

GCSE Biology B (Twenty First Century Science)
J257/01 Breadth in Biology (Foundation)

Question Set 24

Multiple Choice Questions

1. (a) Plants respond to their environment.

Select the word from the list below that describes each statement.

auxin gravitropism photosynthesis phototropism respiration

(i) Plant shoots grow towards the light. **phototropism** [1]

(ii) Plant roots grow in the direction of gravity **gravitropism** [1]

(iii) A hormone involved in plant growth responses **auxin** [1]

(b) Pathogens can cause disease in plants.

Which **two** statements describe **plant** defences against pathogens?

Tick (✓) **two** boxes.

They have a cell wall.

They have platelets.

They have white blood cells.

They produce antibodies.

They produce antimicrobial substances.

(c) (i) Some plants grow in waterlogged soil. [2]

What type of respiration will take place in root cells growing in waterlogged soil?

(ii) Which **two** statements, when taken together, explain why plants that grow in waterlogged soil may obtain fewer nutrients from the soil? **anaerobic** [1]

Tick (✓) **two** boxes.

Active transport uses ATP.

Active transport requires a concentration gradient.

Active transport needs water.

Less ATP is made in aerobic respiration.

Less ATP is made in anaerobic respiration.

[2]

Total Marks for Question Set 24: 8

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