

استوى اول - (202) - حواء لبقية



Mansoura University.
Faculty of Science.
Zoology Department.

1st Level Biochemistry Program

Nutrition Z 125 (Jan 2011) Time allowed: 2 Hrs

Part I.

I- Answer as shown between brackets..... (15 Mark).

- 1- Histologically, salivary glands are(Complete).
- 2- Parotid gland lies in the stomach (Add line under a word that makes the sentence false).
- 3- Psychic effect has no effect on enzyme secretion. (True or False).
- 4- Enterokinase is important for(Complete).
- 5- Enterokinin is an enzyme. (True or False).
- 6- Glycogenesis is affected by glucagons hormone. . (True or False).
- 7- Amino acid is the end product of protein digestion. (True or False).
- 8- Procarboxypeptidase is an endopeptidase. (True or False).
- 9- Pepsinogen is activated by (Complete).
- 10- Renin is important in transformation oftoin the presence of Ca ions.....(Complete).
- 11- Amino acids may used for glucose synthesis (scientific name).
- 12- Glycogenolysis..... (Identify).
- 13- Sodium bicarbonate is important for stomach acidification. . (True or False).
- 14- Iliocical valve is present inand important to.....(complete).
- 15- Lipase enzyme secreted withandjuices.....(Complete).

II- Briefly illustrates what you know about (Three only) of the following(15 Mark).

- a- Davenport mechanism for HCl formation.
- b- Properties of Enzymes.
- c- Oxidation of fat to yield energy.
- d- Bile juice.
- e- Ornithine Krebs cycle.

Part II.

I- A-Fill in the spaces in the following sentences. (10 Mark)

1. Fruits and vegetables are usually considered as good sources of.....

2. Ester of higher alcohols with long fatty acids formed.....
3. Phospholipids enter in the formation of
4. Hemoglobin is classified asprotein
5. Diglyceride is formed fromand
6.sugar, needed for synthesis of RNA.
7. Animal starch known as Which stored in
8. The Milk sugar, or lactose, is composed of.....
9. Any number of amino acid can linked together bylinkage
10. Nails and hairs when hydrolysis they yield.....only.

B- Choose the correct answer.....(10 Mark)

1. Which of the following is not considered a fat soluble vitamin?
A. Vitamin A B. Vitamin B C. Vitamin K D. Vitamin E
2. Which foods should be included in a balanced diet as a good source of fibers?
A. red meat and poultry B. fresh fruits and vegetables
C. eggs and milk products D. animal fat and plant oils.
3. Which of the following is not considered a water soluble vitamin?
A. Vitamin B B. Vitamin C C. Vitamin D D. Vitamin B12
4. Which process causes the movement of the food?
A. Circulation B. active transport C. osmosis D. peristalsis.
5. Which substance is a nutrient in the human diet?
A. oxygen B. carbon dioxide C. fibers D. water.
6. Which of the following is caused by a Vitamin D deficiency?
A. Edema B. Anemia C. Lupus D. Rickets
7. Which of the following is caused by a Vitamin K deficiency?
A. Bruising B. Optic Nerve degeneration C. Anemia D. Hemorrhage (animal)
8. 1 gram of protein is equal to _____ of energy.
A. 3 kcals B. 4 kcals C. 5 kcals D. 6 kcals
9. Which of the following vitamins will be the most common in: cod liver oils and sardines?
A. Vitamin A B. Vitamin D C. Vitamin E D. Vitamin K
10. Another name for Vitamin B12 is _____.
A. Pantothenic Acid B. Cyanocobalamin C. Niacin D. Riboflavin

II-Answer (Two only) in the following question... (10 Mark)

- 1-How can you classify lipids? Give examples.
- 2-Are proteins essential in our diet? Why?
- 3- What are essential amino acids?

Good Luck.....Prof. Dr. G. Edrees & Prof. Dr. M. Amer.

