

IGCSE Biology

Paper 6

Unsolved Topical

Past Papers with Marking Schemes

All Variants

2014-2021

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Preface

Excellence in learning can't be claimed without application of concepts in a certain context. In this regard one of the perfect approach is to start logically in chunks; like chapter wise learning and applying it on exam based questions.

This booklet provides an opportunity for practice of exam based questions which has been classified on the basis of syllabus topics and more precisely on teacher's recommendation basis. Extensive working of Team MS Books has tried to take this booklet to perfection by:

- Removing all the repeated questions but added their references at relevant places.
- Keeping all the question in a hierarchy from early years to most recent years.
- Adding Answering Key / Marks Scheme at the end of each topic.
- Maintaining actual spacing between consecutive questions and within options as per CIE format which gives students a more realistic feel of attempting question.

In addition to all this; review, feedback and contribution in this booklet by various competent teaches of subject belonging to renowned school chains make it most valuable resource and tool for both teachers and students. With all believes in strengths of this resource material I can confidently claim its worth in achieving brilliance.

Subject Head

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Classification of Living Organisms

Q2/61/M/J/14

- 1** A parasite is an organism that obtains its nutrients from another living organism (the host).

Fig. 2.1 shows the parasitic plant dodder, *Cuscuta epithymum*, growing on the host plant, gorse, *Ulex* sp. The flowers and stems belong to the dodder. This plant does not have leaves or roots, and obtains its nutrients and water from the gorse.

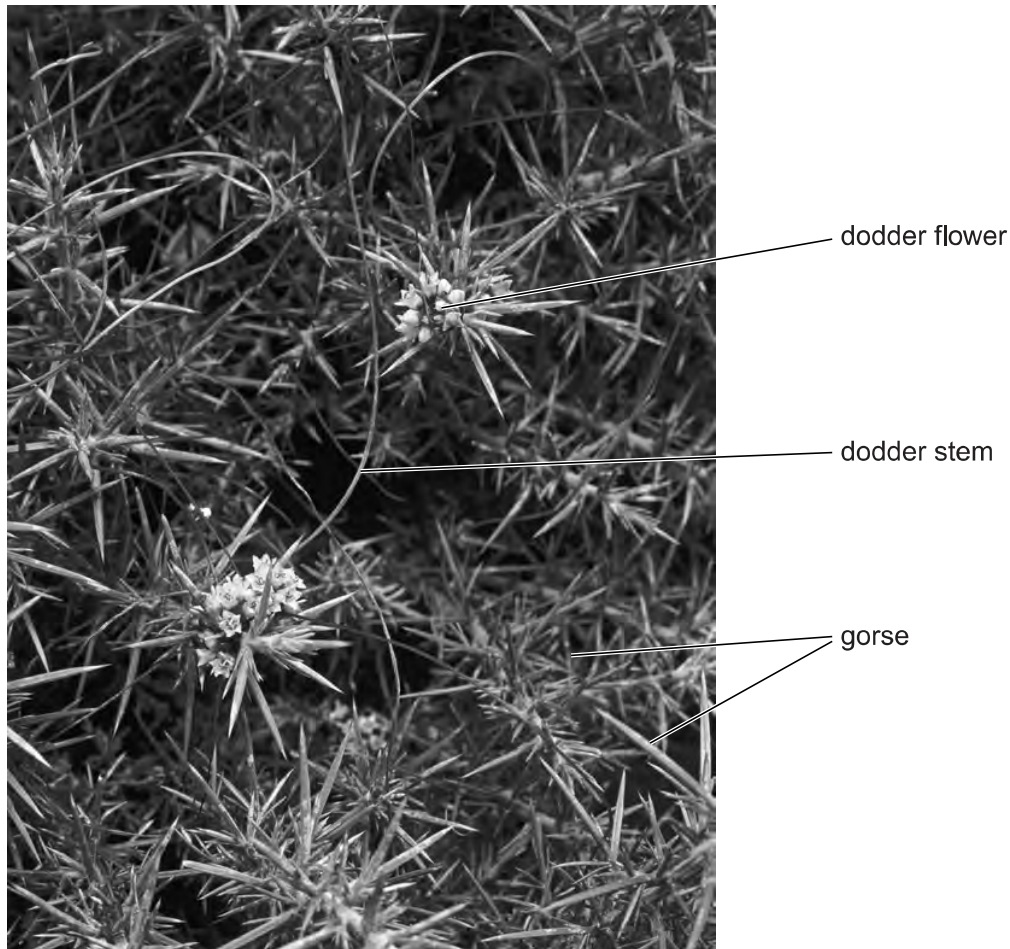


Fig. 2.1

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Fig. 2.2 shows a section through the stem of gorse to show the attachment of the dodder as seen using a microscope.

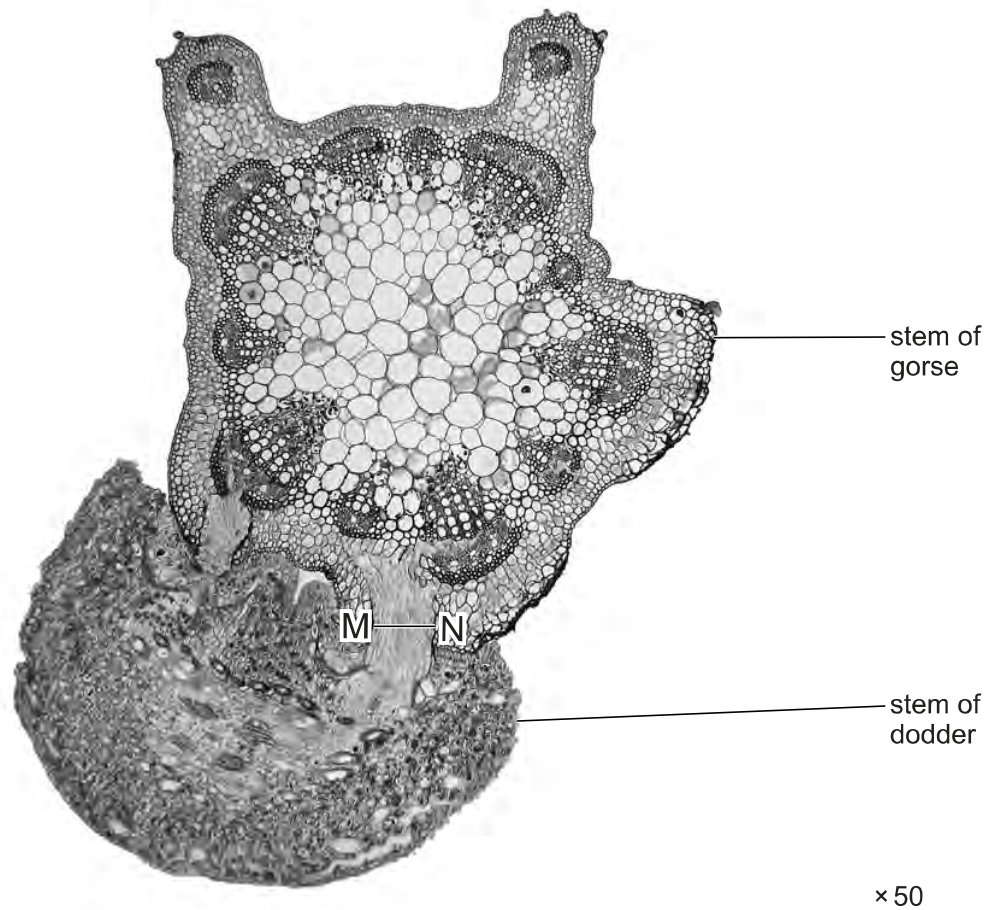


Fig. 2.2

(a) On Fig. 2.2, draw labelled lines to identify the position of:

- (i) xylem of gorse;
- (ii) phloem of gorse.

