

Plan of Work **Biology**

Grade 9

For examination from 2025

Head of Department: Mrs. U.choonee-Busjeet

Prepared by: Mr. T.Jeetun

BSc (Hons) Biology

Post graduate Certificate in Biology



MODERN COLLEGE

SUCCESS DEPENDS ON THE PROPER USE OF TIME

Contents

Introduction	3
FIRST TERM [13/01/2025 – 11/04/2025]	5
Topic B1: Blood circulatory system	5
April Assessment.....	7
SECOND TERM [24/08/2024 – 18/07/2025]	8
Topic B2: Reproduction	8
Topic B3: Biodiversity	Error! Bookmark not defined.
July Assessment	11
THIRD TERM [11/08/2025 – 31/10/2025]	12
Topic B4: Nutrition in Plants.....	12
October Assessment	13

MODERN COLLEGE

SUCCESS DEPENDS ON THE PROPER USE OF TIME

Introduction

Prescribed textbooks:

- SCIENCE GRADE 9; MIE (2020) [BOOK: SG 9]

Reference book:

Not applicable

Recommended prior knowledge

Learners beginning this course are expected to have knowledge of the following topics:

	Topic
1	Characteristics of animals
2	Characteristics of plants
3	Body systems
4	Relationship between organisms and environment
5	Ecosystem and conservation

MODERN COLLEGE

SUCCESS DEPENDS ON THE PROPER USE OF TIME

Websites and videos

This plan of work includes website links providing direct access to internet resources. Modern College is not responsible for the accuracy or content of information contained in these sites. The inclusion of a link to an external website should not be understood to be an endorsement of that website or the site's owners (or their products/services).

The website pages referenced in this plan of work were selected when the plan of work was produced. Other aspects of the sites were not checked and only the particular resources are recommended

MODERN COLLEGE

SUCCESS DEPENDS ON THE PROPER USE OF TIME

FIRST TERM [13/01/2025 – 11/04/2025]

Topic B1: Blood circulatory system

Learning Objectives	Worked Examples	Classwork & Homework	Extra Work	Resources
<i>Students should be able to:</i> a) State that the human circulatory system consists of the blood, the heart and the blood vessels	[Book SG 9]: Pg 2 Activity 1.1,			
<i>b)</i> Show an awareness that the heart is a pumping organ distributing blood throughout the body				https://www.khanacademy.org/testprep/mcat/organsystems/thecirculatorysystem/e/circulatorysystem-questions
List the four main components of blood as plasma, red blood cells, white blood cells and platelets	[Book SG 9]: Pg 4 Activity 1.2	[Book SG 7]: Pg 5 test yourself 1-4, Activity 1.3	Pg 8 activity 1.4	
d) Outline briefly the function(s) of red blood cells, white blood cells, platelets and plasma				

MODERN COLLEGE

SUCCESS DEPENDS ON THE PROPER USE OF TIME

e) Compare the structure of the different blood vessels: arteries, veins and capillaries		[Book SG 9]: pg 10 act 1.5		
f) Relate the functions of different blood vessels to their structures				
g) Define a pulse and locate a pulse point		[Book SG 9]: Pg 13 activity 1.6, pg 209 activity 1.8	Pg 16 activity 1.7,	https://youtu.be/M7VWz0qGW-g
j) List examples of cardiovascular diseases such as stroke and heart attack				https://youtu.be/CWFyx0qDEU
k) Show an awareness of the different factors that contribute to cardiovascular diseases and their preventive measures	[Book SG 9]: pg 20 Q 1-6	Pg 21 Q 7-11		https://youtu.be/qJq5hA4pnOk
l) Interpret data from graphs related to cardiovascular diseases				

MODERN COLLEGE

SUCCESS DEPENDS ON THE PROPER USE OF TIME

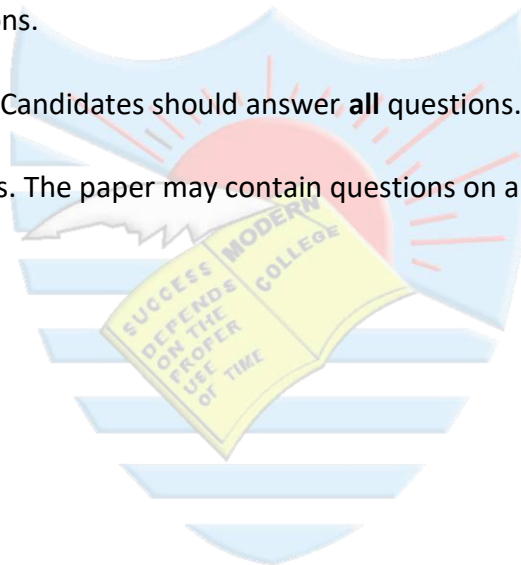
April Assessment

Component	Time Allocation	Type	Maximum Mark
Paper 1	45 mins	Multiple choice questions	10
		short answer questions	40

Section A will consist of about 10 multiple choice questions.

Section B will consist of about 4 short answer questions. Candidates should answer **all** questions.

Candidates are expected to cover the PROPOSED syllabus. The paper may contain questions on any part of the syllabus and questions will not necessarily be restricted to a single topic.



