

جامعة بغداد / كلية العلوم / قسم علوم الحياة

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

دكتوراه / علم النبات

الرقم السري :

الاسم الرباعي :

القناة :

الشهادة المتقدم اليها :

التخصص :

MCQ			المادة	ت
رقم الصفحة	الدرجة كتابة	الدرجة رقماً		
2-1			فسيولوجيا النبات	1
3			الطحالب	2
6-5			التصنيف الحياتي للنبات	3
9			تشريح النبات	4
12			مركبات الايض الثانوي	5
المجموع من 60% =				
S.A			المادة	ت
رقم الصفحة	الدرجة كتابة	الدرجة رقماً		
2			فسيولوجيا النبات	1
4-3			الطحالب	2
8-7			التصنيف الحياتي للنبات	3
11-10			تشريح النبات	4
14-13			مركبات الايض الثانوي	5
المجموع من 40% =				
الدرجة النهائية 100% =				

اسم المادة : فسيولوجيا النبات

الرقم السري:

Choose the correct answer (MCQ)

Q1/ in plants, rate of transpiration is usually maximum in -----

- a- morning b- afternoon c- little before noon d-evening

Q2/ main force for ascent of sap in higher plants is -----

- a- root pressure b-transpiration pull c-atmospheric d- capillary force

Q3/ ABA was found to ----- in harden plants exposed to freezing

- a- Increase b- decrease c- Be not affected

Q4/ Water content is ----- related to hardness of plant

- a- Inversely b- Proportionally c- not related

Q5/----- is responsible for senescence

- a- Ethylene b- cytokinins c- ABA

Q6/ The Pfr of phytochrom-----

- a- Absorb light at peak 660nm b- Active form that initiates biological response c- When Pfr absorbs distinct phases in the production of flower

Q7/ There are three distinct phases in flower production

- a- Induction b- Initiation c- Wilting

Q8/ The action of Gas-----

- a-Overcome dormancy b- Epinasty c- Ethylene production

Q9/ Water rises in xylem in the form of -----

- a- continuous water Colum b- water vapours c- dies continuous water Colum d- none of the above

Q10/ Root pressure is developed in -----

- a- xylem b-phloem c- cortex ,pericycte

Q11/ Which of the following forms of soil has plenty of water but is

Physiologically dry-----

- a- water logged soil b- clayey loam c- sandy loam , loam

Q12/ Transport of ions through channels is always -----

- a- passive , active b- both of them c- none of them

Q13/ Which of the following is an example of electro neutral pump? ----- a-H⁺-ATPase

- b-H⁺-PPase c-H⁺/K⁺ -ATPase d-Ca²⁺-ATPase

Q14/ Which of following mineral elements is less soluble and comparatively immobile in soil -----

- a- P b-K c-N d-none of these

Q15/ Chlorosis of leaves due to nitrogen deficiency begins at first in -----

- a- unfolding leaves b- young leaves c- older leaves d-all of above

Q16/ First step in absorption of mineral salts by plant is -----

- a- imbibitions b-diffusion c-ion-exchange d-none of above

Q17/ Transport of ions through channels is always -----

- a- passive , active b- both of them c- none of them

اسم المادة : فسيولوجيا النبات

الرقم السري:

Choose the correct answer (MCQ)

Q18/ Synthesis of ethylene is stimulated by -----

- a- GA3 b- ABA c- Auxin

Q19/Limitation of fruit set -----

- a- Lack of pollination b- abscission of flower c- high nutritive

Q20/ Disposal of auxins -----

- a- Oxidation b- Conjugation c- Conversion

Q21/The rate of diffusion increased ?if ,-----

- a- the temperature is increased b-density of diffusing particles is lesser
b- the medium through which diffusion occurs in less concentrated d-all of above

Q22/ In primary active transport , the energy required comes chiefly from -----

- a- hydrolysis of ATP b-hydrolysis of GTP c- proton motive force
d- all of these

مجموع درجات الاسئلة:

Answer the following questions briefly

Q1/ Types of tropism are 1- ----- 2- ----- 3- -----

----- 4- ----- 5- -----

Q2/ Phytochrome is -----

Q3/ The increase of ratio of ----- is an important factor to break the dormancy of seeds and buds

