المستوى: الأول المادة : تفاضل وتكامل كود المادة ر ١١٢	كلية العلوم – قسم الرياضيات	الزمن: ساعتين التاريخ : ١٤ /٥/ ٢٠١٤ م الدرجة الكلية: ٨٠ درجة

البرنامج: جميع برامج المستوى الأول

اجب عن أربعة أسئلة فقط مما يلى

السؤال الأول إجبارى للشعب الرياضية والفيزيائية:- (٢٠ درجة)

أ- أوجد مساحة المنطقة المحدودة بالمنحنيات $y = x + 2,\ y = x^2$. (٦ درجات)

ب- أوجد كلاً من التكاملات التالية: (٨ درجات)

$(i) \int_{-2}^{2} |x+1|\,dx$ $(ii) \int sin^2x\, cos^3x\, dx$

ج- حدد مناطق التزايد والتناقص والقيم العظمى والصغرى المحلية للدالة (٦ درجات)

$f(x) = \frac{1}{3}x^3 - x^2 - 3x + 3$.

السؤال الثانى:- (٢٠ درجة)

أ-أوجد $\frac{dy}{dx}$ لكل من الدوال التالية: (٨ درجات)

$(i) y = tan^{-1}(5x) + (tan5x)^{-1}$ $(ii)\ ysinx + x^3 = xe^x$

ب- أوجد كلاً من التكاملات التالية: (٨ درجات)

$(i) \int tan^{-1}x\, dx$ $(ii) \int \frac{1}{x(lnx)^2}\,dx$

ج- إدرس اتصال الدالة التالية عند $x = -3$، (٤ درجات)

$$f(x) = \begin{cases} \frac{x^2-9}{x+3} & ,x \neq -3 \\ 5 & ,x = -3 \end{cases}$$

السؤال الثالث:- (٢٠ درجة)

أ- أوجد $\frac{dy}{dx}$ لكل من الدوال التالية: (٦ درجات)

$(i)\ y = (x^2+1)^{cosx}$ $(ii)\ y = e^{sin3x}\sec(x^3+5)$ (٦درجات)

ب- أوجد كلاً من التكاملات التالية:

$(i) \int (tan3x + sec3x)^2\, dx$ $(ii) \int \frac{1}{\sqrt{4-x^2}}\,dx$

ج- إدرس إمكانية وجود معكوس للدالة $f(x) = \frac{x-3}{x+2}$ حيث $f: \mathbb{R} - \{-2\} \to \mathbb{R} - \{1\}$، ثم أوجده إن وجد. (٨ درجات)

إقلب الصفحة

السؤال الرابع:- (٢٠ درجة)

أ- أوجد كلاً من التكاملات التالية: (٦ درجات)

$$(ii)\int_0^{10}\frac{x}{\sqrt{x^2+4}}dx \qquad (i)\int_0^1 x^2\,e^x dx$$

ب- أوجد $\frac{dy}{dx}$ لكل من الدوال التالية: (٦ درجات)

$$(ii)\ y=\ln(\sec x) \qquad (i)\ y=2^{\sin^{-1}x}$$

ج- إذا كانت $f(x)=\sqrt{2-x}$، $g(x)=x^2+2x$ أوجد مجال تعريف كل منهما ثم أوجد $f\circ g$، $g\circ f$. (٨ درجات)

السؤال الخامس:- (٢٠ درجة)

أ- أوجد كلاً من النهايات التالية: (٨ درجات)

$$(ii)\ lim_{x\to 81}\frac{\sqrt[4]{x}-3}{\sqrt{x}-9} \qquad (i)\ lim_{x\to 0^+} x\ln x$$

ب- أوجد المشتقة الثانية للدالة $f(x)=x^2+\frac{1}{x^2}$ عندما $x=1$. (٦درجات)

ج- أوجد كل من التكاملات التالية: (٦ درجات)

$$(ii)\int sec^2x\,tan^3x\,dx \qquad (i)\int\frac{1}{\sqrt{x}(5+\sqrt{x})^2}dx$$

مع أطيب التمنيات

أسرة قسم الرياضيات

جامعة المنصورة
كلية العلوم

امتحان : مبادئ الحاسبة والإدارة
كود المادة : ع ١٠٦
الزمن : ٢ ساعات

امتحان / المستوى الأول الفصل الدراسي الثاني
للعام الجامعي ٢٠١٥_٢٠١٦
تاريخ الامتحان الثلاثاء الموافق ٢٠١٦/٥/١٧

