

الامتحان التنافسي للطلبة المتقدمين للدراسات العليا للعام الدراسي 2015-2016 / الماجستير - المحاولة الثانية

الرقم السري :

الاسم الرباعي :

القناة :

الشهادة المتقدم اليها :

التخصص :

MCQ			المادة	ت
رقم الصفحة	الدرجة كتابة	الدرجة رقماً		
1			علم الخلية العام	1
3-2			علم فسيولوجيا الحيوان	2
5			علم فسيولوجيا النبات	3
7			علم الاحياء المجهرية العام	4
8			علم البيئة والتلوث	5
11			علم البايولوجي الجزيئي ووراثة البكتريا	6
14			مجاميع نباتية	7
المجموع من 60% =				

S.A			المادة	ت
رقم الصفحة	الدرجة كتابة	الدرجة رقماً		
1			علم الخلية العام	1
4			علم فسيولوجيا الحيوان	2
6			علم فسيولوجيا النبات	3
7			علم الاحياء المجهرية العام	4
10-9			علم البيئة والتلوث	5
13-12			علم البايولوجي الجزيئي ووراثة البكتريا	6
14			مجاميع نباتية	7

المجموع من 40% =

الدرجة النهائية 100% =

اسم المادة : علم الخليةالرقم السري:Choose the correct answer (MCQ)**Q1/ The main function of centromere is:-**

- a- Secretion b-osmoregulation c-protein synthesis d-Formation of spindle fiber

Q2/ Smooth endoplasmic reticulum is the site of:-

- a- protein synthesis b- carbohydrate synthesis c-amino acid synthesis d- lipid synthesis

Q3/ Polymers can be broken down to their monomers by a process called

- a. hydrolysis b. photosynthesis c. dehydration d. condensation

Q4/ Chemical analysis of the cell membrane showed that it contained

- a. Phospholipids b. Proteins c. Phospholipids & proteins d. glycolipids -b

مجموع درجات الاسئلة :-

Answer the following questions briefly**Q1/ What is the structure and function of the cell membrane?****Q2/ The precursor in the biosynthesis of all steroid hormones is**

مجموع درجات الاسئلة :-

اسم المادة : علم فسيولوجيا الحيوان

الرقم السري:

Choose the correct answer (MCQ)

Q1/ The volume of air in the lungs after maximal expiration is called

- a. Tidal volume b. Inspiratory reserve volume c. Expiratory reserve volume
d. Residual volume

Q2/ The following are digestive enzymes which are produced by the pancreas, except:

- a. Pepsin b. Trypsin c. Lipase d. Amylase

Q3/ Blood from the heart flows through the blood vessels in which order?

- a. Veins, arterioles, capillaries, venules, arteries b. Capillaries, arterioles, arteries, venules, veins
c. Arteries, arterioles, capillaries, venules, veins d. Arteries, capillaries, arterioles, venules, veins

Q4/ The four layers of the digestive tract, from innermost to outermost, are the:

- a. Mucosa, submucosa, muscularis, serosa b. Serosa, muscularis, submucosa, mucosa
c. Submucosa, mucosa, muscularis, serosa d. Muscularis, submucosa, serosa, mucosa

Q5/ The following are examples of lymphatic vessels and tissues, except:

- a. Thoracic duct b. Thyroid c. Spleen d. Thymus

Q6/ The process of moving energy from one chemical form (glucose) into another (ATP) is called

- a. Breathing b. External respiration c. Internal respiration d. Cellular respiration

Q7/ The velocity of conduction in nerve fibers increase with -----.

- A- Decrease in temperature.
B- Increase in temperature and diameter of the axon
C- Decrease in diameter of the axon.
D- Decrease in temperature and diameter of the axon

Q8/ During muscle contraction cycle the ATP is needed for:

- A- Attach. B- Pivot. C- Detach. D- Return.

Q9/----- transmits nerve impulse from the CNS to muscle and glands.

- A- Motor neuron. B- Interneuron. C- Sensory neuron. D- Association neuron.

اسم المادة : علم فسيولوجيا الحيوانالرقم السري:Choose the correct answer (MCQ)

Q10/ Aldosterone is secreted by the adrenal cortex in response to-----

- A- A high blood potassium level. B- A low blood sodium level. C- A decrease in blood pressure. D- All of the above.

Q11/ The glomerular filtration, takes place in -----.

- A- Renal corpuscles. B- Distal convoluted tubules. C- Proximal convoluted tubules. D- All of the above.

Q12/ When threshold stimulus is applied to the cell membrane, the permeability for -----ions increases, and leads to depolarization.

- A- Na⁺ B- K⁺ C- Cl⁻ D- A and B

مجموع درجات الاسئلة :-

Answer the following questions briefly

Q1/ The ileum is the longest section of the

Q2/ The rhythmic wavelike contractions that move food through the GI tract referred to as the

Q3/ The function of the is to close off the trachea to direct food into the esophagus

Q4/ If any of the heart valves do not close properly, an extra sound called a may be heard.

Q5/ During muscle contraction, calcium ions bind to -----molecules.

Q6/ Animals living in ----- environment have an acute problem of temperature

Q7/ The cycle of muscle contraction include the following series events -----, -----, -----, and -----.

