

SA's Leading Past Year

Exam Paper Portal



You have Downloaded, yet Another Great Resource to assist you with your Studies 😊

Thank You for Supporting SA Exam Papers

Your Leading Past Year Exam Paper Resource Portal

Visit us @ www.saexampapers.co.za



**SA EXAM
PAPERS**
SA EXAM
PAPERS



education

Department of
Education
FREE STATE PROVINCE

GRADE 12

LIFE SCIENCES P1

JUNE 2024

MARKS: 143

MARKING GUIDELINES

These marking guidelines consist of 9 pages.

PRINCIPLES RELATED TO MARKING LIFE SCIENCES

1. **If more information than marks allocated is given**
Stop marking when maximum marks are 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 the 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 the 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 the sequence and links become correct again, resume credit.
9. **Non-recognised abbreviations**
Accept if first defined in the answer. If not defined, do not credit the unrecognised abbreviation, but credit the rest of the answer if correct.
10. **Wrong numbering**
If the answer fits into the correct sequence of questions, but the wrong number is given, it is acceptable.
11. **If the 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)**
Do not credit.
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 learner's 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.
19. **Changes to the memorandum**
No changes must be made to the memorandum. The provincial internal moderator must be consulted.



SECTION A**QUESTION 1**

1.1	1.1.1	C✓✓		
	1.1.2	C✓✓		
	1.1.3	A✓✓		
	1.1.4	D✓✓		
	1.1.5	A✓✓		
	1.1.6	C✓✓		
	1.1.7	D✓✓		
	1.1.8	C✓✓		
	1.1.9	B✓✓		
	1.1.10	B✓✓	(10 x 2)	(20)
1.2	1.2.1	Choroid✓		
	1.2.2	Parasympathetic✓		
	1.2.3	Tympanic✓membrane		
	1.2.4	Meninges✓		
	1.2.5	Cervix✓		
	1.2.6	Yellow spot✓/fovea		
	1.2.7	Acrosome✓	(7 x 1)	(7)
1.3	1.3.1	B only✓✓		
	1.3.2	A only✓✓		
	1.3.3	A only✓✓	(3 x 2)	(6)
1.4	1.4.1 (a)	B✓ Prostate gland✓		(2)
	1.4.2 (b)	D✓ Urethra ✓		(2)
	1.4.2 (a)	Seminal vesicle✓		(1)
	1.4.2 (b)	Testosterone✓		(1)
	1.4.3	Spermatogenesis✓		(1)
				(7)
1.5.	1.5.1 (a)	C✓ Sensory neuron✓		(2)
		E✓ Interneuron✓/connector neuron		(2)
	1.5.2	Reflex action✓		(1)
	1.5.3	(a) Multiple sclerosis✓/MS		(1)
		(b) The myelin sheath✓ is damaged✓		(2)
	1.5.4	The muscle will not receive the signal✓ to contract✓		(2)
				(10)



SECTION B**QUESTION 2**

- 2.1 2.1.1 Internal (1)
- 2.1.2 There is a gestation period✓ of 21 days before she lays her eggs✓/ after mating she builds a nest (2)
- 2.1.3 Altricial✓ (1)
- 2.1.4 The young are:
- Vulnerable
- Blind
- Hairless✓ (2)
(Mark first TWO only)
- 2.1.5 - They feed their young by giving them concentrated milk✓
- By sweating it out✓/through their sweat glands (2)
(8)
- 2.2 2.2.1 A✓ Chorionic villi✓
X✓ Endometrium✓ (4)
- 2.2.2 Umbilical cord✓ (1)
- It contains two umbilical arteries✓
- which carry deoxygenated blood✓/waste products
- from the foetus to the placenta✓ and
- one umbilical vein✓
- that carries oxygenated blood✓/nutrients
- from the placenta to the foetus✓ Any (5)
- 2.2.3 It acts as a shock absorber to protect the foetus against mechanical injury✓ (1)
(11)
- 2.3 2.3.1 (a) LH✓✓ (2)
- (b) LH✓✓ (2)
- 2.3.2 The female is pregnant✓✓ (2)
- 2.3.3 - High levels of progesterone✓
- inhibits the release of FSH✓ which
- which is responsible for the formation of a Graafian follicle✓
- which secretes oestrogen✓ Any (3)
(7)

Life Sciences P1 7 FS/June 2024
 Grade 12 Marking Guideline

QUESTION 3

- 3.1 3.1.1 (a) C✓ - Auditory nerve✓ (2)
- (b) A✓ - Auditory canal✓ (2)
- 3.1.2 - Air is drawn into the middle ear✓
 - through the Eustachian tube✓ to
 - equalise the pressure on either side of the tympanic membrane✓ Any (2)
- 3.1.3 - The change in the speed and direction of the head✓
 - stimulates the cristae✓ in the
 - semi-circular canals✓/ampulla
 - The stimuli are converted into impulses✓
 - and transported along the vestibular branch✓ of
 - auditory nerve✓
 - to the cerebellum to be interpreted✓
 - Impulses are sent to the muscles to recover the balance Any (6)
(12)
- 3.2 3.2.1 (a) Motor✓/multipolar (1)
- (b) Sensory✓/unipolar/monopolar (1)
- 3.2.2
- | Sensory | Motor |
|---|--|
| Transports the impulse from the receptor to central nervous system✓ | Transports the impulse from the central nervous system to the effectors✓ |
| Unipolar✓ | Multipolar✓ |
- (Mark first TWO only) +1 Mark for table (5)
- 3.2.3 (a) Dendrite✓ – transports impulses to the cell body✓ (2)
- (b) Axon✓ (1)
(10)



Life Sciences P1 8 FS/June 2024
 Grade 12 Marking Guideline

- 3.3 3.3.1 Adrenal✓ gland (1)
- 3.3.2 (a) Aldosterone✓ (1)
- (b) Adrenalin✓ (1)
- 3.3.3 [(1- 0,5) /0,5] ✓ x 100✓ = 100%✓ (3)
- 3.3.4 ~~— Increased salt concentration in the blood✓~~
~~— Decreases the secretion of aldosterone✓~~
~~— This cause less salt to be reabsorbed✓/more salt to be excreted~~
~~— which reduces water reabsorption✓~~
~~— More water remains in the renal tubules✓~~
 - Resulting in more urine formed✓ ~~_____ Any~~ (5)
(6)
- 3.4 3.4.1 (a) Hypophysis✓ pituitary gland (1)
- (b) Thyroid gland✓ (1)
- 3.4.2 Negative feedback mechanism✓ (1)
- 3.4.3 (a) TSH✓ (1)
- (b) Thyroxin (1)
- 3.4.4 (a) Thyroid gland is stimulated✓
 to secrete more✓ thyroxin (2)
- (b) Less thyroxin✓
 will be secreted✓/ by the thyroid gland (2)
(9)



Life Sciences P1 9 FS/June 2024
Grade 12 Marking Guideline

3.5	3.5.1	Hypothalamus✓	(1)
	3.5.2	10 min✓	(1)
	3.5.3	Diagram 1✓	(1)
	3.5.4	- Due to rise in body temperature✓ - the blood vessels widen✓/vasodilation - More blood flows to the skin surface✓ - resulting in more heat loss✓ - More blood flows to the sweat glands✓ - resulting in increased sweat secretion✓ - More sweat evaporates from skin✓/ more heat loss Any	(5) (8)
			45
		TOTAL SECTION B:	93
		GRAND TOTAL:	143