أجب عن الأسئلة التالية :

السؤال الأول : (٥٠ درجة)

أولاً : إن تطبيق نظم الجودة فى منظومة التعليم بكلية العلوم مسئولية كل من : القيادة الجامعية، والأستاذ الجامعي والعاملين، علاوة على مسئوليتك أنت فى هذه المنظومة . حيث أن محور منظومة التعليم بالجامعة هو أنت، فكل ما يدور حولك من محاضرات، وامتحانات، وندوات، وغيرها، غرضها الأساسي الارتقاء بمستواك ومهاراتك التى تؤهلك وتجعلك قادراً على المنافسة فى سوق العمل، الذى تزداد فيه حدة المنافسة يوما بعد يوم، فأنت متلقى الخدمة من الكلية.

ناقش العبارة السابقة موضحا دورك الأساسي فى تطبيق نظم جودة التعليم بكليتك.

ثانيا :افتراض أن لدى إحدى المنشآت ثلاث بدائل هي س١ ، س٢ ، س٣ وأن حالات الطبيعة هي ط١ ، ط٢، ط٣ وأن مصفوفة العائد تتمثل في :

الإستراتيجيات	حالات الطبيعة		
	ط١ ٠,٢٥	ط٢ ٠,٥٠	ط٣ ٠,٢٥
س١	٤٢	٢٠	٨
س٢	١٤	٢٤	١٠
س٣	-١٠	٢٢	٣٠

والمطلوب :

١- تحديد القيمة المتوقعة لكل إستراتيجية مع بيان أفضل إستراتيجية .

٢- تحديد القيمة المتوقعة للمعلومات الكاملة .

٣- وضح الإستراتيجية المثلى في ظل تطبيق المعايير التالية :

أ. معيار التفاؤل ب . معيار التشاؤم ج . معيار الندم (أو الأسف) .

السؤال الثاني : (٥٠ درجة)

أولاً : ضع علامة (✓) أو علامة (×) أمام كل عبارة من العبارات التالية :

١. يشير التنظيم إلى بيان إلى أين تريد المنظمة أن تصل مستقبلاً ، وكيف يمكنها تحقيق ذلك ؟ والتنظيم يعنى تحديد الأهداف المستقبلية وبيان المهام والأنشطة الواجب القيام بها لاستخدام الموارد والإمكانات المتاحة.

٢. تشير وظيفة الرقابة الى التأكد من عمليات التنفيذ ومدى مسايرتها لما تم التخطيط له.

٣. يمكن تعريف اتخاذ القرار بأنه الاختيار من بين عدة بدائل بقصد تحقيق هدف أو مجموعة من الأهداف.

٤. تتمثل المهارات اللآزمة لممارسة العملية الادارية فى المهارات الفكرية والانسانية والفنية.

٥. تشير نظم دعم الإدارة إلى مجموعة التقنيات المرتكزة على التشغيل الالكتروني والتي تهدف إلى دعم العمل الإداري ، وخاصة اتخاذ القرارات.

٦. يشير التخطيط إلى بيان إلى أين تريد المنظمة أن تصل مستقبلاً ، وكيف يمكنها تحقيق ذلك ؟ والتخطيط يعنى تحديد الأهداف المستقبلية وبيان المهام والأنشطة الواجب القيام بها لاستخدام الموارد والإمكانات المتاحة.

٧. يطلق على اتفاقية الجاتس تحرير تجارة الخدمات.

٨. تتمثل قيمة المعلومة الكاملة في الفرق بين قيمة المعلومة في ظل عدم التأكد وقيمة المعلومة في ظل المخاطرة .

٩. ينتج صافى الربح نتيجة زيادة الايرادات على المصروفات.

١٠.يتم الافصاح عن المصروفات والايرادات فى قائمة المركز المالى.

١١.تقوم المحاسبة بكل فروعها على وظيفة أساسية هى وظيفتى القياس والافصاح.