Q8/ The action potential basically occurs in two phases -----, -----

اسم المادة : علم الاحياء المجهرية العام

الرقم السرى:

Choose the correct answer (MCQ)

Q1/ Which of the following is used to grow bacterial cultures continuously?

- a- Chemostat b- Coulter Counter c- Hemostat d- Petroff-Hausser chamber

Q2/ Traveller diarrhea may be caused by

- a- E.coli b- Enterobacter c- Hafnia d- Serratia

Q3/ Teichoic acids found in:

- a- Gram positive bacteria b- Gram negative bacteria c- Mycoplasma d- Fungi

Q4/ Energy for rotation of the flagellum is derived from:

- a- Glucose. b- Electrons c- Proton motive force. d- NADP

مجموع درجات الاسئلة :-

Answer the following questions briefly

Q1/ What is the importance of chromatophores?

Q2/ What are the differences between sterilization and disinfection?

مجموع درجات الاسئلة :-

اسم المادة : علم البيئة والتلوث

الرقم السري:

Answer the following questions briefly

Q1/ Define the term Herbivores?

Q2/ Biosphere is ?

Q3/ What do we mean by Biogenic salts?

Q4/ Classify the pollutants according to its origin?

اسم المادة : علم البيئة والتلوثالرقم السري:Answer the following questions briefly

Q5/ Define only the term of Limiting factors?

Q6/ What do we mean by Heavy metals?

Q7/ Carnivores means ?

Q8/ pollutants are?

مجموع درجات الاسئلة :-

اسم المادة : علم فسيولوجيا النبات

الرقم السري:

Choose the correct answer (MCQ)

Q1/ $FADPH_2$ yields ----- during oxidation Phosphorylation process

- a- 2 ATP b-3ATP c-1 ATP

Q2/The reduced compound formed by glycolysis

- a- $FADH_2$ b- $NADPH_2$ c- $NADH+H^+$

Q3/The following type of water is recognized in plant

- a-Capillary water b-Drainage water c-Gravitational water

Q4/Glycine is synthesized in

- a-perexisome b-mitochondria c-chloroplast

Q5/Translocation of ABA in plant occurs ---

- a-polarly b-Non polarly c-Polarly and non polarly

Q6/ The hormone which is synthesized in apical portion of stems and roots is -----

- a-Ethylene b-Abiscisic acid c-Gibberellin

Q7/The element whose absence prevent plant from completing its life cycle is called -----

- a- Macronutrient element b-Micronutrient element c-Essential element

Q8/ The elements that are involved in redox potential are –

- a- K, N and P b-Zn, Ni and Mo c-Mg, Ca and S

Q9/----- increase the plasticity of plant cell walls

- a- Cytokinins b- auxin and cytokinins c- gibberllin and auxin

Q10/The plant needs more nutrient elements in -----

- a- Deficiency zone b-Adequate zone c-Toxic zone

Q11/Water has

- a- High heat fusion b-High Surface tension c-Non polar characteristic

Q12/lyophilic

- a- Decreased plant growth b-liquid loving water c- have almost some viscosity as than media

Answer the following questions briefly

Q1/----- is the first compound produced after CO₂ fixation in CAM plants

Q2/ One of the differences between plant and animal hormones is -----

Q3/ The factors that affect the rate of enzyme - catalyzed reaction are -----,
-----, and -----

Q4/ The most acceptable theory of opening and closing of stomata is -----

Q5/ Because of the presence of -----, the plant can maintain a higher ionic
Concentration in the xylem than in -----

Q6/ The enzyme responsible for CO₂ fixation in C₄ plants is -----

Q7/----- is a series of metabolic reactions started with glucose and ended with the
Lactate compounds.

Q8/ Colloidal system is made up of -----

اسم المادة : علم اليايولوجى الجزيئى ووراثة البكتريا

الرقم السرى:

Answer the following questions briefly

Q1/ What properties must a polymer possess for it to be capable of carrying genetic information?

Q2/What are the important of exonuclease activity in DNA replication?

Q3/Why may it be necessary to have some proteins encoded by organelle- specific genomes?

Q4/Define = open reading frame.

مجموع درجات الاسئلة :-

اسم المادة : علم البايولوجى الجزيئى ووراثة البكتريا

الرقم السرى:

Answer the following questions briefly

Q5/Discus: RNA molecules are usually much shorter than DNA.

Q6/Mention the essential role of IF3.

Q7/List the enzymes that involved in DNA replication (in serial)

Q8/Mention the importance of operon.

Choose the correct answer (MCQ)

Q1/ Vaucheria belonging to order

a-Pinales b-Centrales c-Chrysophyles)

Q2/ Rhodophyta group of algae are

a-motile b-non- motile c-other

Q3/ Star shaped plastid present in

a- Spirogyra b-Zygnema c-Enteromorpha)

Q4/ Bacillariophyceae group of algae cell wall structure have

a-cellulose b-Polysulphate c- ester,Silica)

مجموع درجات الاسئلة :-

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Answer the following questions briefly

Q1/ Conjugation sometime called Anisogamy?

Q2/ Sporangium called unilocular?

Q3/ Phaeophyta are brown algae?

Q4/ Algae sometimes called Epizonic algae?

مجموع درجات الاسئلة :-