KWAZULU-NATAL PROVINCE

EDUCATION

REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 10

LIFE SCIENCES

MARCH COMMON TEST

MARKING GUIDELINE

2023

Stanmorephysics

MARKS: 50

N.B This marking guideline consist of 7 pages

PRINCIPLES RELATED TO MARKING LIFE SCIENCES

1. **If more information than marks allocated is given**
   Stop marking when maximum marks is reached and put a wavy line and 'max' in the right-hand margin.

2. **If, for example, three reasons are required and five are given**
   Mark the first three irrespective of whether all or some are correct/incorrect.

3. **If whole process is given when only a part of it is required**
   Read all and credit the relevant part.

4. **If comparisons are asked for but descriptions are given**
   Accept if the differences/similarities are clear.

5. **If tabulation is required but paragraphs are given**
   Candidates will lose marks for not tabulating.

6 **If diagrams are given with annotations when descriptions are required**
   Candidates will lose marks.

7. **If flow charts are given instead of descriptions**
   Candidates will lose marks.

8. **If sequence is muddled and links do not make sense**
   Where sequence and links are correct, credit. Where sequence and links are incorrect, do not credit. If sequence and links become correct again, resume credit.

9. **Non-recognised abbreviations**
   Accept if first defined in answer. If not defined, do not credit the unrecognised abbreviation but credit the rest of the answer if correct.

10 **Wrong numbering**
   If answer fits into the correct sequence of questions but the wrong number is given,it is acceptable.

11. **If language used changes the intended meaning**
   Do not accept.

12. **Spelling errors**
   If recognisable, accept the answer, provided it does not mean something else in Life Sciences or if it is out of context.

13. **If common names are given in terminology**
   Accept, provided it was accepted at the national memo discussion meeting.

14. **If only the letter is asked for but only the name is given (and vice versa)**

15. **If units are not given in measurements**
    Candidates will lose marks. Memorandum will allocate marks for units separately.

16. **Be sensitive to the sense of an answer, which may be stated in a different way.**

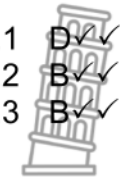
17. **Caption**
    All illustrations (diagrams, graphs, tables, etc.) must have a caption.

18. **Code-switching of official languages (terms and concepts)**
    A single word or two that appear(s) in any official language other than the learners' assessment language used to the greatest extent in his/her answers should be credited if it is correct. A marker that is proficient in the relevant official language should be consulted. This is applicable to all official languages.

SECTION A

QUESTION 1

1.1 1.1.1 D✓✓
1.1.2 B✓✓
1.1.3 B✓✓



2X3 **(6)**

1.2 1.2.1 Active transport✓
1.2.2 Osmosis✓
1.2.3 Stage clip✓
1.2.4 Ribosomes✓

1x4 **(4)**

1.3 1.3.1 B only✓✓
1.3.2 Both A and B✓✓ 2x2 **(4)**

1.4 1.4.1 Mitochondria✓ (1)

1.4.2 Animal✓ and plant✓ cell (2)

1.4.3 They break down glucose molecule ✓to provide energy to the cell✓ (2)

1.4.4 Oxygen✓ (1)
(6)

TOTAL QUESTION 1 [20]
TOTAL SECTION A [20]



SECTION B

QUEATION 2

2.1	2.1.1	Peanut butter ✓	(1)
	2.1.2	Fatty acids and glycerol	(1)
	2.1.3	a = 17g+2g+0,1g+0g+3,8g+20g+25g+50g✓ =117g 144,9 – 117,9✓ =27g✓	(2)
	2.1.4	Millions reagent ✓	(1)
	2.1.5	The colour change to blue black✓indicate the presence of the starch✓	(2) **(7)**
2.2	2.2.1	(a) Enzyme rate of reaction✓	(1)
		(b) Effect of temperature✓	(1)
	2.2.2	To determine the effect of temperature on enzyme rate of reaction✓✓	(2)
	2.2.3	Enzyme reaction rate was at its maximum point at 35°/was 29 U/ml which is the highest rate of reaction for enzyme✓ And it drastically dropped after 35°✓	(2)
	2.2.4	Increase sample size✓ Repeat the investigation✓ Calculate the average✓ **Mark the first two**	(2) **(8)** **[15]**

QUESTION 3

3.1 3.1.1 Sugars ✓
Minerals✓
Pigments in water✓ (2)
Mark first two

3.1.2 Control activities of the cell✓
Transmit hereditary characteristics from parents to offspring ✓ (1)
Mark any one

3.1.3 A✓ – cell membrane✓ (2)

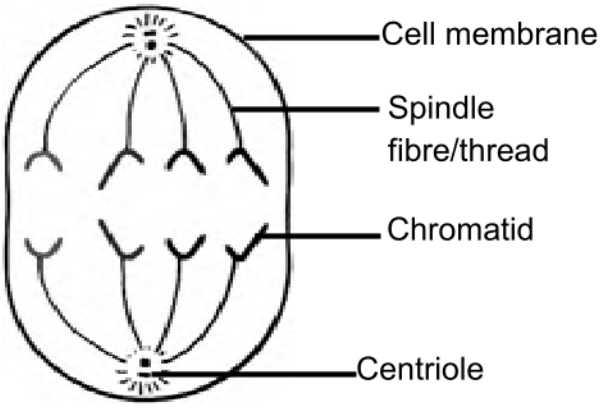
3.1.4 Many part D/ chloroplasts will increase food production✓
chloroplast absorb light for photosynthesis for plants to manufacture food✓ (2)
(7)

3.2 3.2.1 A – spindle fibre/thread✓ (1)
B – Centromere✓ (1)

3.2.2 Chromosomes are arranged at the equator line✓ (1)

3.2.3 4/four✓ (1)

3.2.4 **Anaphase**



Marking rubric:

Features	Marks
Caption (**C**)	1
Correct phase (**P**)	1
Correct number of chromosomes/chromatids (**N**)	1
Any one correct label (**L**)	1

(4)

TOTAL QUESTION 3 [15]
TOTAL SECTION B [30]
GRAND TOTAL [50]