١٢.تعرف الإدارة الالكترونية بأنها العملية الإدارية القائمة على الإمكانات المتميزة للانترنت وشبكات الأعمال في تخطيط وتوجيه والرقابة على الموارد من أجل تحقيق أهداف الشركة.

ثانيا : فيما يلى بعض العمليات المتعلقة بمركز المهندس عمر تيجر لصيانة أجهزة الحاسب الالكترونى خلال مارس ٢٠١٥ :

١ . فى أول مارس تم بداية النشاط باستثمار ١٥٠٠٠٠ج نقدا ومبانى بمبلغ ٨٠٠٠٠ج .

٢ . فى ٢ مارس تم سداد مبلغ ٤٠٠٠ج نقدا مقابل ايجار مخزن شهرين مقدم .

٣ . فى ٥ مارس تم شراء أثاث للمركز بمبلغ ١٦٠٠٠ جنيه نقدا.

٤. فى ١٧ مارس بلغ ايراد عمليات الصيانة ٤٥٠٠٠ج لشركة شومان لم تحصل بعد.

٥ . فى ٢٠ مارس تم سداد رواتب العاملين بالمركز وقدرها ٢٨٠٠٠ جنيه نقدا.

٦ . فى ٢٣ مارس تم تحصيل مبلغ ٢٠٠٠٠ج نقدا من المستحق على شركة شومان.

٧ . فى ٢٦ مارس بلغ ايراد عمليات الصيانة ٧٥٠٠٠ج حصلت نقدا.

٨ . فى ٢٨ مارس تم فتح حساب جارى باسم المركز فى البنك الأهلى بمبلغ ٣٠٠٠٠ج.

٩ . فى ٣١ مارس تم سحب مبلغ ١٢٠٠٠ جنيه للمصروفات الشخصية بشيك.

والمطلوب:

١. بيان أثر العمليات السابقة على المعادلة المحاسبية (معادلة الميزانية) .

٢. إعداد قائمة الدخل عن شهر مارس ٢٠١٥.

٣. إعداد قائمة التغير في حقوق الملكية فى ٣١ مارس ٢٠١٥.

٤. قائمة المركز المالي في ٣١ مارس ٢٠١٥.

مع تمنياتي بالتوفيق و النجاح

أ.د. سمير أبو الفتوح صالح

Mansoura University Faculty of Science Department of Physics Phys. 102	Final Exam 2015-2016	Time Allowed: 2 h Date: 21/ 5 / 2016 First year: All programs Total Degree: 60

Answer the following Questions:

Q.1) Choose the correct answer: (30 Marks)

1. Biot-Savart Law *is* given by

(A) $dB = \frac{\mu_0}{4\pi} \times \frac{I\,dl \sin\theta}{r^2}$ (B) $dB = \frac{\mu_0}{2\pi} \times \frac{I\,dl \sin\theta}{r^2}$ (C) $dB = \frac{\mu_0}{4\pi} \times \frac{I\,dl \sin\theta}{r}$ (D) None

2. Calculate the electric field at a distance of 3.0cm on a positive test charge due to a charge of 2.0×10^{-6} C. Take ($1/4\pi\varepsilon_0 = 9.0 \times 10^9$ $N.m^2/C^2$).

(A) 2.0×10^7 N C^{-1}, (B) 6.0×10^7 N C^{-1}, (C) 5.4 x 10 N C^{-1}, (D) 4.05×10^{11} N C^{-1}

3. The capacitance of a capacitor may be increased by

(A) decreasing the amount of charge stored (B) increasing the surface area of the plate
(C) increasing the voltage across the plate (D) decreasing dielectric constant

4. In fiber optic thread, refractive index of inner core is

(A) Less than cladding (B) equal to cladding, (C) Both A and B (D)Higher than Cladding.

5. A wire (length = 2.0 m, diameter = 1.0 mm) has a resistance of 0.45Ω. What is the resistivity of the material used to make the wire?

(A). $5.6 \times 10^{-7}\ \Omega \cdot m$ (B). $1.2 \times 10^{-7}\ \Omega \cdot m$ (C) . $1.77 \times 10^{-7}\ \Omega \cdot m$

6. A 9.0-V battery is connected between two parallel metal plates 4.0 mm apart. What is the magnitude of the electric field between the plates?

