

الاسم الثلاثي :

الشهادة المتقدم اليها :

التخصص :

MCQ			المادة	ت
رقم الصفحة	الدرجة كتابة	الدرجة رقماً		
1			علم الخلية العام	1
2				
3			علم فسيولوجيا الحيوان	2
4				
5			علم فسيولوجيا النبات	3
6				
7			علم الاحياء المجهرية العام	4
8				
9			علم البيئة والتلوث	5
10				
11			علم البايولوجي الجزيئي ووراثة البكتريا	6
12				
13			مجاميع نباتية	7
المجموع من 60% =				

S.A			المادة	ت
رقم الصفحة	الدرجة كتابة	الدرجة رقماً		
14			علم الخلية العام	1
15				
16			علم فسيولوجيا الحيوان	2
17				
18			علم فسيولوجيا النبات	3
19				
20			علم الاحياء المجهرية العام	4
21				
22			علم البيئة والتلوث	5
23				
24			علم البايولوجي الجزيئي ووراثة البكتريا	6
25				
26			مجاميع نباتية	7
المجموع من 40% =				
الدرجة النهائية 100% =				

Choose the correct answer:-

Q1/ Plant cell wall mainly composed of:-

- a- cellulose
- b- starch
- c- protein
- d- lipid

Q2/ During metaphase mitosis chromosomes:-

- a- undergo coiling
- b- move towards the poles
- c- line up at the equator
- d- break and disintegrate

Q3/ One of the following polysaccharides provides structure and support in the invertebrates

- a. glycogen b. cellulose c. chitin d. starch

Q4/ Digestive enzymes and hormones are secreted from the secretory cells by

- a. phagocytosis b. pinocytosis c. exocytosis d. endocytosis

Q5/ During normal exhalation, which of the following muscles contract?

- a. Diaphragm, external intercostals
- b. Internal intercostals, transversus thoracis
- c. None; the muscles of inhalation relax in normal exhalation
- d. Abdominals

Q6/ Blood flows out of the ventricles when?

- a. The atrioventricular valves are open
- b. The semilunar valves are open
- c. The bicuspid valves are open
- d. The mitral valves are closed

Q7/ Bile is produced by the and stored by the until it drains into the

- a. Gall bladder, liver, duodenum
- b. Pancreas, liver, gall bladder
- c. Liver, gall bladder, duodenum
- d. Liver, gall bladder, stomach

Q8/ Blood pressure is usually expressed as

- a. Diastolic pressure over systolic pressure
- b. Systolic pressure over diastolic pressure
- c. Diastolic pressure over pulse pressure
- d. Pulse pressure over diastolic pressure

Q9/ The following are examples of lymphatic vessels and tissues, except:

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

Q10/ 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

Q11/----- animals which are capable of maintaining a relatively constant body temperature in spite of great variations of external temperature.

- A- Poikilothermic. B- Homeothermic C- Ectothermic. D- Heterothermic.

Q12/ 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.

Q13/ When the nerve is stimulated, the polarized state is altered and the interior becomes positive;this is called-----

- A- Depolarization phase B- Repolarization phase C- Polarization phase D- None of the above.

Q14/ During muscle contraction ----- remains constant.

- A- Z discs. B- A band . C- H zone . D- I band.

Q15/ The glomerular filtration, takes place in -----

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

Q16/ 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

Q17/ Oxidation of glucose to H₂O and CO₂ yields

- a-36 ATP b-30ATP c-38ATP

Q18/ The first compound produced after CO₂ fixation in C₄ plant

- a-Ribulosediphosphate carboxylase b-Phosphoenol pyruvate carboxylase c-invertase

Q19/ Water potential of plant cell is determined by

- a- Osmotic potential b- Hydrostatic pressure c- Wall pressure

Q20/ Plant hormones differ from animal hormones in that

- a- plant hormones are made in tissues specialized for hormone production
b- plant hormones do not have definite target areas
c- No different between them

Q21/----- increases the plasticity of plant cell walls

- a- CytoKinins b- Auxin and Cytokinins c- Gibberellin and Auxin

Q22/ ATP produced by respiration is called

- a- oxidation phosphorylation b- photophosphorylation c- phosphorylation

Q33/ A group of organisms that all belong to the same species and live in a given area is called a (n)...

- A. Community B. Colony C. Population D. Ecosystem

Q34/ A population is *correctly* defined as having which of the following characteristics?

- A. inhabiting the same general area B. individuals belonging to the same species
C. possessing a constant and uniform density and dispersion

Q35/ A community is several species of animals interacting, while a population is?

- A. members of one species in an area. B. the biotic and abiotic elements of an area.
C. the nonliving elements of a habitat. D. a single organism

Q36/ The sequence of energy flow through a food chain is?

- A . primary consumers- producers- higher order consumers.
B . producers- higher order consumers- primary consumers
C. higher order consumers- primary consumers- producers.
D . primary consumers- higher order consumers- producers.
E. producers- primary consumers- higher order consumers.

Q.37/Biotic components of ecosystems includes -----?

- A. Producers B. Consumers C. Decomposers D. all the above

Q38/ Indirect methods for measurement of productivity?

