Question 48
Not yet answered
Marked out of 1.00
Flag question
Edit question

Life Science (+)
Climacteric fruits produce a hormone in large quantities after harvesting to promote ripening.
What is the name of this phytohormone?

Select one:
- a. Auxin
- b. Ethylen
- c. Melatonin
- d. Giberelic acid
- e. Insulin

Question 49
Not yet answered
Marked out of 1.00
Flag question
Edit question

Life Science (+)
The Golgi apparatus plays a central role in eukaryotic cells.
It is involved in

Select one:
- a. the post-translational modification of proteins.
- b. the targeting of proteins and lipids.
- c. the packaging of hormones or enzymes into secretory vesicles.
- d. all three processes.
- e. none of these processes.

Question 50
Not yet answered
Marked out of 1.00
Flag question
Edit question

Life Science (+)
Phytoremediation can be defined as the decontamination of soil by plants. Among the pollutants that plants must contend with are a number of metallic elements such as Lead, Zinc, Iron, and Cadmium.
These elements

Select one:
- a. come from acid rain.
- b. come solely from human activities.
- c. come from human activities and the degradation of the Earth's crust.
- d. come from human activities, acid rain, and the degradation of the Earth's crust.
- e. come solely from the degradation of Earth's crust.

Question 51
Not yet answered
Marked out of 1.00
Flag question
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Life Science (+)
The translation of messenger RNA (mRNA) into proteins in eukaryotes occurs in three main stages:

Select one:
- a. copy, elongation, and termination.
- b. mRNA are not translated into proteins.
- c. initiation, elongation, and structuration.
- d. initiation, elongation, and termination.
- e. copy, elongation, and structuration.

Question 52
Not yet answered
Marked out of 1.00
Flag question
Edit question

Life Science (++)
A biofilm is a complex and resilient microbial community, capable of colonizing various surfaces and playing a crucial role in chronic infections because

Select one:

a. the bacteria in the biofilm are as sensitive to antibiotics as planktonic bacteria.
b. the bacteria in the biofilm are more resistant to antibiotics due to a lipid cell wall.
c. the bacteria in the biofilm are more resistant to antibiotics due to the extracellular matrix.
d. the bacteria in the biofilm are more sensitive to antibiotics due to the extracellular matrix.
e. the bacteria are not sensitive to antibiotics, it's fungi.

Question 53
Not yet answered
Marked out of 1.00
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Life Science (++)
Mammals can control their body temperature through different mechanisms like sweating or adjusting blood vessel size.
Is this also true for plants?

Select one:

a. No, plants can only regulate their temperature by transpiring.
b. No, plants can only regulate their temperature by adjusting their vessels size.
c. No, plants cannot transpire nor adjusting their vessels size.
d. No, plants regulate their temperature by producing a lipid film on the leaves.
e. None of the above.

Question 54
Not yet answered
Marked out of 1.00
Flag question
Edit question

Life Science (+++)
Climate change poses a real challenge for maize breeders who must develop varieties resilient to various stresses (water, heat, biotic, etc.). Traditional maize populations, still cultivated in tropical regions, represent a rich source of genetic diversity that can offer valuable alleles for breeding programs. Before incorporating these traditional populations into breeding programs, breeder Tom decided to evaluate their performance. Four maize populations have been evaluated in the same field, with each population replicated 10 times.
The evaluation included phenotyping for water deficit tolerance (WDT, measured as a percentage), and biomass production (BP, measured in bushels per acre).
The results are presented in the following table:

Population	WDT %		BP b/a	
	mean	min–max	mean	std
A	80	65-95	45	15
B	75	73-77	45	15
C	74	71-77	44	5
D	50	45-55	25	10

According to the results of the Water Deficit Tolerance ONLY, classify the 4 populations, the first one being the one that you would recommend to keep.

Select one:

a. D / C, B / A
b. A / B, C / D
c. A / D / B, C
d. B, C / A / D
e. C, B / D / A

Question 55

Not yet answered

Marked out of 1.00

Flag question

Edit question

Life Science (+++)

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According to the results of BOTH the Water Deficit Tolerance and the Biomass Production, what populations would you recommend to keep?

Select one:

- a. D
- b. None of them
- c. B and C
- d. A only
- e. A and D