(A) 2.3×10^3 N/C (B) 9.0 N/C (C) 2.3 N/C (D) 0.75×10^{-6} N/C

7. A uniform electric field, with a magnitude of 600 N/C, is directed parallel to the positive x-axis. If the potential at x = 3.0 m is 1000 V, what is the change in potential energy of a proton as it moves from x = 3.0 m to x = 1.0 m? ($q_p = 1.6 \times 10^{-19}$ C).

(A) 8.0×10^{-17} J (B) 1.9×10^{-16} J (C) 0.80×10^{-21} J (D) 2.2×10^{-15} J

8. If a body P, with a positive charge, is placed in contact with another uncharged body A. What is the charge on A?

(A). must be equal in magnitude to that on P (B). must be negative
(C). must be positive (D). must be greater in magnitude than that on P

9. Total internal reflection occurs when

(A) Light passes from a denser to a lighter medium (B) Light comes into the air from the vacuum (C) Light goes to vacuum from air (D) light passes from more denser to less denser medium.

10. Can electric field lines intersect in free space?

(A) Yes, but only at the midpoint between two equal like charges. (B) Yes, but only at the midpoint between a positive and a negative charge. (C) Yes, but only at the centroid of an equilateral triangle with like charges at each corner. (D) No.

11. What is the electric field (E) value when a force equals to 300 N affected on 6 μC charge?

(A) $5x10^7$ N/C (B) $5.5x10^8$ N/C (C) $7x10^7$ N/C (D) $8.5x10^9$ N/C

12. Two parallel plates having a potential difference of 30 V between them are spaced 0.04 mm. The electric field strength is .

(A) 7500 V/m (B) 34000 V/m (C) 750000 V/m (D) 6000 V

13. Which of the following about a magnetic field is correct?

(A) The unlike magnetic poles repel. (B) A magnetic pole can be isolated.

(C) Tanget of magnetic field lines indicate the direction of the magnetic field.

(D) A magnetic pole cannot induce magnetic poles in other materials.

14. Several electrons are placed on a hollow conducting sphere. They

(A) clump together on the sphere's outer surface. (B) clump together on the sphere's inner surface. (C) become uniformly distributed on the sphere's outer surface- They get as far away from each other as possible (D) become uniformly distributed on the sphere's inner surface.

15. If a capacitor parallel- plate having a charge of 10 μC and a voltage of 10V is applied across it. Hence, the energy stored will be

(A) 20 μJ (B) 30 μJ (C) 50 μJ (D) 75 μJ

Q.2). Answer the following questions (15 Marks)

Q 2a.) Describe a general relationship between the net electric flux through a closed surface (often called a *gaussian surface*) and the charge enclosed by the surface.

Q 2b.) Find the frequency of a circulating charge in a magnetic field B.

Q 2c) Deduce the expression for the magnetic force due to a wire carrying current.

Q.3a) Write True or False for each statement. (10 Marks)

1. A positive charge placed in an electric field experiences a force in the direction of the field.
2. The equivalent capacitance of two capacitors connected in parallel is always greater than the larger of the two capacitance values.
3. The electric lines of force begin on positive charge and terminate on the negative charge.
4. Capacitors connected in series carry the same charge Q.
5. When light passes from one medium to another, its frequency does not change but its wavelength changes.
6. The electric field inside a conductor is zero in the static situation.
7. Lorentz Law State that $F = q_0(E v_d + v \times B)$
8. Ampere's law states that $\oint B.dl = \mu_o i$.
9. In ohmic materials, the current density J is inversely proportional to the electric field E
10. The magnetic force has a maximum values when the directionof the magnetic field is parallel to the velocity direction (v) of the charge q.

Q.3b) Three capacitors (4 μF, 8 μF and 16 μF) are connected in parallel across a 200 V power supply. Determine (A) the equivalent capacitance . (B) the charge on each capacitor. (5 Marks)

Examiners: Prof. Dr. Naer Bakr, Prof. Dr. Moustafa Tawfek, , Prof. Dr. Rezk Moustafa
Ass.Prof. Maysa Abdelhamed, Ass..Prof. Abdel Meguid Hassan, Ass.. Prof. Mahdy Elmahdy,
Dr. Afaf Sarhan, Dr. Moneim Ismail

Mansoura University
Faculty of Science
Math. Dept.
Final Exam, May 28, 2016
Full mark: 60 marks