- A. harvest method B. oxygen C. Carbon monoxide D. all the above E. Only B and C

Q39/ According to its persistence which of following considered more dangerous ?

- A. DDT B. chlordane C. picloram D. 2,4-D

Q40/ Greenhouse effect refers to

- A. ability of atmosphere to retain water vapor
B. ability of certain atmospheric gases to trap heat and keep the planet relatively warm
C. ability of cloud to scatter electromagnetic radiation
D. none of the above

Q41/ What is the harm from the depletion of Earth's ozone layer.

- A. The average temperature of earth's surface will increase gradually
B. The oxygen content of the atmosphere will decrease
C. Increased amount of Ultra violet radiation will reach earth's surface
D. Sea levels will rise as the polar ice caps will gradually melt

Q42/ The total damage or risk is directly proportional to the accumulated exposure, this statement

related to

- A. Linear effect B. Threshold effect C. synergism D. pollution response E. both A and D

Q43/ The pollutant responsible for ozone holes is -----

- A. CO₂ B. NO_x C. CO D. CFC E. Each the previous F. only B and D

Q44/ According to the concept of Biological discrimination, which one of the following will contain the maximum amount of insecticide residues

- A. Soil B. Stem of plant C. Root of plant D. leaves of plant

Q51/Among types of mutation occurred to genes is :

- a- Transformation b-transgenic c- transition

Q52/ Frame shift mutation mean

- a- Changes in the reading frame of the gene b- Change in the direction of polymerase.
c-Change in repairing of DNA segments

Q53/Fragment of DNA 201 bp in length, the number of the phosphodiester bound is :

- a- 202 b- 200 c- 201

Q54/ For example for invisible mutation is:

- a- Point mutation b- conditional mutant c- suppressor mutants

Q55/ Nitrous oxide, chemical compound converts the amino group of bases into keto group through:

- a- Splicing process b- deamination oxidative c- methelation step.

Q56/ Thymin dimer is mean:

- a- T=T in same strand b- T=T in opposite strand c- T=T unwind strands

Q57/ Algae are:-

- a- Bryophytes b- Pteridophytes c- Thallophytes

Q58/ Pro Chlorophyta are:-

- a- Procaryotic b- Eucaryotic c- Others

Q59/ Cyanophyta are

- a- non- motile b- motile c- Others

Q60/ Ectocarpus sp. belonging to division:-

- a- Chlorophyta b- Phaeophyta c- Rhodophyta)

Answer the following questions briefly:-

Q1/ What is the structure and function of the cell membrane?

Q2/ Nitrogenous bases in the DNA are classified as ?

Q3/ The which are part of the lymphatic system, form a ring at the connection of the oral cavity and the pharynx

Q4/ The exchange of gases between alveoli and their surrounding capillaries is called

.....

Q5/ Pancreas produces an enzyme called which is digests the fats

Q6/ Hydrochloric acid is produced by within the stomach.

Q7/ Renin is needed to stimulate the secretion of -----

Q8/ The resting membrane potential (RMP) indicates the resting state of cell, also called state of

Q9/ Functionally, neurons are classified to -----, -----

or-----

Q10/ when the fiber is at rest, the ----- block active sites for myosin on actin.

Q11/ Chlorophyll ----- exists in brown algae.

Q12/ One function of ----- pigment is to protect chlorophylls against photooxidation in excessive light

Q13/ ----- Is the process by which the plant can produce ATP in the presence of Light and it happens in the plastids and through the light reactions.

Q14/ ----- is a proteinous compound contains two Cu atoms and responsible for receiving the electrons from cytochrome f and transfer them to pigment system 1 in light reaction

Q15/ Colloidal system is made up of -----

Q16/ One function of water is -----

Q17/ Because of the presence of -----, the plant can maintain a higher
Ionic concentration in the xylem than in -----

Q18/ Two functions of transpiration are: -----
and -----

Q19/ Mention the differences between pili and flagella?

Q20/ What is the meaning of microbial cell death?

Q21/ Define the term Ecology?

Q22/ What is the difference between Autecology and Synecology?

Q23/ What is the difference between food chain and food web?

**Q24/ There are three kinds of ecological pyramids ,
and**

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**Q24/ There are three kinds of ecological pyramids ,
and**

Q25/ What do we mean by Ultra-violet radiation (UVR)?

Q26/ Classify the pollutants according to its effect?

Q27/ SO₂ mass in the atmosphere is so small compared to annual emissions by humans. Give the Reason?

Q28/ The decreasing of Oxygen in water led to

Q29/ Why proteins are not directly translated from DNA?

Q30/ What are the roles of histones in the assembly of chromosomes?

Q31/ Which RNA is referred to by the term none coding RNA?

Q32/ What's the central dogma?

Q33/ Define the plasmids and mention their essential roles?

Q34/ Mention the main differences between stringent plasmid and relaxed plasmids?

Q35/ What is the main different between transcription and replication?

Q36/ Mention the role of sigma factor?

Q37/ Scientists believed that higher plants developed from Chlorophyta?

Q38/ Ectocarpin produced by Ectocarpus female gametes?

Q39/ Algae branching called false branching?

Q40/ Diatoms are used to be bioindicators?