

Name of the Student: _____

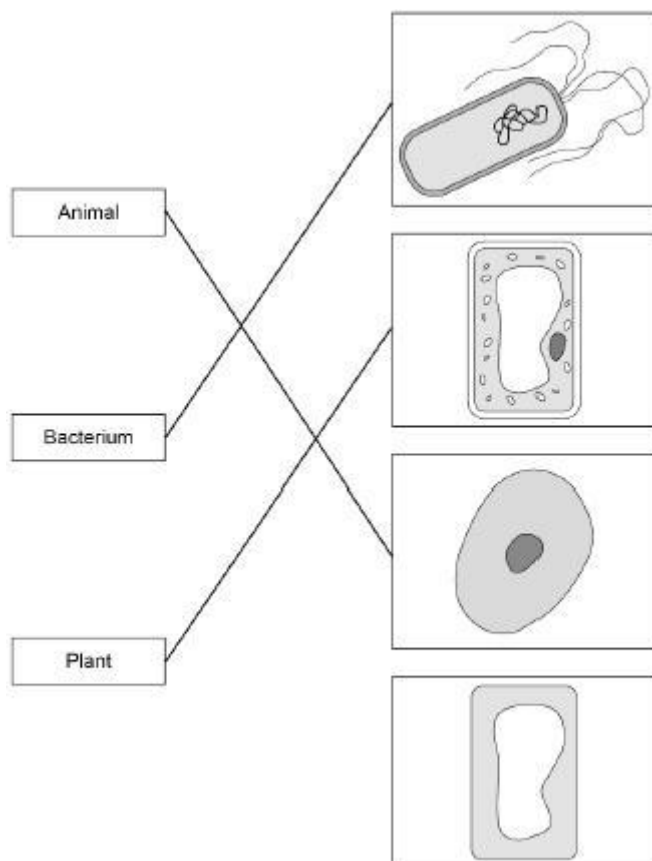
Max. Marks : 25 Marks

Time : 25 Minutes

Mark Schemes

Q1.

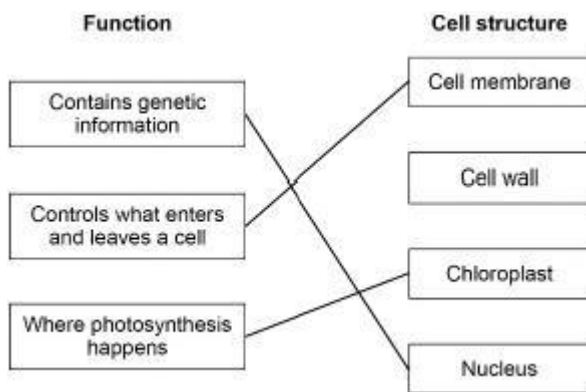
(a)



do **not** accept more than one line from a box on the left

1
1
1

(b)



do **not** accept more than one line from a box on the left

1
1
1

(c) urea

must be in this order

1

glycogen

1

starch

1

cellulose

1

(d) any **one** from:

- (to cause) movement
- to contract / shorten

allow example of movement

ignore to relax / expand

ignore references to strength / energy / power

1

(e) (many) mitochondria

1

to transfer / release (a lot of) energy

allow (mitochondria) for respiration

*do **not** accept to produce / make / create energy*

ignore reference to the shape / strength of the cells

1

(f) $\frac{2}{0.05}$

1

(×) 40

*do **not** accept if a unit is given*

1

[15]

Q2.

- (a) nucleus 1
- (b) cells never stop dividing 1
- (c) any **one** from:
• chemicals enter the lungs (first)
• chemicals are inhaled
• chemicals are more concentrated in the lungs
allow smoke / tar / carcinogens for chemicals
ignore nicotine unqualified 1
- (d) (cancer cells transported) in the blood 1
- (e) any **one** from:
• (smoking) will damage the new lung
allow poor chance of success
allow (smoking) will increase the risk of cancer developing in the new lung
allow wastes a healthy lung

• (NHS has) limited financial resources
• the lung could be used for someone else (who does not smoke)
• illness is self-inflicted **or** person is not attempting to help themselves 1
- (f) 300
answer line takes precedence 1
- (g) any **one** from:
• little exposure to ionising radiation
allow do not use sunbeds

• little exposure to the sunlight / UV (light)
• more use of sunscreen
allow better sunscreen

• little exposure to carcinogens
allow named carcinogen

• little cell / DNA / gene damage
allow skin cancer takes a long time to develop
ignore references to smoking 1
- (h) any **one** from:
• most new cases each year are in males / people aged 65-69 (years)
• new cases per year increases (from age 15) up to 69 (years)
allow any upper age of 65-69

• new cases per year decreases from age 69 to 90 (+ years) 1

- (i) any **two** from:
- improved treatment / drugs
 - earlier diagnosis
 - improved cancer screening
allow improved technology / machinery
 - improved patient / doctor knowledge (of dangers / treatments)
allow improved patient diet / lifestyle

2

[10]