[2]

(b) Suggest how dodder obtains minerals from the gorse.

.....

.....

[1]

- (c) The structure that dodder uses to make contact with the gorse is called a haustorium. The width of the haustorium is marked by the line **MN**, on Fig. 2.2.

Measure the length of **MN**.

..... mm

Calculate the actual width of the haustorium (**MN**).

Show your working.

actual width mm

[3]

Fig. 2.3 shows an arthropod that is a parasite that can live on humans.

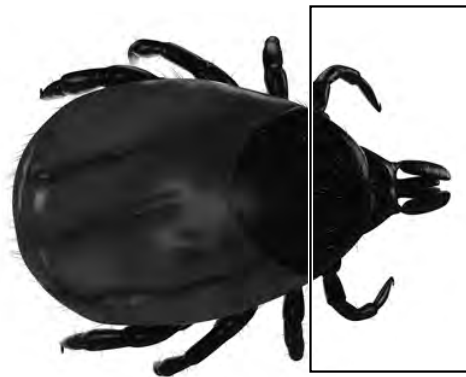


Fig. 2.3

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BOOKS

- (d) (i) Make a large labelled drawing of the part of the parasite in the rectangle.

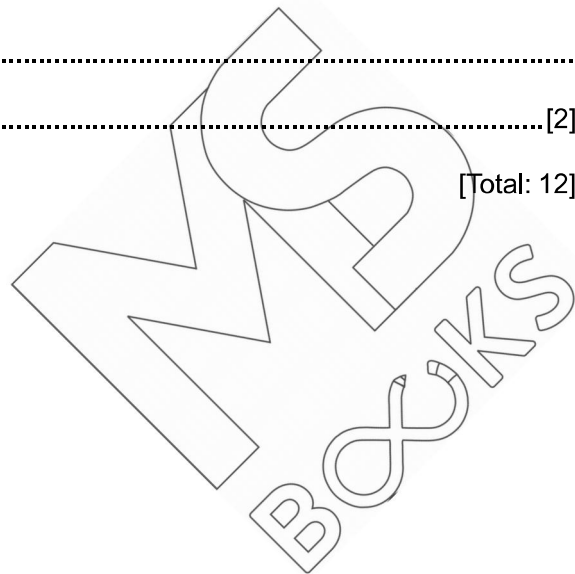
[4]

- (ii) Name the group of arthropods to which this animal belongs.

Give a reason for your answer.

.....
.....[2]

[Total: 12]



Q3/62/O/N/14

2 Fig. 3.1 shows a male and a female fly of the same species.

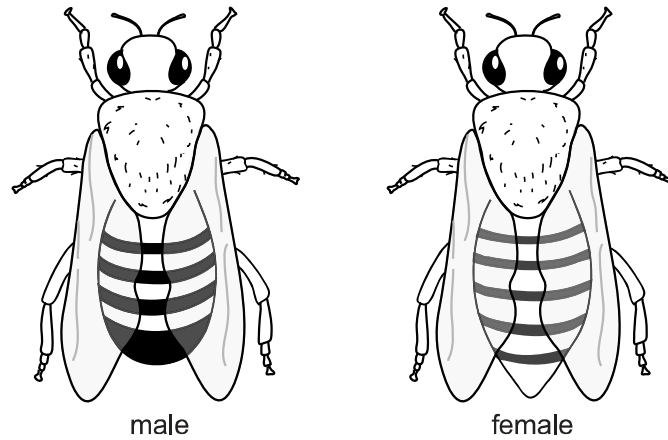


Fig. 3.1

(a) Describe **two** differences, **visible** in Fig. 3.1, between the male and female fly.

Complete Table 3.1 to record these differences.