Second Semester:2015-2016
Subject: Computer Science (1)
Course code: ١٠١ع
Time: 120 Minutes

First Level: Chemistry, Biochemistry, Zoology-Chemistry, Microbiology, Geology
Botany-Chemistry programs

Answer the following questions

First Question: [15 Marks]

a) Define the computer network and discuss the main components of this network. [5 Marks]

b) Write the basic functions for the following:
1) Motherboard 2) Operating system 3)ALU
[5 Marks]

c) List the five basic steps to solve problem in computer and draw a flowchart to input two numbers and print the smallest. [5 Marks]

Second Question: [15 Marks]

a) Name five types of data that a computer can process and show the steps are needed to convert audio data to bit patterns. [5 Marks]

b) Compare between ASCII and UniCode. [5 Marks]

c) Show the Octal equivalent of x2A4E. [5 Marks]

Third Question: [16 Marks]

(a) Store +124 in a 16-bit memory location using one's complement representation. Then interpret the result in a decimal using two's complement. [8 Marks]

(b) Show the representation of -71.3125 using single-precision format. [8 Marks]

Fourth Question: [14 Marks]

(a) Write a program to compute the sum and count of positive and negative numbers from list -4, 7, 9, 23, -11, 6, -90, -17, -29, 14, 38, -89, 52, -65, 76, 53, -49, 68, 90, -70. [6 Marks]

(b) Rewrite the program in figure (1) using if.....Go to. And write the output for the program in figure (2). [8 Marks]

```
Input n
F=1
For i=1 to n
F=F*i
Next i
Print "Factorial n =", F
End
```

Figure (1)

```
Read n
F=1:S=0
For i=1 to n step 2
Read x
S=S+x
F=F*x
Next i
Print "sum="; S
Print "fact=", F
Data 10,1,2,3,4,5,6,7,8,9,10
```

Figure (2)

Examiners: Dr. Yasser Fouda, Dr. AbdulFatah Moustafa, and Dr. Mohammed Abdel-Atheem

Mansoura University
Faculty of Science
Botany Department

جامعة المنصورة
كلية العلوم
قسم النبات

Final Examination in Botany
Second Term: May 2016

Educational Year: 1st Level **Program : Biology**
Courses: Basics of Plant Physiology
Subject: (B 102) **Time :2 hrs** **Date: 31/5/2016** **Full mark: 60**

Answer the following questions: ملحوظه: مراعاة تسلسل الاجابة كما هو فى الاسئلة

Q1- Plant water relationship (13 marks)

A- Complete the following (3 marks)

1- Water pass from soil through ..... to....., then through .....of the endodermis, followed by ..... and .....

2- Active absorption of H_2O depends on .....,while the passive uptake is due to.....

3- Water uptake is α with ..... , ... , ... , ... while it is inversely proportional with ..... (environmental factors).

B- Give reasons for: (5 marks)

1- Water drops appear on leaf tips and margins in the early morning.

2- Exudation of H_2O on the cut surface of stem.

3- Variation of the rate of stomatal & cuticular transpiration during leaf development.

4- Promotion of H^+pump in guard cells by light and its effect on stomatal movement.

C- Mention of: (5 marks)

1- The role of transpiration in plant life.

2- Characters of desert plants to adapt the environment.

3- The relationship between transpiration and the external factors.

Q2- Enzymes (13 marks)

A- Complete:

1- Mg ions are essential for .....enzyme.

2- K ions are important for .....enzyme.

3- Succinic acid can be converted into .....by succinic dehydrogenase.

4- .....are group of enzymes catalyzing the splitting of their substrates in absence of water.

5- The reactants must attain .....before they can react.

B- Identify each of the following:

Turnover number – Lyase – Isomerase – Ligase – Transaminase.

Q3- Osmosis & Permeability (14 marks)

A- Define each of the following: (4 marks)

Osmosis – Permeability- Ion antagonism – Ion synergism.

B- Explain each of the following: (5 marks)

1- The behavior of the plant cell when it put in pure water. (3 marks)

2- Roles of osmosis in plant cell. (2 marks)

C- What do you know about: (5 marks)

1- Permeability of plasma membrane to non-electrolytes. (3 marks)

2- Temperature and light as factors affecting the permeability of plasma membrane. (2 marks)

من فضلك اقلب الصفحة (الأسئلة فى صفحتين)

Q4- Colloids and Respiration & Photosynthesis (20 marks)

Part I: Colloids (14 marks)

A- Complete the following: (9 marks)

1- Each colloid has two components are ..... and .....

