

Cell and Microscopy MS

QUESTION 1

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	A = nucleus B = cell wall		
Total marks			2

QUESTION 2

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)i)	A = (cell) wall B = cytoplasm	ignore cellulose	2
a)ii)	any one from <input type="checkbox"/> bacterial cell / it has no nucleus <input type="checkbox"/> DNA free in cytoplasm <input type="checkbox"/> has no vacuole / no vesicles	accept has DNA instead of a nucleus but not just has DNA allow no mitochondria ignore size ignore strands of DNA	1
Total marks			3

QUESTION 3

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	A nucleus B(cell) membrane C cytoplasm		1 1 1
b)	any two from: <input type="checkbox"/> (contain) mitochondria <input type="checkbox"/> many (mitochondria) <input type="checkbox"/> respiration (occurs in mitochondria)		2
Total marks			5

QUESTION 4

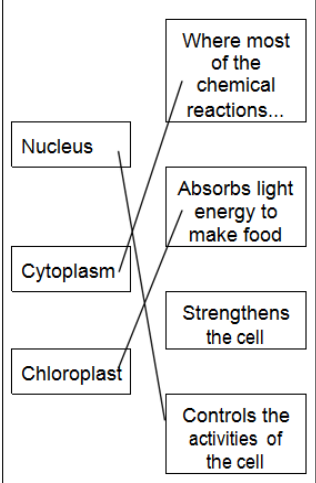
QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)i)	A cytoplasm B nucleus	accept clear indications	2
a)ii)	any two from: P R		1

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b)	sperm cells need a lot of energy to swim		1
Total marks			4

QUESTION 5

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)i)	cell membrane	allow membrane	1
a)ii)	cytoplasm		1
b)i)	A		1
b)ii)	B		1
Total marks			4

QUESTION 6

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)		<p>1 mark for each correct line mark each line from left hand box</p> <p>two lines from left hand box cancels mark for that box</p>	3
b)	energy		1
Total marks			4

QUESTION 7

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)i)	A = nucleus B = (cell) membrane		2
a)ii)	any two from: • no (cell) wall • no (large / permanent) vacuole • no chloroplasts / chlorophyll	ignore shape	2
b)	because high to low oxygen /	allow 'more / a lot of oxygen	1

	concentration or down gradient	molecules outside' ignore along / across gradient	
c)	a tissue		1
Total marks			6