Mansoura University
 Faculty of Science
 Chemistry Department
 Subject: Chemistry
 Course: Physical Chemistry (141)

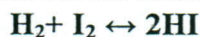


First level Chemistry
 Date: 17th Jan.2011
 Time allowed: 2 hours
 Full mark: 60 marks

Answer the following questions

- 1)-a) Give a full accounts on the following:
- i) Gay-Lussac's law. (3 marks)
 - ii) Boiling point elevation. (3 marks)
 - iii) Reversible reaction. (3 marks)
- b) Under the same condition of temperature and pressure dose hydrogen iodide or ammonia effuse faster? Calculate the relative rate at which they effuse.
 (H=1, N=14, I=127) (6 marks)

- 2)-a) Write shortly on the following:
- i) Relationship between K_p and K_c . (3 marks)
 - ii) Hess's law for heat summation (3 marks)
 - iii) Factors affecting solubility. (3 marks)
- b) Calculate the equilibrium constant for the following reaction



When the equilibrium concentrations at 25°C were found to be
 $[\text{H}_2] = 0.0505$, $[\text{I}_2] = 0.0498$ and $[\text{HI}] = 0.389$ (6 marks)

- 3)-a) Write briefly on:
- i) The difference between molarity and molality. (3 marks)
 - ii) Lechatelier principle. (3 marks)
 - iii) The water ionization constant (K_w). (3 marks)
- b) Calculate the pH values for the following solutions: (6 marks)
- i) 0.2 M HCl
 - ii) 0.2 M NaOH
 - iii) 0.2 M acetic acid ($K_a = 1.0 \times 10^{-5}$)
 - iv) 0.2 M NH_4OH ($K_b = 1.77 \times 10^{-5}$)

- 4)-a) Define the following items:
- i) Bond energy. (3 marks)
 - ii) Polyprotic acid. (3 marks)
 - iii) Mole fraction. (3 marks)
- b) What is the freezing point of the solution when 14.75 grams of the electrolyte NaNO_3 is dissolved in 66.5 grams of water. (K_f of water = 1.86 °C/mol)
 (Na=23, N=14, O=16) (6 marks)

GOOD LUCK

Professor Dr. Yehia Elewady

Mansoura University
Faculty of Science
Zoology Department
El- Mansoura, Egypt



جامعة المنصورة
كلية العلوم
قسم علم الحيوان
المنصورة - مصر

First Semester, Jan. 2011

Educational year: First Level
Time: 2hr
Date: 15/1/2011

Program: Chemistry
Subject: Functional Morphology
Course (s): Z 122
Full Mark: 60

Answer all the following questions

Q1- Choose the correct answer :

(20 marks)

- 1- During digestion, proteins are broken down into molecules of -----
a- glucose b- fatty acids c- amino acids d- nucleic acids
- 2- Bile is produced in the -----
a- liver b- small intestine c- pancreas d- stomach
- 3- All of the following are substances found in pancreatic juice EXCEPT:
a- pepsin b- trypsin c- amylase d- lipase
- 4- Salivary amylase secreted into the oral cavity starts the digestion of ----
a- proteins b- starch c- lipids d- amino acids
- 5- The stage in an action potential that immediately follows depolarization is -----
a- polarization b- repolarization
c- threshold d- the resting period
- 6- The different charge between the outside and the inside of a neuron at rest is called -----
a- action potential b- synaptic potential
c- resting membrane potential d- equilibrium potential
- 7- Processes that carry nerve impulse away from the cell body are called -----
a- dendrites b- axons c- synapses d- myelin sheaths

- 8- Which of the following hormones increase reabsorption of water in the collecting ducts?
 a- renin b- ADH c- secretin d- aldosterone
- 9- Most glucose molecules are reabsorbed in the -----
 a- proximal convoluted tubule b- distal convoluted tubule
 c- loop of Henle d- collecting duct
- 10- Which of the following substances is not normally in the glomerular filtrate?
 a- amino acids b- glucose c- urea d- proteins
- 11- Fibrinogen has a role in:
 a- Maintains blood pressure. b- Immune response.
 c- Vitamin transport. d- Blood coagulation.
- 12- CO₂ inside blood vessels, found mainly as:
 a- HbCO₂ b- CO₂ dissolved in plasma
 c- Bicarbonate. d- Carbonic acid.
- 13- White blood cells:
 a- Function in O₂ & CO₂ transport. b- Originate in bone marrow.
 c- Life span 120 days. d- Biconcave.
- 14- Which of the following is not true about skeletal muscle?
 a- Contract involuntary. b- Striated.
 c- Composed of myofibrils. d- Has actin and myosin molecules.
- 15- Anti-diuretic hormone is not:
 a- Released from posterior pituitary. b- Retain sodium.
 c- Secreted by hypothalamus. d- Retain water.
- 16- Which one, lines the walls of hollow organs?
 a- Cardiac muscle. b- Skeletal muscle.
 c- Smooth muscle. d- Both b and c.
- 17- Which of the following white blood cells secrete antibodies?
 a- Basophiles. b- Eosinophils.
 c- Lymphocytes. d- Monocytes.
- 18- Homeostasis results in:
 a- Blood clot. b- Platelet plug.
 c- Vascular spasm d- a, b and c are true

