

I-Write a 250-word essay on the following topic: (20 marks)

"Food Pollution"

II-Read the following passage and then answer the questions: (20 marks)

A heart attack occurs when one of the coronary arteries becomes completely plugged. What happens is that a plaque ruptures, exposing a bare area of tissue which promotes the formation of a blood clot. The blood flow through the artery is completely stopped, so that the muscle which it supplies gets no oxygen. The pain that results from this is not only more severe than the pain of angina, but it also lasts longer, for hours rather than minutes. The amount of damage caused depends on where the blockage occurs, and whether there are other arteries supplying the affected muscle. More muscle will be damaged if the block occurs at the origin of the artery than if it's in a minor branch. The technical name for a heart attack is myocardial infarction. Myocardium means heart muscle, and infarction means death of tissue because of a lack of blood supply. The affected muscle cells die and are eventually replaced by scar tissue. This has two effects. It weakens the heart's ability to pump, but it can also lead to an electrical instability of the heart by setting up a short circuit in the wiring. This interference with the normal, clock-like rhythm of the heart is called an arrhythmia and may take many forms. The most dangerous form, which can happen after a heart attack, is called ventricular fibrillation. Instead of proceeding through the heart muscle in an orderly fashion, the electrical impulses become chaotic, and the heart muscle quivers all over but stops pumping. This process explains why some people who have a heart attack simply drop dead, and also why emergency resuscitation can be effective, because an electrical shock administered to the chest may be able to kick the heart back into its normal rhythm. If you're having a heart attack, it is important to get to the hospital right away. There are two reasons for this: first, the potentially lethal arrhythmias tend to occur in the first hour or two after the onset of symptoms, and second, it's possible to dissolve the clot that's blocking the artery with medications. This, however, only does any good if it's done in the first few hours, because after this, the affected muscle will already have died.

Questions:

1. How does the heart attack occur?
2. What will happen if the block occurred at the origin of the artery?
3. What is "Myocardial Infarction"?
4. Some people who have a heart attack simply drop dead. Explain.
5. Why are people who have a heart attack advised to get to hospital quickly?
6. Use the opposite of the underlined words in sentences of your own.

7-Explain the following terms:

Adrenal gland – Stroke – Immune System – DNA
Pathology – Diarrhea – Hepatitis – Vaccine



Biochemistry Examination for 1st year students
1st Term exam.

Answer all the following questions; illustrating your answer with diagrams if possible:

Part 1. (25 marks)

- 1-write short notes on factors affecting enzyme activity. (5 marks)
- 2-Discuss point mutation (definition, causes and fates). (5 marks)
- 3-Write down the structural formula of each of the followings.
 - A- One purine and one pyrimidine base. (5 marks)
 - B- Two basic amino acids. (5 marks)
 - C- Glutathione. (5 marks)

Part 2. (25 marks)

- 1- Bacterial contamination of oils. (2.5 marks)
- 2- Role of carbohydrates in detoxification reactions. (2.5 marks)
- 3- X-linked mucopolysaccharidosis. (2.5 marks)
- 4- Normalization of serum calcium. (2.5 marks)
- 5- Cytolipin-H. (2.5 marks)
- 6- Early diagnosis of apoptosis. (2.5 marks)
- 7- Lactose intolerance in horse. (2.5 marks)
- 8- Hydrogen carriers. (2.5 marks)
- 9- Lipoproteins. (2.5 marks)
- 10- Hyaluronic acid role in cancer cells spreading. (2.5 marks)

Good luck

Dr. Obeid Shanab.

Dr. Mohammed Hosny.



إمتحان الفصل الدراسي الاول

للعام الجامعي ٢٠١٧ / ٢٠١٨

الفرقة : الاولى - كلية الطب البيطري

الزمن : ٣ ساعات

القسم الذي يقدم المقرر: قسم النبات الزراعي (الوراثة)

اسم المادة : الوراثة والهندسة الوراثية

أجب على جميع الاسئلة التالية بالترتيب (الامتحان في صفحتين)

السؤال الاول: أولاً: أكتب ما تعرفه عن

١- خطرية الكروموسوم

٢- الجينات المانعة في الدجاج

٣- نظام تحديد الجنس في الثدييات وفي الحشرات

ثانياً: وجدت الاعداد التالية في نسل تلقيح إختباري لحشرة الدوسوفيل

S r I	977	+++	960	S + I	427	+ r +	402
++ I	95	S r +	98	+ r I	27	S r +	27

احسب المسافة بين الجينات وارسم الخريطة الكروموسومية ثم احسب معامل التعارض

السؤال الثاني: ١- وضع المقصود بالمصطلحات الآتية

Gene pool-SRY gene-Heritability in broad sense-gene interaction-relation coefficient-

dominance-inbreeding-duplication gene - sex determination gene - hybrid

٢- في عشيرة من الامريكان البيض وجدت الاعداد التالية بالنسبة لتوزيع الافراد لمجاميع الدم M,N

MM	MN	NN	Total
680	211	9	900

١- احسب التكرار الاليلي p,q وتكرار الطرز الوراثية وهل العشيرة في حالة إتزان

٣- وضع التأثير الوراثي لفعل الجين

السؤال الثاني : اولاً : (١١ درجة)

١- قارن في جدول بين تضاعف الـ DNA في الكائنات وحيد الخلية والـ PCR من حيث:

١- الانزيمات المستخدمة ٢- القالب المستخدم ٣- القواعد النيتروجينية المستخدمة ٤- الناتج النهائي

ب- ما الفرق بين الـ Monoploid chromosomes والـ Monosomic chromosomes (درجتان)

ج- سلسلة مفردة من الـ DNA تحتوى على ٧٠ ألف نيوكليوتيدة

المطلوب (٣ درجات)

