**LIFE SCIENCES**

**GRADE 10**

**Practical Task Term 3 2024: Mitosis and Plant Tissues**

**Marking Guidelines**

|  |  |  |
| --- | --- | --- |
| **Question 1: Mitosis** |  |  |
|  |  |  |
| **1.1 B C A ✓ ✓** | (2) |  |
|  |  |  |
| **1.2 B-** Chromosomes are visible**✓**  | (1) |  |
|  **C -** Chromosomes are aligned at the equator.**✓**  | (1) |  |
|  **A –** Chromosomes are being pulled apart **✓** | (1) |  |
|  |  |  |
| **1. 3**  |  |  |
| **Telophase** |  |  |
|  |  |  |
|

|  |  |  |
| --- | --- | --- |
| **Description**  | **Code** | **Marks** |
| Correct name of Phase  | **P** | 1 |
| Each cell has 4 chromosomes | **C** | 1 |
| Correct diagram showing TWO cellsNuclear membraneCentrosome | **D** | 1 |
| Must show constriction/ invagination | **F** | 1 |
| Any ONE correct label. | **L** | 1 |
| TOTAL |  | **5** |

 |  |  |
|  | **(10)** |  |
| **QUESTION 2: Plant Tissues** |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| 2.1 | A Collenchyma**✓**C Sclerenchyma**✓** | (1)(1) |  |
| 2.2 |

|  |  |
| --- | --- |
| **Cells A / Collenchyma** | **Cells C / Sclerenchyma** |
| Walls are unevenly thickened | Walls are evenly thickened**✓** |
| Cells have nuclei | Cells have no nuclei**✓** |

 **✓** Table  | (3) |  |
| 2.3 | Acts as packing tissue**✓** |  |  |
|  | Stores water, sugar, and starch**✓** |  |  |
|  | Intercellular air spaces allow for gaseous exchange and water to pass through the tissue. **✓**  Any | (2) |  |
|  |  | **(7)** |  |
|  |  |  |  |
|  | **Question 3 : Cancer** |  |  |
| 3.1 | Cells dividing uncontrollably by mitosis **✓** to form a mass **✓**/ tumour | (2) |  |
| 3.2 |  Surgery, Radiotherapy, ChemotherapyAny | (2) |  |
|  |  | (3) |  |
| 3.3 | **A -**Age group of Men **✓**   |  |  |
|  | **B –** Number of Men **✓** |  |  |
|  |  |  |  |
| 3.4 | 60-69 **✓** age group |  |  |
|  |  |  |  |
| 3.5 | 1000 **✓** - 100 **✓** = 900 **✓** | (3) |  |
|  |  |  |  |
| 3.6 | The number of men that die from lung cancer increases as the age increases **✓** after 69 **✓** years, the number of deaths decreases **✓** | (3) |  |
|  |  | **(13)** |  |
|  |  **TOTAL** | **[30]** |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |