميا كل مماياتي : . (4 درجة)

1- كثرة التحورات في حشرة ذات الذنب القافز على الرغم من التطور فيها بسيط ؟

2- في عائلة ال grridae تكون الارجل الامامية قصيرة بينما بقية الارجل طويلة ؟

ب- وضح بالتفصيل لكل مماياتي : (4 درجة)

1- اذكر صفات انواع عائلة القمل الماص مع ذكر اسم الجنس والنوع لكل منهم ؟

2- عدد الفئات التي تنطوي تحت رتبة Isoptera وماهو طبيعة عمل كل كل فئة ولماذا سميت بهذه الاسماء ؟

امنياتنا لكم بالنجاح والتوفيق

رئيس القسم
أ.م.د. هناء علي عزيز

أ.م. محمد قاسم وهيب



((Assessment of the final exam for the second semester))

45

Academic year 2022-2023

- Q1: Answer Two of the following questions** (10 Marks)
- A- Explain the different ways for generating metabolic energy in bacteria** (5 Marks)
- B- Show the characteristic of exponential phase in microbial cell growth** (5 Marks)
- C- Enumerate the types of enzymes inhibitors with explaining one of them** (5 Marks)
- Q2:- Answer all of the following questions** (10 Marks)
- A- What are the essential nutrients that microorganisms require for growing** (4 Marks)
- B- Classify microorganisms in nutritional classes based upon:** (6 Marks)
1- Carbon Sources 2-Energy Sources 3- Electron sources
- Q3: Answer all of the following questions** (10 Marks)
- A-Explain the ways in which bacteria can perform Active transport** (5 Marks)
- B-What are the differences between Constitutive enzymes and Inducible enzymes** (5 Marks)
- Q4:- Answer all of the following questions** (10 Marks)
- A- How can bacteria synthesize lipids, (briefly explain)** (5 Marks)
- B- Describe the structure of gram negative bacteria with drawing** (5 Marks)

Good Luck

Lecturer

Asst. Prof. Dr. Yasir Adil Jabbar

Lecturer

Asst. Prof. Dr. Noor Sami Aboud

Lecturer

Dr. Dhay Ali aziz

Lecturer

Emaduldeen hatem

Head of Department

Asst. Prof. Dr. Hanaa Ali Aziz



س1// قائمة File في برنامج (Microsoft Excel 2010) تحتوي على العديد من الأوامر اشرحها بالتفصيل ؟ (14 درجة)
س2// اختر الاجابة الصحيحة لكل مماياتي :

1. اخصصار تحديد كل ورقة العمل في برنامج (Microsoft Excel 2010) هو :
a. Ctrl +C b. Ctrl +S c. Ctrl + A . C
2. غلق المستند المفتوح حالياً في برنامج (Microsoft Word) من خلال الضغط على مفتاحي :
a. (Alt+ f4) b. (Alt+ f2) c. (Alt+ f3)
3. إحدى هذه الأوامر ليست من قائمة (Insert) في برنامج (Microsoft Excel) :
a. Tables b. Margins c. Shapes
4. عند اغلاق ورقة العمل في برنامج (Microsoft Word) دون حفظها فان برنامج Word يقوم بالاتي :
a. الحفظ التلقائي ومن ثم الاغلاق b. الاغلاق دون تنبيه المستخدم c. تنبيه المستخدم بضرورة الحفظ قبل الاغلاق
5. يوجد أمر Font في برنامج (Microsoft Power Point) في تبويب :
a. Home b. Insert c. Design

س3// املن الفراغات الآتية لاربعة فقط :
1- لحفظ مستند في برنامج (Microsoft Excel 2010) لأول مرة تستخدم الأمر ولحفظ تعديلات على مستند محفوظ مسبقاً تستخدم الأمر
2- يتم غلق المستند المفتوح حالياً في برنامج (Microsoft Word) عن طريق و و
3- يمكن تشغيل برنامج (Microsoft Word 2010) من خلال قائمة ثم اختيار ثم تحديد
4- الصيغة الجاهزة في برنامج (Microsoft Excel 2010) هي
5- الصفوف (Rows) في برنامج (Microsoft Excel 2010) هي

س4// ضع كلمة (صح) أو (خطأ) مع تصحيح الخطأ أن وجد للعبارة الآتية : (10 درجة)
1) يمكن إضافة شريحة جديدة الى برنامج Power point من خلال تبويب Home ثم الأمر New Slide
2) الامر Close في قائمة File يؤدي الى غلق برنامج (Microsoft Excel 2010).
3) إخفاء صف في برنامج (Microsoft Excel 2010) تحدد الصف ثم نقر بزر الماوس الايسر على اي مكان في التحديد ونختار الامر احفاء (Hide) من القائمة .
4) تبويب Transitions في (Power point) يتم من خلاله إضافة مؤثرات فيديوية أو صوتية أو صورية للعرض التقديمي
5) العدد الافتراضي لأوراق العمل في برنامج (Microsoft Excel 2010) هي (2) أوراق .

س5// اجب عن اثنين فقط مماياتي : (10 درجة)
1) هناك العديد من الطرق لفتح برنامج (Microsoft Power point) وضحا بالتفصيل ؟
2) تبويب Home Tab في برنامج Microsoft Word يحتوي على خمس مجموعات رئيسة عددها موضحاً اهم الاوامر الموجودة في كل مجموعة ؟
3) كيف يتم حماية الأوراق Protect Sheets في برنامج (Microsoft Excel 2010)؟


رئيس القسم:

ا.م.د. هناء علي عزيز

تمنياتي لكم بالنجاح


استاذ المادة:

م.م. ايد رحيم الظالمي



((Assessment of the final exam for the second semester/ second round))
Academic year 2022-2023

45

Q1- a- Describe the basic steps of bioengineering biotechnology process. (4 marks)

b- Why we clone DNA. (2 marks)

Q2- In the history of molecular biotechnology, why was the year 1970 considered important? (4 marks)

Q3- What is an operon? And what is the biological significance of it? (6 marks)

Q4- Describe the type II restriction endonuclease? Why are they important for recombinant DNA technology? (6 marks)

مستقبل cell
mint subunit
1000 pb
25 kbp

Q5- In the DNA sequence below, how many RE sequence found? Listed them and mention it recognition site:

ATCATGGCATAAACCCCCAGCTGAAATCCAC (8 marks)

ATGA

A-T
C-G

Q6- What are cloning vectors? Define, list their types, and talk about one of them. (6 marks)

الناقل
Plasmid
Pathogenic
Cosmid
BAC/YAC

Q7- Explain the relationship between vector copy number and vector size for good protein expression. (4 marks)

Lecturer

Prof. Dr. Laith AbdulHassan

Head of Department