Downloaded from SEE academy: www.seeacademy.co.za




KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

# NATIONAL SENIOR CERTIFICATE

## GRADE 11

## LIFE SCIENCES

## MARCH MARKING GUIDELINE

## 2022

**MARKS: 60**

**TIME: 1 hour**

**This marking guideline consists of 5 pages**

SEE ACADEMY

Downloaded from SEE academy: www.seeacademy.co.za



## SECTION A

## QUESTION 1

1.1

1.1.1 B✓✓
1.1.2 C✓✓
1.1.3 D✓✓

(3 x 2) **(6)**

1.2

1.2.1 Gametophyte✓
1.2.2 Sessile✓/ sedentary
1.2.3 Pistil✓
1.2.4 Mesoderm✓

( 1 X 4) **(4)**

1.3

1.3.1 A only✓✓
1.3.2 A only✓✓



( 2 x 2) **(4)**

1.4

1.4.1 Phylogenetic tree✓ (1)

1.4.2 Porifera ✓ (1)

1.4.3 - Arthropod✓
- Chordata✓ (2)
**(MARK FIRST TWO ONLY)**

1.4.4 They both share most recent common ancestor✓ (1)

1.4.5 - Annelida ✓
- Arthropoda ✓
- Chordata ✓ (1)
**(MARK FIRST ONE ONLY)**
**(6)**

**TOTAL MARKS SECTION A: 20**

SEE ACADEMY

Downloaded from SEE academy: www.seeacademy.co.za



**SECTION B**

**QUESTION 2**

| | | | | |
|---|---|---|---|---|
| 2.1 | 2.1.1 | (a) | ovary✓ | (1) |
| | | (b) | Style✓ | (1) |
| | | (c) | Stigma✓ | (1) |
| | 2.1.2 | | Stamen ✓ | (1) |
| | 2.1.3 | | C✓- ovule✓ | (2) |
| | 2.1.4 | | - Attract pollinators✓<br>- Contain and protect reproductive organs✓ | (2)<br>**(8)** |
| 2.2 | | | | |
| | 2.2.1 | | Bacteria ✓ | (1) |
| | 2.2.2 | | - Vomiting✓<br>- Dehydration✓<br>- Diarrhoea✓<br>**(MARK FIRST TWO ONLY)** | (2) |
| | 2.2.3 | | - Antibiotics ✓ | (1) |
| | 2.2.4 | | - A patient may not finish the course of treatment✓<br>- causing bacteria to re-establish itself and grow rapidly✓ | (2) |
| | 2.2.5 | | - Food production will decrease✓<br>- less food will be exported to other countries✓decreasing the country's economy | (2)<br>**(8)** |
| 2.3 | | | - All the off springs are identical✓<br>if conditions become unfavourable, they will die✓<br>- Bad characteristics✓/traits present in parents<br>will be passed to off springs increasing the number of plants with this characteristic✓<br>**(MARK FIRST TWO EXPLAINED ONLY)** ( Any 2 X 2) | **(4)** |

SEE ACADEMY

Downloaded from SEE academy: www.seeacademy.co.za



**QUESTION 3** **TOTAL QUESTION 2** **(20)**

3.1

3.1.1 Effect of mycorrhizal association✓ (1)

3.1.2
- Decide on the time/date ✓
- Decide on the sample size✓
- Decide how to record results✓

**(MARK FIRST TWO ONLY)** (2)

3.1.3
- Plants were grown for the same number of weeks✓/10 weeks
- Plant height was measured each week✓
- Same species of plants used✓
- Plants were grown on the same type of soil✓

**(MARK FIRST TWO ONLY)** (2)

3.1.4
- $\frac{6.4 - 4.7}{4.7}$ ✓ X 100✓

= 36✓% (3)

3.1.5
- Growing plants in non-sterilised soil rapidly increases the height of the plants✓✓

(2)

**OR**

- Growing plants in sterilised soil causes plant height to grow slowly✓✓

**(10)**

SEE ACADEMY

Downloaded from SEE academy: www.seeacademy.co.za



**TOTAL QUESTION 3 20**

3.2

3.2.1 (a) ectoderm✓ (1)

(b) endoderm✓ (1)

(c) mesoderm✓ (1)

3.2.2 Organism **1**✓ (1)

3.2.3 - It contains two germ layers✓/ contains endoderm and ectoderm only (1)

3.2.4 - The gut wall will not be separated from the body✓ efficient digestion of food will not occur✓
- Decrease respiration and nutrition✓ as less nutrients will dissolve✓

**(MARK FIRST ONE EXPLAINED ONLY)** (Any 1 x 2) (2)

3.2.5 Cnidaria ✓ (1)

3.2.6 **1** / Cnidaria has a radial symmetry ✓and **2** / Annelids have a bilateral symmetry✓

**(MARK FIRST ONE ONLY)** (2)

**(10)**

**TOTAL MARKS 60**

SEE ACADEMY