

O-Level Biology

Paper 6

Unsolved Topical

Past Papers With Marking Scheme
According to New Syllabus (2023-2025)

2014-2021

All rights reserved. No part of this publication may be reproduced, Stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the publisher.

Title O-LEVEL Biology Paper 6

Published by MS Books (042-35774780)

Legal Advisor Ashir Najeeb Khan (Advocate)
AKBAR LAW CHAMBERS
39-40, 1st Floor, Sadiq Plaza, The Mall, Lahore.
0307-4299886, 042-36314839

For Complaints/Order **MS Books**
83-B Ghalib Market Gulberg III Lahore
info@msbooks.pk
(042-35774780), (03334504507), (03334548651)

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.

Team Head

Muhammad Shahid

M.Phil (FSQM), B.S (Biology), B.S.Ed (Education)
Biology Teacher at SLC (SICAS Liberty Complex)

In case of any suggestion for improvement Team Head can be contacted at

 **0334-4463339** /  **feedback@msbooks.net**

CONTENT TABLE

Sr #	Topics	Pg #
1.	Drawing and Labelling	7
2.	Drawing and Calculating Magnification	15
3.	Drawing a Graph	39
4.	Measurement and Calculation	48
5.	Food Tests	59
6.	Water and Carbondioxide Tests	71
7.	Features of Photograph or Drawing	73
8.	Drawing a Graph, Suggesting and Concluding	83
9.	Observation and Conclusion	101
10.	Designing and Planning an Investigation	109
11.	Suggestion and Improvement	113
12.	Interpreting Data and Drawing Conclusion	119
13.	Classification of Living Organisms	126
14.	Cell Structure and Organization	144
15.	Movement in and out of Cells	148
16.	Biological Molecules	183
17.	Enzymes	249
18.	Nutrition In Plants	277
19.	Nutrition in Humans	297
20.	Transport in Flowering Plants	323
21.	Transport in Humans	338
22.	Diseases and Immunity	352
23.	Gas Exchange in Humans	355
24.	Respiration	360
25.	Co-ordination and Response	402
26.	The Use and Abuse of Drugs	414
27.	Relationship of Organisms with one another and with the Environment	417
28.	Continuity of Life	424
29.	Biotechnology and Genetic Engineering	442

Drawing and Labelling

Q2(b)/62/O/N/14

1 Fig. 2.1 shows the lower surface of a leaf. On the printed grid, each square measures 1 cm².

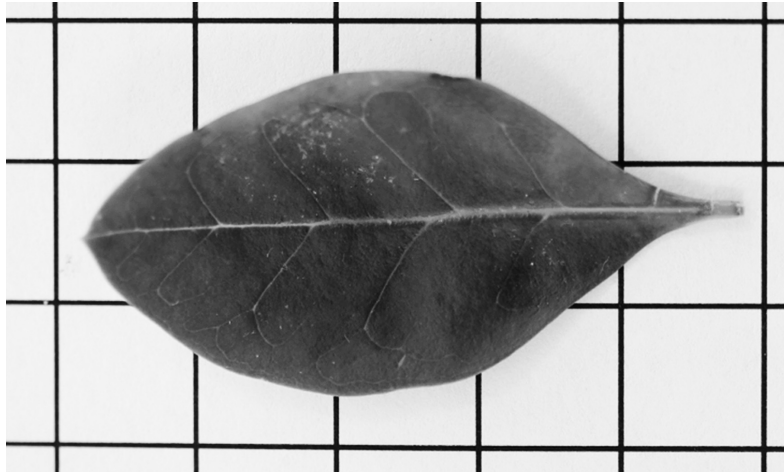


Fig. 2.1

(b) Make a large, labelled drawing of the leaf in Fig. 2.1.

MS
BOOKS [4]

Q1(b)/61/O/N/15

2 (b) Fig. 1.2 shows half of a fresh apricot.



magnification x1

Fig. 1.2

Make a drawing of this fruit, twice the size of the actual fruit.

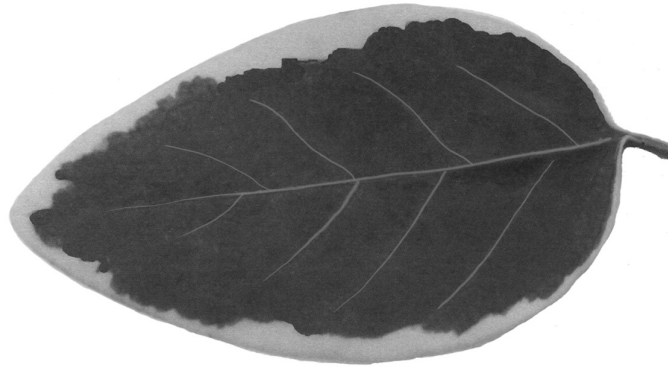
On your drawing, indicate where the fruit was attached to the parent plant using the letter P.

MS
BOOKS

[4]

Q2(a(i))/62/O/N/15

3 Fig. 2.1 shows a variegated leaf. Variegated leaves have green (dark) and white (pale) areas.



magnification $\times 0.5$

Fig. 2.1

(a) (i) Make a large labelled drawing of this leaf.