- 19- Hypo-parathyroidism may result in :
- a- Increase in plasma calcium.
 - b- Bone demineralization.
 - c- Neuro-muscular excitability increase.
 - d- Both a & c.

- 20- Which one is not an ovarian hormone:
- a- Estrogen.
 - b- Progesterone.
 - c- Relaxin.
 - d- Androgen

Q2- (20 marks)

A- Identify FIVE only of the following:
(5 marks)

- i- Glycogenesis
- ii- Phospholipids
- iii- Retinoic acid
- iv- Synapse
- v- Niacin
- vi- Beta oxidation
- vii- Central nervous system

B- Fill in the blanks: (15 marks)

- 1- Urine is formed as a result of three processes which are:
a- ----- b- ----- c- -----
- 2- Two factors affecting the enzyme activity are:
a- ----- b- -----
- 3- From the types of neurons:
a- ----- b- -----
- 4- Two hormones that control the digestive secretions are:
a- ----- b- -----
- 5- Night blindness can be caused by -----
- 6- Cardiac muscle characterized
- 7- The disorders in growth hormone results in:
- 8- Steroid hormones differ from peptide hormones in:
- 9- Types of anemia are:
- 10- Human blood group recognized according to:
- 11- Types and functions of plasma proteins:-----
- 12- Blood functions are: -----

13- Adrenal gland secretes..... ,
while the medulla region secretes-----

14- Smooth muscle stimulated byor by -----

15- Hemoglobin combine with CO₂ formingor with O₂
Forming -----

Q3- (20 marks)

A- Answer Four only of the following: (10 marks, 2.5/ each)

- a- Using diagram, explain how HCl is formed in the stomach
- b- List the biological significance of proteins
- c- Describe the voltage gated channels
- d- Discuss acid-base hemostasis
- e- Follow-up the protein digestion in the GIT
- f- Compare vitamin D and vitamin C

B- Give an account in two of the following:- (10 marks, 5 / each)

- a- Factors affecting erythropoiesis.
- b- Neuro-muscular junction.
- c- Hormones regulating blood glucose and blood calcium.

Dr. El-sayed M. El-Habiby

Dr. Hanaa Serag

Mansoura University
Faculty of Science
Zoology Department
El- Mansoura, Egypt



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كلية العلوم بالمنصورة

امتحان مادة: حقوق الإنسان
الفصل الدراسي : الأول

الزمن: ساعتان
الفرقة:

السؤال الأول

حدد العبارات الصحيحة والخاطئة فيما يلي مع تصحيح العبارات الخاطئة :

١. تتميز حقوق الإنسان بوجه عام بأنها حقوق مالية يمكن تفويضها بالنفود ، كما أن من وقع عليه اعتداء على أي حق من هذه الحقوق له الحق في التعويض المالي عما أصابه من ضرر جراء هذا الاعتداء .
٢. يُعتقد إجماع الفقهاء على أن الجسم الإنساني يعتبر داخلا في دائرة التعامل .
٣. يعد القتل بدافع الرحمة مانعا من موانع المسؤولية .
٤. يعني النص على الالتزام بعدم إقضاء الأسرار المهنية عن إقرار الحق في احترام سرية الحياة الخاصة .
٥. يجوز إجراء أي تجربة علمية أو طبية على أي إنسان بدون رضاه الحر .
٦. فرق الإسلام في حماية حياة الإنسان بين المسلم وغير المسلم .
٧. يعد الحق في التقاضي من حقوق الإنسان ، كما أنه من آليات حماية حقوق الإنسان عامة على المستوى الدولي .
٨. رضاه المجني عليه بالاعتداء على حرمة الحياة الخاصة لا يمنع من التمسك بالاثار المترتبة على هذا الاعتداء .
٩. تعد الوساطة والتحكيم من طرق العدالة البديلة .
١٠. يجوز أن تنطق بالحكم في جلسة سرية أيضا ذات الاعتبارات .

