 Province of the

EASTERN CAPE

EDUCATION

**DIRECTORATE SENIOR CURRICULUM MANAGEMENT (SEN-FET)**

**HOME SCHOOLING SELF-STUDY WORKSHEET**

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| **SUBJECT** | LIFE SCIENCES | **GRADE** | 10 | **DATE** | 20/07/2020 |
| **TOPIC** | ANIMAL TISSUES: EPITHELIAL, MUSCLE, NERVE | **TERM 1**  **REVISION** |  | **TERM 2 CONTENT** | ✓ |
| **TIME ALLOCATION** | 45 MINUTES | **TIPS TO KEEP HEALTHY**  1. **WASH YOUR HANDS** thoroughly with soap and water for at least 20 seconds. Alternatively, use hand sanitizer with an alcohol content of at least 60%.  2. **PRACTICE SOCIAL DISTANCING** – keep a distance of 1m away from other people.  3. **PRACTISE GOOD RESPIRATORY HYGIENE**: cough or sneeze into your elbow or tissue and dispose of the tissue immediately after use.  4. **TRY NOT TO TOUCH YOUR FACE.** The virus can be transferred from your hands to your nose, mouth and eyes. It can then enter your body and make you sick.  5. **STAY AT HOME.** | | | |
| **INSTRUCTIONS** | Use the following resources to answer the worksheet:   * Textbook * Via Afrika Grade 10 Study Guide * PowerPoint Presentation on Animal Tissues * Video Lesson on Animal Tissues |

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| 1.1 | **Various options are provided as possible answers to the following questions.**  **Choose the correct answer and write only the letter (A‒D) next to the question numbers** |  |  |

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|  | 1.1.1 | Which of the following characteristics can be associated with cardiac muscle?  (i) intercalated discs  (ii) branched fibres  (iii) tapered ends  (iv) striations  (v) voluntary | | |  |  | |
|  |  | A  B  C  D | (i), (iii), (v)  (ii), (iii), (iv)  (i), (ii), (iv)  (iii), (iv), (v) |  | | |  | |
|  | 1.1.2 | Nerve cells are known as: | |  | | |  | |
|  |  | A | neurons |  | | |  | |
|  |  | B | mast cells |  | | |  | |
|  |  | C | leucocytes |  | | |  | |
|  |  | D | fibroblasts. |  | | |  | |
|  | 1.1.3 | The type of epithelial tissue found on the surface of the skin is … | |  | | |  | |
|  |  | A | squamous. |  | | |  | |
|  |  | B | cuboidal. |  | | |  | |
|  |  | C | columnar. |  | | |  | |
|  |  | D | ciliated. (3 x 2) |  | | | **(6)** | |

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| **1.2** | **Give the correct biological term for each of the following descriptions.**  **Write only the term next to the question number.** | |  |  |
|  | 1.2.1 | Movements done under one’s conscious will |  |  |
|  | 1.2.2 | The type of tissue that is responsible for voluntary movement |  |  |
|  | 1.2.3 | The type of neuron that senses environmental changes |  |  |
|  | 1.2.4 | The long-threadlike part of a neuron that conducts impulses away from the cell body |  | **(4)** |

**1.3 Indicate whether each of the statements in COLUMN A applies to A ONLY, B ONLY, BOTH A AND B or NONE of the items in COLUMN B.**

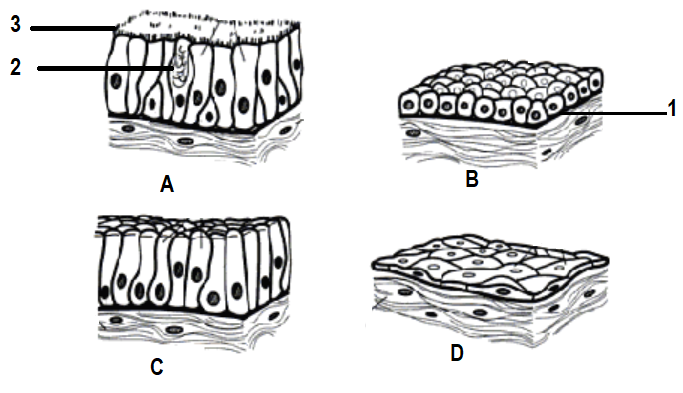
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| **COLUMN A** | | **COLUMN B** | |
| 1.3.1 | Involuntary muscle tissue | A: | Cardiac |
|  | | B: | Striated |
| 1.3.2 | Tissue that covers body surfaces | A: | Nerve |
|  | | B: | Muscle |

**(4)**

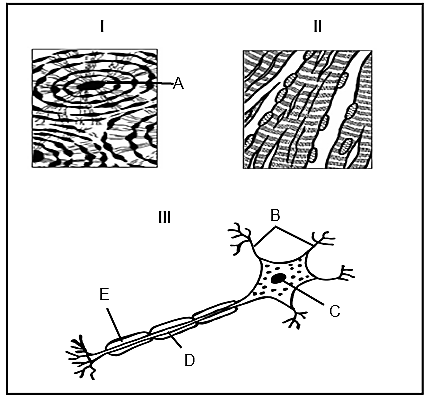
1.4. Compare the structure and location of cardiac, skeletal and smooth muscles in a table.  **(10)**

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| 2.1 | The diagram shows the various tissues found in animals |  |  |



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|  | 2.1.1 | Identify tissues **A, B, C** and **D**. |  | (4) |
|  | 2.1.2 | Where in the body would you find the tissue labelled **B?** |  | (1) |
|  | 2.1.3 | Which labelled part secretes mucus? |  | (1) |
|  | 2.1.4 | Give the function of part labelled **3**? |  | (1) |
|  | 2.1.5 | Name the part labelled **1**. |  | (1)  **(8)** |

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| 2.2 | Study the diagrams of animal tissues and answer the questions that follow. |  |  |  |



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|  | 2.2.1 | Name the groups of tissue to which **II** and **III** respectively belong to. |  | (2) |
|  | 2.2.2 | Name parts **B** to **E**. |  | (4) |
|  | 2.2.3 | Where in the body will tissue type **II** be found? |  | (1) |
|  | 2.2.4 | What is the function of the part numbered **B** in diagram **III**? |  | (1)  **(8)**  **[40]** |