2- ..... is the conversion of a sol to a gel by ....., while .....is the conversion of a gel to a sol by .....

3- Increase in temperature cause an increase in the Brownian movement due to ..... and .....

4-.....is an electric migration of dispersed particles, while electric double layer is defined as .....

5- There are two types of colloids according to ....., while there are eight types of colloids according to .....

6- The origin of the electric charges on the colloidal particles is thought to result from ..... or .....

7- .....and .....are two methods for formation of colloids.

8- Salting out is defined as ..... , while the precipitation power of the electrolyte is related to .....

9- The characters of the protoplasm as a colloidal system are ..... , ... , ... , ... , ...

B- Correct the following: (5 marks)

1- True solutions are intermediate stage between coarse suspensions and colloidal solutions.

2-Particles of any colloid have electronegative charge and electropositive charge.

3- Liquid in solid colloid is the most important type of colloids in biology.

4- Tyndall phenomenon is the scattering of light by colloidal solution.

5- Diffusion provided the first rough differentiation between true solutions and colloids.

6- Colloidal system is electrically charged.

7- Increasing the viscosity of the hydrophilic colloid leads to an increase in the concentration of the dispersed particles.

8- Seed germination is an example of adsorptive power of protoplasm.

9- Colloids are stable and homogenous solution.

10- Hydrophobic colloid can be converted into the colloidal state (stable) again after being precipitated when water is added once again.

Part II: Respiration & Photosynthesis (6 marks)

Answer the following questions:

A- Mention all the factors affecting on photosynthesis. (3 marks)

B- Write the scientific expression of the following: (3 marks)

1- The breakdown or oxidation of complex organic substances within cells into simple inorganic substances with releasing of energy.

2- The total chemical reactions that go on in the plant body.

3- The ratio of the volume of CO_2 evolved to the volume of O_2 consumed.

Examiners

Prof. Samy A. Abo-Hamed Prof. Samia A. Haroun Prof. Hamed El-Shora

Dr. Rasha M. Eid Gamel Dr. Heba M. M. Abdel-Aziz

Mansoura University
Faculty of Science
Zoology Department
Subject: Zoology
Code: Z102
Courses: Principles of Animal Taxonomy

Second Term - Final Exam
1st Level Biology Program Students
Date: 4 June, 2016
Time Allowed: 2 hrs
Full Mark: 60
Academic Year: 2015-2016

Answer All the Following Questions

Question No. 1. Answer the following parts: (20 marks)

I. Write Short Notes on the Following: (10 Marks)

a- With labeled drawings illustrate the life cycle of *Fasciola gigantica* **OR** *Taenia saginata.* **(4 Marks)**

b- Enumerate (In Table) the main differences between *Schistosoma mansoni* and *S. haematobium.* **(3 Marks)**

c- The general characters of Platyhelminthes **OR** Nematoda. **(3 Marks)**

II. Choose the correct answer from the following: (5 Marks, each 0.5 Mark)

1) **Cercaria of *Fasciola* differs from cercaria of *Schistosoma* in:**
a) The tail is unforked. b) The tail is biforked. c) Has penetration gland. d) Is the infective stage.

2) **The intermediate host of *Schistosoma mansoni* is:**
a) *Bulinus* snail b) *Biomphalria* snail c) *Pirenella* snail d) *Lymnea* snail

3) **Where does *Fasciola gigantica* live?**
a) Intestine of man b) Bile duct of cow c) Veins of urinary bladder d) Veins of intestine

4) **What is the infective stage of *Ascaris lumbricoides*?**
a) Egg with 1st stage of Rabditiform larva b) Egg with 2nd stage of Rabditiform larva
c) Filariform larva d) Egg with mammilated coat

5) **How can you diagnose of *Schistosoma mansoni* in humans?**
a) Examination of stool to detect operculated egg.
b) Examination of stool to detect egg with lateral spine.
c) Examination of stool to detect egg with terminal spine.
d) Examination of urine to detect egg with terminal spine.