السؤال الثاني

أجب عن سؤالين فقط مما يأتي :

١. أهمية حماية حقوق الإنسان على المستوى الدولي .
٢. يعد الحق في الحياة من أهم الحقوق الشخصية للإنسان سواء من منظور القانون أو الشريعة الإسلامية . أشرح ذلك بالتفصيل المناسب .
٣. عرف الحقوق و الحريات المعنوية ثم أذكرها بالتفصيل .
٤. الحق في التقاضي حق من حقوق الإنسان ، كما أنه آلية لحماية حقوق الإنسان بوجه عام . تكلم في ذلك موضعا صعوبات ممارسة هذا الحق ، ووسائل الحد منها ثم وضح الضمانات المقررة لكفالة هذا الحق .

مع التمهيد والتوضيح و النجاح

المستوى : الأول		الفصل الدراسي الأول: دور يناير ٢٠١٠
المادة: جبر وهندسة		التاريخ: ١٢ / ١ / ٢٠١١ م
كود المادة : ر ١١١	قسم الرياضيات - كلية العلوم	الزمن : ساعتان
		الدرجة الكلية : ٨٠ درجة

برامج : الكيمياء - الكيمياء الحيوية - كيمياء وحيوان - ميكروبيولوجي - علوم بيئة - جيولوجيا - جيوفيزيكا

أجب عن الأسئلة التالية:-

(٢٠ درجة)

السؤال الأول:

أ- أثبت باستخدام الاستنتاج الرياضي أن $\frac{1}{1 \times 2} + \frac{1}{2 \times 3} + \frac{1}{3 \times 4} + \dots + \frac{1}{n(n+1)} = \frac{n}{n+1}$ (١٠ درجات)

(١٠ درجات)

ب- بين ما إذا كان المستقيمان

$$2x + 3y + 5 = 0 \quad \& \quad x + y + 2 = 0$$

متقاطعين أم لا وإذا كانا متقاطعين أوجد نقطة تقاطعهما والزاوية بينهما وأوجد معادلة المستقيم المار بنقطة التقاطع وعمودي على المستقيم $x - 2y + 1 = 0$.

(٢٠ درجة)

السؤال الثاني:

(١٠ درجات)

أ- باستخدام قاعدة كرامر أوجد حل المعادلات الآتية

$$x - y + z = 6 \quad \& \quad 2x - y - 2z = 5 \quad \& \quad x - 4y + z = 3$$

ب- أوجد المحل الهندسي لنقطة تتحرك بحيث يكون بعدها عن النقطة $(-1, -1)$ يساوي $\sqrt{6}$. (١٠ درجات)

(٢٠ درجة)

السؤال الثالث:

(١٠ درجات)

أ- حلل الكسر $\frac{x^2 - 1}{x^2 - 5x + 6}$ إلى كسوره الجزئية.

ب- بنقل المحاور نقلا موازيا إلى النقطة $(-2, 1)$ اكتب المعادلة $y^2 + 3x - 2y + 7 = 0$ في أبسط

صورة وحدد نوع المنحنى الذي تمثله المعادلة مبينا الرأس والبؤرة والدليل مع الرسم (١٠ درجات)

(٢٠ درجة)

السؤال الرابع:

أ- أوجد المقياس والسعة للعدد المركب $z = 1 + \sqrt{3}i$ ثم أوجد قيمة z^5 , $z^{\frac{1}{3}}$ (١٠ درجات)

ب- ارسم القطع الناقص $16x^2 + 9y^2 - 32x + 36y - 92 = 0$ ثم أوجد إحداثي الرأسين والبؤرتين

(١٠ درجات)

ومعادلتى المحورين والدليلين وطول الوتر البؤري العمودي.