MODERN COLLEGE

SUCCESS DEPENDS ON THE PROPER USE OF TIME

SECOND TERM [28/04/2025 – 18/07/2025]

Topic B2: Reproduction

Learning Objectives	Worked Examples	Classwork & Homework	Extra Work	Resources
<i>Students should be able to:</i> a. Define reproduction as the process of producing new individuals of the same kind or species	[Book SG 9]: Pg 30 Activity 2.1, pg 31 act 2.2	[Book SG 9]: Pg 32 Activity 2.3		Video using link provided in textbook pg 33
<i>b.</i> State the importance of reproduction in living things				
c. Distinguish between the two modes of reproduction: sexual and asexual		[Book SG 9]: Pg 231 Activity 2.4 practical		asexual reproduction in yeast https://www.youtube.com/watch?v=GFEgB_ytDZY
d. Identify and label the different parts of the male and female reproductive systems in man		[Book SG 9]: Pg 37 Activity 2.5, pg 38-39 Activity 2.6 and 2.7		

MODERN COLLEGE

SUCCESS DEPENDS ON THE PROPER USE OF TIME

e. Define sexually transmitted diseases (STDs) as diseases that are spread from one infected individual to another through sexual contact	[Book SG 9]: Pg 42 Activity 2.8	[Book SG 9]: Pg 41 Activity		https://youtu.be/gVH1gY05MsA
f. List examples of sexually transmitted diseases such as HIV/AIDS and syphilis • Interpret data from graphs related to sexually transmitted diseases		[Book SG 9]: pg 46 MCQ 1-10, section B Q 1-5	Pg 49 Section B Q 6-8	
g. Interpret data from graphs related to sexually transmitted diseases				

MODERN COLLEGE

SUCCESS DEPENDS ON THE PROPER USE OF TIME

Topic B3: BIODIVERSITY

Learning Objectives	Worked Examples	Classwork & Homework	Extra Work	Resources
Students should be able to: a. Demonstrate simple understanding of biodiversity and its importance				Importance of ecosystem https://youtu.be/WhORBN_Y3xw
b. Use quadrats to estimate and record the number of species in a given ecosystem	[Book SG 9]: Pg 54 Activity 3.1	[Book SG 9]: Pg 58 Activity 3.2		Recommended websites in textbook on page 60
Show an awareness that biodiversity is affected by natural calamities such as cyclones and droughts			https://quizizz.com/admin/quizzes/582f155b9923cffa65b70872/biodiversity	Importance of biodiversity https://youtu.be/GKvRtHJZu4

MODERN COLLEGE

SUCCESS DEPENDS ON THE PROPER USE OF TIME

List the human activities (deforestation, pollution, degradation of habitat, invasive alien species) affect biodiversity		[Book SG 9]: Pg 62 Activity section A and B qs 1-4	https://www.earthday.org/deforestationandbiodiversityquiz/	Man effect on ecosystem https://www.wwf.org.uk Ecosystem https://en.m.wikipedia.org/wiki/biodiversity

July Assessment

Component	Time Allocation	Type	Maximum Mark
Paper 1	mins	Multiple choice questions	10
		short answer questions	40

Section A will consist of about 10 multiple choice questions.

Section B will consist of about 4 short answer questions. Candidates should answer **all** questions.

Candidates are expected to cover the PROPOSED syllabus. The paper may contain questions on any part of the syllabus and questions will not necessarily be restricted to a single topic.

MODERN COLLEGE

SUCCESS DEPENDS ON THE PROPER USE OF TIME

THIRD TERM [11/08/2025 - 31/10/2025]

Topic B4: Nutrition in Plants

Learning Objectives	Worked Examples	8Classwork & Homework	Extra Work	Resources
<i>Students should be able to:</i> a. State that photosynthesis is the process by which green plants manufacture their food	[Book SG 9]: Pg 68 Activity 4.1		Practical on observing the network of veins in leaf	Process of photosynthesis https://youtu.be/UPBMG5EYydo
b. Write down the word equation for photosynthesis				
c. Describe briefly how a leaf is adapted for photosynthesis		[Book SG 9]: Pg 72 Activity 4.3		

MODERN COLLEGE

SUCCESS DEPENDS ON THE PROPER USE OF TIME

d. List the factors that are essential for photosynthesis to take place			https://www.bbc.co.uk/bitesize/guides/zpwmxnb/test	
e. Conduct simple laboratory experiments to show the importance of these factors for photosynthesis	[Book SG 9]: Pg 74 Activity 4.4	[Book SG 9]: Pg 76 Activity 4.5 Pg 77 Activity 4.6, 4.7	[Book SG 9]: Pg 83 section A and B Qs 1 -9	View videos on pg 80

*** working of past papers from 2018 - 2024

October Assessment

Component	Time Allocation	Type	Maximum Mark
Paper 1	45 mins	Multiple choice questions	10
		short answer questions	40

Section A will consist of about 10 multiple choice questions.

Section B will consist of about 4 short answer questions. Candidates should answer **all** questions.

Candidates are expected to cover the PROPOSED syllabus. The paper may contain questions on any part of the syllabus and questions will not necessarily be restricted to a single topic.