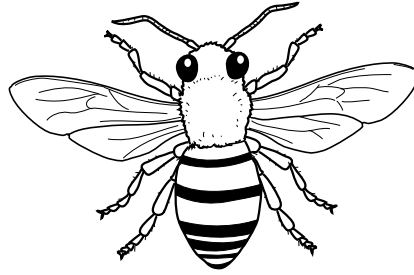
Table 3.1

feature	male	female

[3]

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(b) Fig. 3.2 shows a different type of insect, a bee.



not drawn to scale

Fig. 3.2

Insects can be recognised by having three parts to the body and three pairs of legs, amongst other features.

Describe **two other** features, visible in Fig. 3.1 **and** Fig. 3.2 that show that the fly and the bee are both identified as insects.

- 1
- 2[2]

(c) Both flies and bees are attracted to coloured flowers.

Suggest how you could find out which colours attract more bees than flies.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

[5]

[Total: 10]

Q2/61/M/J/14 Q 1

2 (a)	(line and) label/(i) to xylem of gorse; (line and) label/(ii) to phloem of gorse;	[2]	
(b)	in /from /via xylem (of gorse);	[1]	
(c)	measurement of MN : 9 ± 1 [mm]; formula : length $\div 50$; calculation : 0.18 [mm];	[3]	A ecf for calculation
(d) (i)	O – outline – clear unbroken line and no shading; S – size; D – detail; L – one correct label from: leg /limb /cephalothorax / mouth part;		Drawing larger than 70 mm at widest point between the legs. A evidence of jointed leg(s) and mouth parts
(ii)	Arachnid(a) ; 4 pairs or 8 legs / 2 parts to body;	[2]	
		[Total: 12]	

Q3/62/O/N/14 Q 2

3 (a)	<table><tr><td>feature</td><td>male</td><td>female</td></tr><tr><td rowspan="3">(end of) abdomen / body /AW</td><td>rounded / blunt / AW</td><td>pointed / AW;</td></tr><tr><td>black / dark / AW</td><td>white / light / AW;</td></tr><tr><td>short / AW</td><td>long / AW;</td></tr><tr><td rowspan="3">bands / stripes (on abdomen / body) /AW</td><td>wide / AW</td><td>thin / AW;</td></tr><tr><td>three or four / less</td><td>six or five / more;</td></tr><tr><td>dark / black / AW</td><td>white / light /grey / AW;</td></tr></table> <p>two correct features in first column; correct descriptions in each row, one mark each for any two descriptions;;</p>	feature	male	female	(end of) abdomen / body /AW	rounded / blunt / AW	pointed / AW;	black / dark / AW	white / light / AW;	short / AW	long / AW;	bands / stripes (on abdomen / body) /AW	wide / AW	thin / AW;	three or four / less	six or five / more;	dark / black / AW	white / light /grey / AW;	max 3	A. comparative answers / presence or absence of features A. round vs oval
feature	male	female																		
(end of) abdomen / body /AW	rounded / blunt / AW	pointed / AW;																		
	black / dark / AW	white / light / AW;																		
	short / AW	long / AW;																		
bands / stripes (on abdomen / body) /AW	wide / AW	thin / AW;																		
	three or four / less	six or five / more;																		
	dark / black / AW	white / light /grey / AW;																		
(b)	<p>one pair of antennae;</p> <p>wings;</p>	2	A compound eyes																	

(c)	<p>independent variable: different colours (of flowers / paper / AW);</p> <p>controlled variables: (max 2) similar flowers for shape / size / AW; same type of attraction mechanism / scent / honey guides / nectar / same plant species; same area (in open) / same number of bees and flies (if in enclosed chamber) / AW; same time / period;</p> <p>method: count / observe / video / film / record the number of visits / AW; repeats / AW; handling of data: calculate average / tally chart / graph / table / AW; AVP; e.g. a safety point with reference to bees</p>	max 5	<p>A only two different colours / named colours</p> <p>A same paper flowers / shapes</p>
		[Total: 10]	