MS
BOOKS [4]

Q2(a)/61/O/N/16

- 4 Vegetarian sources of protein, for example seeds and single cell proteins, are increasingly being used throughout the world.

Fig. 2.1 shows the surface view of half of a peanut seed with the embryo attached.



Fig. 2.1

- (a) Make a large drawing of the peanut seed as shown in Fig. 2.1. Label the radicle and plumule.

MS
BOOKS [4]

Q1/62/O/N/16

5 Fig. 1.1 shows a flower.



Fig. 1.1

(a) (ii) Make a large drawing of the structures of the flower shown within the box on Fig. 1.1.

(iii) **On your drawing** label the following structures with a label line, the appropriate letter and its biological name: [4]

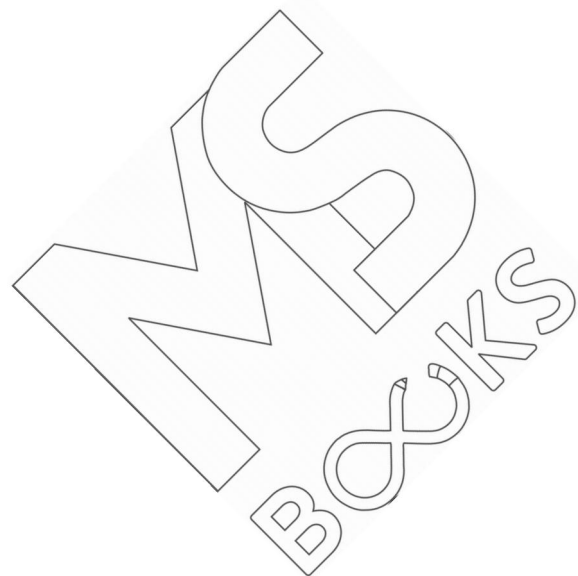
A the part of the flower in which pollen grains are produced

B the part of the flower to which the pollen grains are transferred during pollination

C the part of the flower through which the pollen tube grows after pollination. [3]

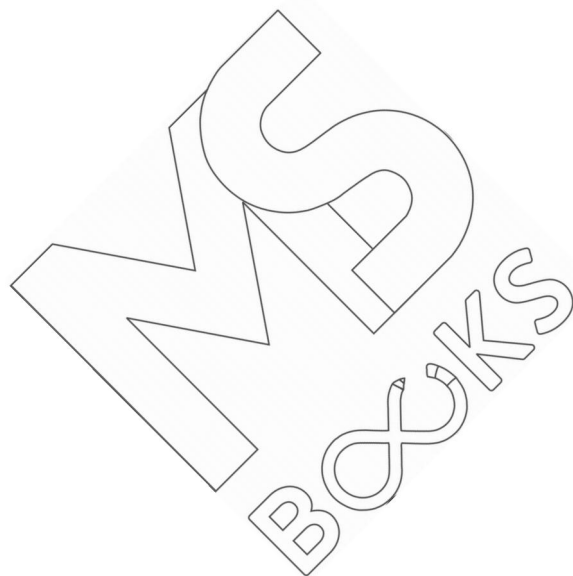
Q2(b)/62/O/N/14

<p>1 (b) (i)</p>	<p>clear outline, realistic shape and no shading ; at least 100 mm in length ; midrib (as double line, and to apex) and veins represented ; labels: 2 from (leaf) stalk (petiole) / mid rib (main vein) / vein / blade (lamina) / cuticle ;</p>	<p>[4]</p>	
-------------------------	--	------------	--



Q1(b)/61/O/N/15

2 (b)	clear outline (with no shading) ; twice size of photograph ; correct proportion, stone and 'dip' shown ; label P for point of attachment to parent plant ;		[4]
-------	--	--	-----



Q2(a(i))/62/O/N/15

<p>3 (a) (i)</p>	<ol style="list-style-type: none"> 1. clear, clean continuous outline ; 2. at least 100 mm total length + green area clearly outlined ; 3. at least part of midrib drawn with double line + not ruled + 8 veins ; 4. labels: 2 correct from lamina / petiole (leaf stalk) / midrib (main vein) / vein ; 	<p>[4]</p>	
-------------------------	---	------------	--

Q2(a)/61/O/N/16

<p>4 (a)</p>	<p>outline clear and continuous + no shading ; at least 60 mm long ; detail of embryo and correct proportions ; label the plumule and radicle ;</p>	<p>4</p>	
---------------------	---	----------	--

Q1/62/O/N/16

<p>5 (a) (ii)</p>	<p>6 anthers + style with stigma drawn ; clear, continuous outlines of anthers + no shading anywhere + length of style with stigma at least 60 mm ; all filaments drawn with double line + all anthers below the level of the top of the stigma ; rounded top of stigma + stigma wider than style ;</p>	<p>4</p>	
<p>(a)(iii)</p>	<p>A labelli ; B labelling the stigma ; C labelling the style ;</p>	<p>3</p>	