6) **How does infection with *Fasciola* occur?**
a) Swimming in fresh water containing biforked cercaria
b) Eating vegetables contaminated with metacercaria
c) Eating insufficiently cooked meat containing metacercaria
d) Eating food contaminated with second stage of rhabditiform larva

7) **Where is *cysticercus bovis* occur?**
a) In grass b) In beef c) In pork d) In fish

8) **What is the best method of controlling *Fasciola*?**
a) Destruction of *Lymnea* snail b) Destruction of *Bulinus* snail
c) Destruction of *Biomphalaria* snail d) Destruction of *Pirenella* snail

9) **Where does *Planaria* live?**
a) In veins of intestine b) In veins of urinary bladder c) Free living in fresh water d) In intestine

10) **How can you diagnose *Ascaris lumbricoides*?**
a) Examination of stool to detect egg with with 2nd stage of rhabditiform larva.
b) Examination of stool to detect egg with lateral spine.
c) Examination of urine to detect egg with terminal spine.
d) Examination of stool to detect egg with operculated egg.

إقلب الصفحة من فضلك صفحة 1 من 4

1. Mark (√) or (×) for the following and correct the false: **(5 Marks, each 0.5 Mark)**

1- Planaria reproduce sexually and asexually and by regeneration.
2- All Platyhelminthes are hermaphrodite.
3- Man may act as an intermediate host when the eggs find their way to his food or through autoinfection.
4- Longitudinal muscles of Nematodes are fairly developed.
5- Digeneans have a simple life cycle.
6- *Schistosoma haematobium* lives in veins of intestine.
7- In male *Ascaris*, there are two copulatory bursa.
8- Cestoda has no alimentary canal and nutrition takes place by absorption of nutritive material through body surface.
9- In *Ascaris*, the female genital opening opens into the rectum.
10- The disease in *Fasciola* is called liver rot in heavy infection.

With my best wishes Dr. Shadia F. hamada

Question No.2. Answer the following parts: (20 mark)

A- Write short note on (TWO) only of the following: **(4 marks)**

1- Classification of Mollusca. 2- Class Hirudinea.
3- Economic importance of Echinodermata.
4- General characters of Mollusca.

B- Compare between the body wall structure in Porifera and Coelenterates. **(6 marks)**

C- Complete the following sentences with suitable words: **(5 marks)**

1- Excretion in *Allolobophora* takes place by …….. while in scorpion by ……..
2- *Aurelia* is a cnidarian animal have three types of canals: ……, ……., ……..
3- Jellyfish has ……symmetry while ……has bilateral symmetry.
4- The internal budding during unfavorable conditions of sponge is called ……..
5- Anticoagulant secreted by leech is……

D- Choose the correct answer from the following: **(5 marks)**

1- Protruded pharynx is characteristic to ……..
A- *Hirudo*. B- Earth worm. C- *Neries*. D- None.

2- Annelids show advancement over the Nematode in having……..
A- Metameric segmentation. B- True coelom.
C- Closed circulatory system. D- A & B.

3- A type of cell in sponges that forms gametes called ……..
A- Choanocyte. B- Amoebocyte. C- Porocyte. D- Cnidocyte.

4- Gastropod animal that couldn't form shell named …….
A- Shell. B- Snail. C- Slug. D- None.

5- Stony corals mostly live in colonies except some as ……..
A- *Favia*. B- *Fungi*. C- *Coeleria*. D- *Acropora*.

With my greets..... Dr. Eman El-Shabasy

إقلب الصفحة من فضلك صفحة 2 من 4

Question No. 3. Answer the Following: (20 marks)

A. Choose the correct answer from the following: **(10 marks, each statement of 0.5 Mark)**

1- Fresh water free-living Protozoa have a .... which regulates the osmotic pressure.
A) Food vacuole B) Contractile Vacuole C) Reservoir D) Nucleus

2- Released from ruptured RBCS in *Plasmodium* infection.....
A) Sporozoites B) Zygote C) Haemozoin granules D) Ookinate

3- Amoebic dysentery is a disease caused by .....
A) *Entamoeba coli* B) *Plasmodium* C) *Trypanosoma* D) *Entamoeba histolytica*

4- *Amoeba proteus* moves by
A) Flagellum B) Cilia C) Pseudopodia D) No Locomotory organ