Q4/ Type of growth regulators are 1-----, 2-----and 3-----

Q5/ Differences between phytohormones and enzymes are 1----- and 2-----

Q6/ Active non- absorption of water is -----

Q7/ Physiological effects of ethylene in plants are 1-----, 2-----

3----- 4 ----- and 5-----

Q8/ The production of ATP in the light reaction is called -----

مجموع درجات الاسئلة:

اسم المادة : الطحالب

الرقم السرى:

Choose the correct answer (MCQ)

Q1/Radial system diatoms are belonging to order -----

- a- Pinnales b- centrales c-diatomales

Q2/ the growth usually happen in Ulva is -----

- a- Diffused b- localized growth

Q3/Cyanobacteria could live with fungi to produce -----

- a- Lichen b- Mycorhyza c- Cyanofungi

Q4/ The culture which contain one alga with bacteria and fungi called -----

- a- Axenic b- unialgal c- crude culture

Q5/Zygnema has chloroplast -----

- a-star shaped b- reticular shaped c- spiral shaped

Q6/Laminarine stored in -----

- a- Rhodophyta b- chrysophyta c- phaeophyta

مجموع درجات الاسئلة:

Answer the following questions briefly

Q1/ Give types of seasonal life of algae?

Q2/ Give two references used in algal taxonomy?

مجموع درجات الاسئلة:

Answer the following questions briefly

Q3/What are the main nutrient compounds needed for algal cultures?

Q4/Why the classical antibiotics were not recommended to control algal blooms?

Q5/Why the use of contaminated water with toxic algae is not recommended for cooking?

Q6/ Give two types of parasitism in Rhodophyta species?

اسم المادة : التصنيف الحياتي للنبات

الرقم السري:

Choose the correct answer (MCQ)

Q1/ A taxa whose geographical ranges overlap called -----

- a- Apomixis b- allopatric c- sympatric d- self-incompatibility

Q2/ The leaf trace is :

- a- The leaf venation b-The leaf vascularization c-The vascular bundle of leaf petiole

Q3/ Cinamoriaceae is :

- a- A paracytic family b-A seedless family c-A monocots family

Q4/ Allium sativum has:

- a- Closed R.S b-Restricted R.S c-Opened R.S

Q5/ A crocentric chromosome means:

- a- Chromosome with subterminal centromere b-Chromosome with distinct centromere
c-Chromosome with accessory centromere

Q6/ A flower which never open and self-pollination is -----

- a- Polygamy b- perfect flower c- cleistogamy d- heterophylly

Q7/ Which plant bear monodelphous stamens -----

- a- Pea b- Datura c- Tobacco d- Malva

Q8/The plants live in the same region but flower at different time called -----

- a- Geographical isolation b- ecological-isolation c- mechanical-isolation d- seasonal-isolation

Q9/ - basic chromosome number of Dicots is :

- a- 7 and 14 b-7,8,9 c-12,16,18

Q10/ The genus Solanum includes:

- a-200 spp b-2700 spp c-1800 spp

مجموع درجات الاسئلة:

اسم المادة : التصنيف الحياتي للنبات

الرقم السري:

Choose the correct answer (MCQ)

Q11/Which term use if the stamens are more in length than the petals?

- a- Exserted b- inserted c- extrorse d- introrse

Q12/Dichogamy is facilitates :

- a- Cross – pollination b- self – pollination c- crossing – over d- as in both a & b

Widely distributed species has:

- a- More than one chromosome number b-Two chromosome number c-Few chromosome number

Q13/ Tetrasuleate pollen mean:

- a- Pollen with sulcate b- Pollen with 3 colpi c-Pollen with 4 grooves

Q14/Cleistogamous flower are:-

- a- Flower are unisexual b- flower are never open c- flower are bisexual d- as two types b&c

Q15/Hydrophilous plant such ad :-

- a- Eloda b- Hydrilla c- Vallisneria d- as in three types a,b,&c

Q16/The famous Linnaeus books

- a- General – plantarum b- species plantarum c- as two types a&b d- non any one above

مجموع درجات الاسئلة:

اسم المادة : التصنيف الحياتي للنبات

الرقم السري:

Answer the following questions briefly

Q1/ What is the ethological - isolation?

Q2/ What is the Pollinia ?

Q3/ Give two factors cause the change and evolution at the population level?

Q4/ What is the speciation ?

Q5/Define Taxon ?