أسرة التدريس (د. عواطف شاهين & د. محمد الدسوقي)

مع أطيب التمنيات بالنجاح والتوفيق

كل يوم (11) في صياغة صراخه وفواصداة
كل يوم (11) في صياغة صراخه وفواصداة

Mansoura University Faculty of Science Physics Department Subject: Physics(101)		First Term First Level (all programs) Date :10 – 1 - 2011 Time allowed : 2 hours Full Mark:: 60 Mark
Course (s): Heat and Properties of Matter		

Answer the following Questions: Each Questions (15) Mark

[1] A:- Define the following.

British thermal unit – Latent heat of vaporization – Stefan's Law – Isobaric process [8] Mark

B:- A cowboy fires a silver bullet of mass 2 gm with a muzzle velocity of 200 m/s into the pine wall of a saloon. Assume that all the thermal energy generated by the impact remains with the bullet. What is the temperature change of the bullet (specific heat of silver = 234 J/Kg. °C)

[7] Mark

[2] A:-What mass of steam initially at 130 °C needed to warm 200g of water in a 100 g glass container from 20°C to 50°C. (Specific heat of steam = 2010 J/kg.K, Specific heat of water = 4190 J/kg.K, $L_v = 2.26 \times 10^6$ J/kg, specific heat of glass = 837 J/kg.K) [7] Mark

B :- Drive an expression for the radial heat flow through the spherical cross section pipe ?

[8] Mark

3-A) Define the following:

The Continuity Equation –The steam point –The shear stress - The concepts of ideal fluid follow

[8] Mark

B) A pipe has a diameter of 16 cm at point 1 ($P_1 = 200$ KPa) and 10 cm at point 2 that is 6 m higher than portion 1. When oil of density 800 kg/m³ flows in this pipe at a rate of 0.03 m³/s .

Find the pressure at point 2 ?

[7] Mark

4-A) The position of a particle moving along X-axis is given by : $X(t) = 4 \sin (20t)$ m

and t in second. Compute a) The X_{max} , V_{max} , periodic time and frequency.

b) Position, velocity and acceleration.

[7] Mark

B) Derive the Bernoulli's equation ($P + \frac{1}{2} \rho v^2 + \rho g y = \text{constant}$).

[8] Mark

Examiners:

د/ عبدالرحمن لاشين

د. مایسة اسماعیل

ا.د. / المتولى عبد الرازق

المستوى الأول - علم تصنيف النبات

برامج (السورج + صولج + الكما)

Mansoura University
Faculty of Science
Botany Department
El-Mansoura, Egypt



جامعة المنصورة
كلية العلوم
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المنصورة - مصر

Final Examination in Botany
First Term: Jan.2011

Educational Year: First Level
Program: Biochemistry, Microbiology
Botany & Chem., Zoology & chem., Geology
and Envi.Sci.

Subject: Botany Course(s): Systematic Botany (Bot.101)

Time: 2 hrs Date: 15 / 1 / 2011 Full mark: 60 Question mark: 20

Answer the following questions:

Q1 Fill in the spaces:

1. The Fusion between two morphologically similar gametes in fungi and algae is defined as (2)
2. the protein coat of a virus is known as..... (2)
3. The life cycle where a virus genome replicates without destroying the host cell is called..... (2)
- 4 Cyanophyta belong to the Kingdom..... (2)
5. The layer coating the bacterial cell wall is calledor..... (2)
6. under unfavourable growth conditions, bacteria can reproduces by (2)
7. Bacteria that require little oxygen to grow is known as (2)
8. Cell wall of bacillarophyta is composed of(2)
9. The nucleus of a bacterial cell ishowever the nucleus of Gymnosperms are..... (2)
10. Nutrition in Algae ishowever nutrition in fungi is called..... (2)

Q2 Choose the most correct answer:

1. The Kingdom Protista include organisms that are (Prokaryotic-eukaryotic – prokaryotic and heterotrophs - eukaryotes and single celled) (2).

P. T. O