١- احسب طول السلسلة بالانجستروم

٢- عدد القواعد الموجودة في هذا السلسلة

٣- اذا علمت ان نسبة الادنين في هذه السلسلة ١٥% هل يمكن معرفة باقى النسب ام لا مع ذكر السبب

ثانياً: (١٤ درجات)

أ- عرف كلا مما يأتى:- (٥ درجات)

Regulator protein - Operator - Restriction enzymes - ddAtp- Interferon

ب- اكتب ما تعرفه عن (٤ درجات)

Type of translocation - polysomes - RNA polymearase III - Adenelate cyclase

ج- إذا علمت أن التتابع التالي هو تتابع لجين معين ويجب عمل PCR له

5'-ACCGTACCGGCC-----CCCGGAGGTTTTTAC-3'

3'-TGGCATGGCCGG-----GGGCCTCCAAAAATG-5'

حدد تتابع الـ Primers المستخدم وإتجاهه (٥ درجات)

أنتهت الاسئلة

مع تمنياتنا بالتوفيق

ا.م.د/ عبيد محمد أحمد إبراهيم

لجنة الممتحنين : ا.د/ ثروت محمد الامين



الفرقة الأولى
هستولوجيا - سيم ١ أول
٢٠١٨/١/١



South Valley University
Faculty of Veterinary Medicine
Department of Histology

Date: Jan 1st, 2018
Time allowed: 3 hours

First Semester Final Examination
Course Code: 112

Subject: Histology

Students: First year

Please answer the following questions, with **DIAGRAMS** whenever possible.

First question ----- (15 marks; 5 marks each)

- List only 5 features characteristics for epithelial tissue.
- With examples, illustrate the types of simple epithelium.
- With diagrams, describe types of epithelium according to modes of secretion.

Second question: ----- (15 marks; 5 marks each)

- Give an account about the morphological features of phagocytic cells with light and electron microscopy, and enumerate the types of specific phagocytic cells in different organs.
- Enumerate the types of connective tissues that contain fibroblasts, and describe in detail the type located in the dermal layer of the skin.
- With light and electron microscopy, describe cells responsible for calcification of tissues.

Third question: ----- (10 marks; 5 marks each)

- Enumerate the neuroglia and neuroglia-like cells of the nervous system, and discuss fully the cells which are responsible for myelination of the nerve fibers.
- Mention the types of muscle fibers and illustrate in detail the ultrastructure of the voluntary one.

Fourth question: Complete the sentences----- (10 marks; 0.5 mark each)

- The cell membrane can be visible by due to the presence of
- The active cells secreting proteins characterized by containing and well developed
- Golgi apparatus can be stained by....., while mitochondria stained by
- RER is formed from, while SER is formed from
- Nucleolonema of the nucleolus is composed of and
- The membranous organelle plays a role in phagocytosis isand results from budding of another membranous organelle known as
- Autophagosome results from the fusion of and
- A protofilament is the structural unit of theand composed of
- is a cell inclusion stored in muscles and could be visible by.....stains.
- The power house of the cells is, however, the contains the genetic materials.

Good Luck

Total = 50 marks

The oral exam starts 9.00 am on Jan 2nd, 2018

تسليم اول
سرم اول ٢٠١٧ / ٢٠١٨

South Valley University
Fac. of Veterinary Medicine
Dept. of Anatomy and Embryology

Time allowed: 3 hours
Decembar 2017

First year / First semester

Answer all the following questions and illustrate your answers with diagrams as possible.

I. What do you know about:

(12 marks)

1. Suture.
2. Arrangement of skeletal muscle fibers.
3. What means of: Synchondrosis, Meniscus, Trochoid joint, Pneumatic bone.

II. Write on the followings:

(12 marks)

1. Stomach in birds.
2. Cloaca in birds.
3. Syrinx.

III. Give an account on:

(12 marks)

1. Palpable bony prominences of the thoracic limb.
2. Cutaneous glands in birds.
3. Scales of fish.

IV. Fill in the spaces:

(14 marks)

1. The main symptoms of suprascapular paralysis are and
2. Appendicular skeleton includes the bones of

أنظر للخلف

3. Function of the synovial bursa is
4. The male genital system of fish consists of.....
5. According to the length, the intestine of fishes may be,
..... and
6. The glottis in birds is supported on either sides by.....
7. Avian kidney has two types of nephron which are and
8. The radius and ulna are independent in
9. The distal phalanx presents three surfaces which are,
..... and
10. The collateral ligaments of the shoulder joint are replaced by tendons of
insertion of and
11. Distal sesamoidean ligaments consist of,
and
12. Muscles inserted on the accessory carpal bone include and
.....
13. The subscapular artery gives off
14. The brachial plexus results from connection between

Good Luck

Staff members of Anatomy and Embryology department



Faculty of veterinary medicine



South Valley University

٢٠١٧/١/٤

الزمن ساعتان

يناير 2017

الفرقة الأولى

امتحان ارشاد بيطرى

من فضلك اجب عن الأسئلة الآتية

(عشر درجات لكل سؤال)

- 1- ما هو الارشاد البيطرى وما هى أسسه واهم مبادئه .
- 2- تكلم عن اهم المواصفات التى يتحلى بها المرشد البيطرى الناجح وما هى المهام الأساسية التى يقوم بها.
- 3- ما هى قنوات الاتصال ثم تكلم عنها طبقا للتصنيف الكمى.
- 4- مرض الحمى القلاعية هو مرض وبائى يصيب الحيوانات ويسبب خسارة اقتصادية تكلم عنه بايجاز .
- 5- دعيت لعمل ندوة ارشادية عن مرض النيوكاسل ماذا تقول .

مع اطيب الامنيات بالتوفيق

د. / احمد ابراهيم احمد