مجموع درجات الاسئلة:

اسم المادة : التصنيف الحياتي للنبات

الرقم السري:

Answer the following questions briefly

Q6/ Genetic drift is :

Q7/ Interspecific hybridization is ?

Q8/ What is the protogynous?

Q9/ What is the reproduction – isolation ?

Q10/ To increase fitness in a population two things must be happened:

1-

2-

مجموع درجات الاسئلة:

اسم المادة : تشريح النبات

الرقم السري:

Choose the correct answer (MCQ)

Q1/ A membrane around the vacuole it is known as -----

- a- Vacuole membrane b- plasma membrane c- pit- membrane d- tonoplast

Q2/ Who was father of Botany -----

- a- Aristotle b- Leeuwenhoek c- Brown d-Theophrastus

Q3/ The root hairs are usually -----

- a- Multicellular b- unicellular c- uni and multicellular

Q4/In root the region after meristematic region (or apical region) is called as -----

- a- Differentiation region b- absorption region c- elongation region

Q5/type of the vascular bundle in stem of monocote plant called as

- a- Conjoint collateral b- Conjoint collateral closed c- radial vascular bundle d- concentric vascular bundle

Q6/the epidermis becomes multilayered in some plants like

- a- Potamogeton b- Nerium c- Ficus d- as two types b&c

Q7/the inner most layer of cortex in stem it is called as

- a- Peridermis b- exodermis c- hypodermis d- endodermis

Q8/ the epidermis layer has thin or absent cuticle as in plant of

- a- Hydrpphytes b- xerpphytes c- mesophytes d- Bryophytes

Q9/ plant belong to gymnosperms because

- a- Endospermis haploid b- seeds are formed c- ovules are naked d- none of above

Q10/ the science study pleen-grain is known

- a- Pollinium b- pleobotany c- palynology

مجموع درجات الاسئلة:

Answer the following questions briefly

Q1/ Give only the structure of the cystolith – crystal?

Q2/What are the differences between xylem arrangement in Dicot stem and Dicot root?

Q3/ Give only names of the three types of collenchyma tissue?

Q4/ Give only the structure of the aleuron – grain?

Q5/In which plant finds the motor-cells?

Answer the following questions briefly

Q6/Explain by labeled drawing three types of starch grains ?

Q7/Explain the differences between hypodermis in dicot and monocot stem?

Q8/Write short note of the characters of sapwood?

Q9/ Write short note of the arenchyma tissue ?

Q10/ Write short note of the characters of heart wood ?

اسم المادة : مركبات الايض الثانوى

الرقم السرى:

Choose the correct answer (MCQ)

Q1/ Anticancer -----

- a- Antitoxic b- anti viral c- allelopathic effect d-antioxidant

Q2/ Have storage function -----

- a- Forming nonfunctional protein b-Act as intermediates in the metabolic pathways for standard amino acids
c-Protection of seeds from seed predators
d-have insecticidal activity

Q3/ Toxic to fungi and insects and act as antibiotic-----

- a- Phytoalexine compounds as in rice b-Use in the treatment of acute chronic bronchitis and related conditions
c-it has phermonal effect d- it has steroidal effect

Q4/ Ecological and physiological roles-----

- a- Allelopathic effects b- Has inhibitory effect against *Rhizobium Azotobacter* and *Frankia* c- Has inhibitory effect against *Nitrobacter and Nitrosomanas*

Q5/----- may also promote cell growth by causing a decrease in the osmotic potential of the cell sap

- a- IAA b-cytokinin c-gibberellins

Q6/ The hormone responsible for root initiation is -----

- a- IBA b-ABA c-GA₃

مجموع درجات الاسئلة:

اسم المادة : مركبات الايض الثانوى

الرقم السرى:

Answer the following questions briefly

Q1/What are the properties of a good solvent in plant extractions for secondary metabolites compounds?

Q2/ Enumerate the ecological functions for the secondary metabolites compounds ?

Q3/ What are the different between Terpenoids and phenolics secondary metabolites?

اسم المادة : مركبات الايض الثانوى

الرقم السرى:

Answer the following questions briefly

Q4/ What are the relationships between secondary metabolites and the free radicals? give some examples ?

Q5/Which one of the plants growth regulators would you use if you are asked to Induce rooting in a twig ?

Q6/ Feeding attractants in Legumes plants roots are -----

مجموع درجات الاسئلة: