

Photosynthesis

Question Paper

Level	International A Level
Subject	Biology
Exam Board	Edexcel
Topic	Energy Flow , Ecosystem and Environment
Sub-Topic	Photosynthesis
Booklet	Question paper

Time Allowed: 41 minutes

Score: /34

Percentage: /100

Grade Boundaries:

A*	A	B	C	D	E	U
>85%	77.5%	70%	62.5%	57.5%	45%	<45%

(c) Photosynthesis takes place in palisade mesophyll.

Describe what happens to the carbon dioxide that enters this tissue.

(4)

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(d) Xylem transports ions and water molecules to the leaf.

Describe the roles of these ions and water molecules in photosynthesis.

(3)

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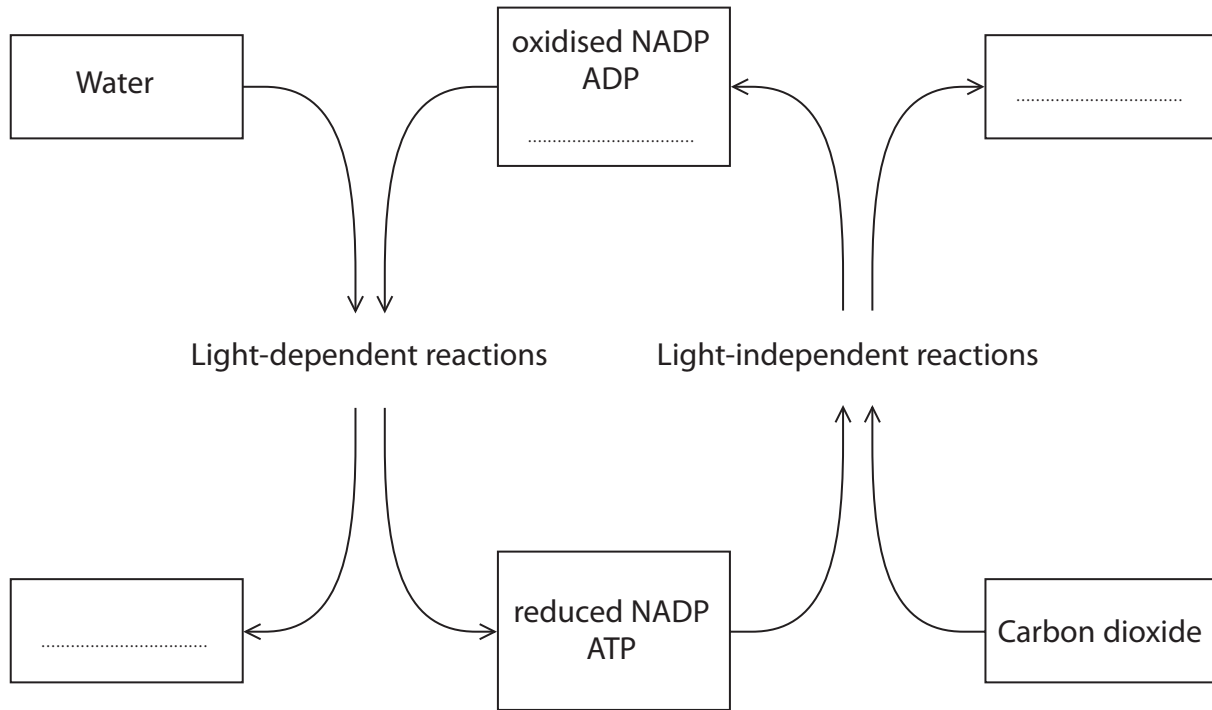
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(Total for Question 1 = 12 marks)

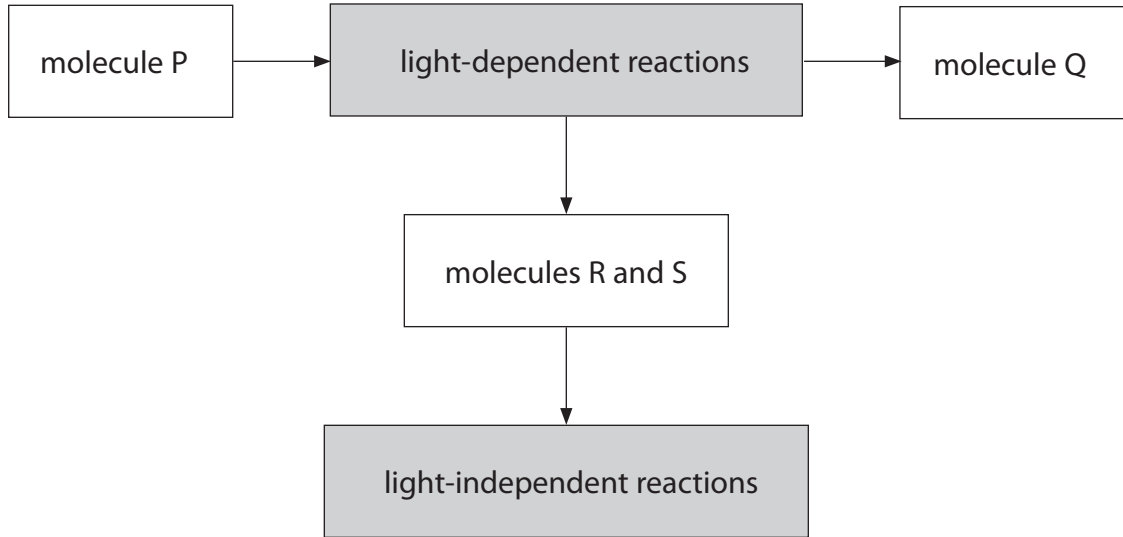
2 The diagram below shows some of the steps involved in photosynthesis.



(a) Complete the diagram by writing the correct word or words on the dotted lines.

(3)

3 (a) The diagram below shows some of the steps in the process of photosynthesis.



(i) Name molecules **P** and **Q** in the diagram.

(1)

molecule P

molecule Q

(ii) Place a cross ☒ in the box next to the names of molecules **R** and **S** in the diagram.

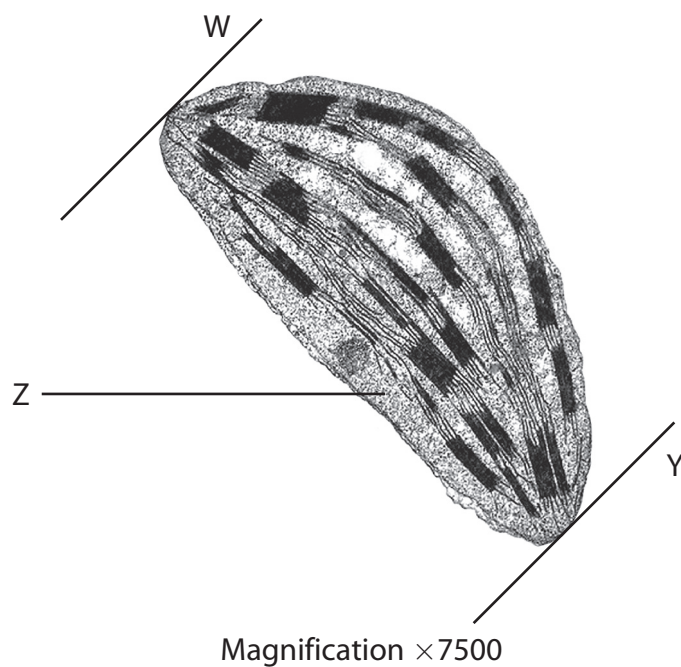
(1)

- A** ADP and oxidised NADP
- B** ADP and reduced NADP
- C** ATP and oxidised NADP
- D** ATP and reduced NADP

(iii) Describe the role of RUBISCO in the production of GALP in the light-independent reaction.

(4)

(b) The electronmicrograph below shows a chloroplast.



(i) Place a cross ☒ in the box next to the name of the part labelled Z.

(1)

- A cytoplasm
- B matrix
- C stroma
- D thylakoid