5- *Entamoeba coli* moves by pseudopodia and the number of them is:
A) One pseudopodium B) Two Pseudopodia C) Three Pseudopodia D) Many pseudopodia

6- Oral groove of *Paramecium* disintegrates in .....
A) Binary fission B) feeding process C) Conjugation D) locomotion

7- Which of the following consists of true tissues?
A) Mesozoa B) Parazoa C) Eumetazoa

8- *Euglena* has a structure that is considered a character of plants.....
A) Myonemes B) Eye-spot C) Cytopharynx D) Chloroplasts

9- The infective stage of *Entamoeba histolytica* parasite is the
A) Cyst with 2 nuclei B) Cyst with 4 nuclei C) Trophozoite D) Cyst with 8 nuclei

10- *Paramecium* contains .....
A) One nucleus B) 2 nuclei C) 4 nuclei D) 8 nuclei

11- Female *Culex* can't transmit *Plasmodium* because.....
A) All the forms of *Plasmodium* digested in its stomach. B) Doesn't feed on blood
C) Have no Piercing proboscis D) Have no sucking proboscis

12- *Entamoeba histolytica* perform Encystaion for .....
A) Completing the life cycle B) Feeding process
C) Forming trophozoite D) don't make cyst

13- *Euglena* uses ..... in the Euglenoid movement.
A) Flagellum B) Cilia C) Myonemes D) Pseudopodium

14- *E. histolytica* reproduces normally by a process of
A) Simple binary fission B) Sexual C) Conjugation D) Syngamy

15- Female *Anopheles* pours saliva when biting Man for.....
A) Increase blood flow B) Preventing blood coagulation
C) Decrease blood flow D) A & B

16- Mode of nutrition in *Amoeba proteus* is called:
A) holozoic B) Saprozoic C) Autotrophic D) pinocytosis

17- Sexual reproduction in Protozoa occurred by
A) binary fission B) budding. C) conjugation. D) syngamy. E) (C & D)

18- Vector of *Entamoeba histolytica* is .....
A) House fly B) Female Anopheles C) Tse Tse Fly D) Non

19- He begins the study and identification of species:
A) Carl Linnaeus. B) MFA. C) Aristotle D) John Ray

20- The infective stage of *Plasmodium* is stored in ..... of the female *Anopheles*.
A) Salivary glands B) Gut C) Stomach D) Gut wall

إقلب الصفحة من فضلك صفحة 3 من 4

B. Mark (√) or (X) for the following statements: **(10 marks, each statement of 0.5 Mark)**

1- Protozoa are multicellular prokaryotic animals.
2- Encystment in Protozoa occurs under unfavorable conditions.
3- *Paramecium* moves by flagella.
4- John Ray was the first to classify animals according to the presence or absence of blood.
5- The food vacuole in protozoan animals secretes the digestive enzymes.
6- The sexual cycle of *Plasmodium* in Female *Anopheles* occurs in the gut lumen.
7- *Paramecium* reproduces sexually by transverse binary fission.
8- Male *Anopheles* is the vector of malaria.
9- Protozoans lack cell walls.
10- The contractile vacuole in *Amoeba* is fixed.
11- The infective stage of *Entamoeba gingivalis* is the trophozoite.
12- The infective stage of *Plasmodium* is called sporozoite.
13- Protozoa are subdivided based upon their means of locomotion.
14- *Amoeba proteus* is a protozoan parasite lives in the large intestine of man.
15- Respiration and excretion in Protozoa take place through lungs.
16- The macronucleus in *Paramecium* has a major role in conjugation process.
17- Excystaion in *Entamoeba* means the transformation of Trophozoite to cyst.
18- Nutrition in protozoa may be holozoic, autotrophic, saprozoic or by pinocytosis.
19- Individuals infected with *Plasmodium* shows fever every 48hrs because of complete cycle in RBCs.
20- *Entamoeba coli* is pathogenic protozoa

****

With my best wishes Dr. Mohamed F. Abouel-Nour

==========

With our best wishes

Dr. Shadia Farid Hamada

Dr. Mohamed F. Abouel-Nour

Dr. Eman A. El-Shabasy

2015- 2016

إنتهت الأسئلة صفحة 4 من 4