

Smart Edu Hub / Smart Exam Resources

9700 / CAIE A level Biology / Paper-1/ Multiple Choice
Questions

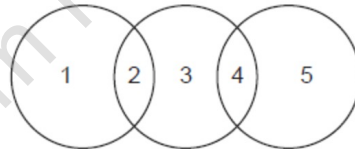
1.2.31-Cell-structures-mixed-bag-Set-1-qp

Total Questions: 11

Questions

Question 1:

The diagram shows some similarities between chloroplasts, mitochondria and typical prokaryotes.



Which row is correct?

	1	2	3	4	5
A	chloroplasts	70S ribosomes	prokaryotes	70S ribosomes	mitochondria
B	chloroplasts	70S ribosomes	prokaryotes	80S ribosomes	mitochondria
C	mitochondria	70S ribosomes	chloropl	ribosomes	prokaryotes
D	mitochondria	80S ribosomes	chloropl	ribosomes	prokaryotes

Question 2:

In order to complete the sentence below, what is the correct process and cell structure?

Cells which have a high rate of1..... will have many2..... .

	1	2
A	DNA replication	lysosomes
B	exocytosis	Golgi vesicles
C	facilitated diffusion	mitochondria
D	phospholipid production	ribosomes

Questions (Continued)

Question 3:

What are found in **both** chloroplasts and mitochondria?

- A 70S ribosomes only
- B 70S ribosomes and circular DNA
- C 80S ribosomes and circular DNA
- D circular DNA only

Question 4:

Which statements about **both** mitochondria and chloroplasts are correct?

- 1 They contain 80S ribosomes.
- 2 They contain circular DNA molecules.
- 3 They produce ATP.

- A 1, 2 and 3 B 1 and 2 only C 1 and 3 only D 2 and 3 only

Question 5:

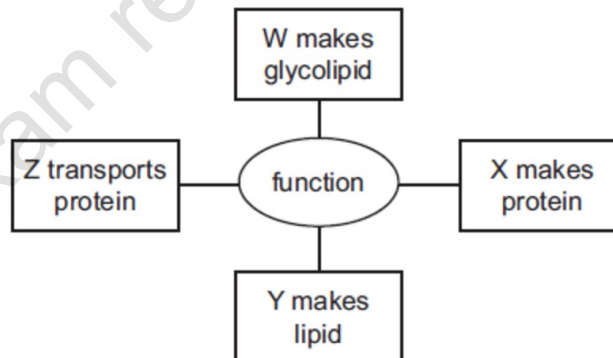
Which structures are measured using these units?

	10^{-3} m	10^{-6} m	10^{-9} m
A	chloroplast	ribosome	nucleus
B	nucleus	chloroplast	xylem vessel
C	ribosome	xylem vessel	chloroplast
D	xylem vessel	nucleus	ribosome

Questions (Continued)

Question 6:

The diagram shows functions of four cell structures, W, X, Y and Z.



Which row correctly matches the cell structure with the letter representing a function?

	Golgi body	ribosome	rough endoplasmic reticulum	smooth endoplasmic reticulum
A	W	X	Z	Y
B	X	Z	Y	W
C	Y	W	X	Z
D	Z	Y	W	X

Question 7:

Which features of microvilli and root hairs are correct?

	increase cell surface area	cannot be resolved with the light microscope	contain vacuoles	more than one present on a cell
A	microvilli	microvilli	root hairs	root hairs
B	microvilli	root hairs	microvilli	microvilli
C	root hairs	microvilli	root hairs	microvilli
D	root hairs	root hairs	microvilli	root hairs

Questions (Continued)

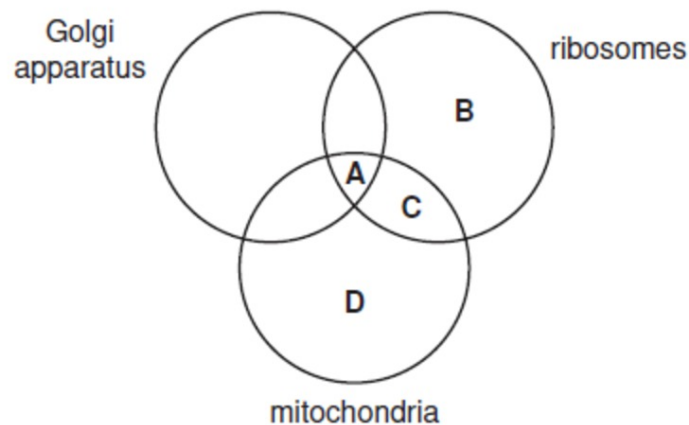
Question 8:

Which features of cilia and root hairs are correct?

	increase cell surface area	cannot be resolved with the light microscope	contain vacuoles	more than one present on a cell
A	cilia	cilia	root hairs	root hairs
B	cilia	root hairs	cilia	cilia
C	root hairs	cilia	root hairs	cilia
D	root hairs	root hairs	cilia	root hairs

Question 9:

Which structures are present in a cell of *Plasmodium*?



Questions (Continued)

Question 10:

Single-celled animals that live in fresh water have a vacuole that contracts regularly to remove excess water. Single-celled plants that live in fresh water do not have a similar vacuole.

Which statement explains why only these animals need this vacuole?

- A Plant cell cytoplasm and animal cell cytoplasm both have a lower water potential than fresh water.
- B Plant cell sap has the same water potential as fresh water, animal cytoplasm has a lower water potential than fresh water.
- C Plant cell walls are impermeable to water, animal cell surface membranes are permeable to water.
- D Plant cell walls restrict the entry of water, animal cell membranes allow the free entry of water.

Question 11:

Which substances contain carbon, hydrogen, oxygen and nitrogen?

- 1 amylopectin
- 2 collagen
- 3 deoxyribonucleic acid

- A 2 only
- B 1 and 2 only
- C 2 and 3 only
- D 1, 2 and 3