(a)  
 Province of the

EASTERN CAPE

EDUCATION

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

**HOME SCHOOLING SELF-STUDY WORKSHEET ANSWER SHEET**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SUBJECT** | **GEOGRAPHY** | **GRADE** | **11** | **DATE** | **18/5/20** |
| **TOPIC** | **Geomorphology**  **Topography Associated – Massive Igneous rocks** | **TERM 2**  **REVISION** | **√√** | **TERM 2 CONTENT** | **√√** |

1. **Answer Sheets on Topography associated with Massive Igneous Rocks**
2. **Please revise all concepts before going through your worksheet.**
3. **Revise at least 1 hour per day.**
4. **Please revise question papers from 2014 to 2019 on the ECEXAMS website**

**Answer sheet to Topography associated with Massive Igneous Rocks**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.1. |  |  |  |  |
|  | 1.1.1 | Intrusive igneous rocks occur when molten rock solidifies beneath the earth surface (1) and extrusive igneous rock occur when molten  rock solidifies above the earth surface (1) | (2 x1) | (2) |
|  |  |  |  |  |
|  | 1.1.2 | **X** – Laccolith (1)  **Y** – Dyke (1) | (1x2) | (2) |
|  |  |  |  |  |
|  | 1.1.3 | Magma is squeezed between layers of rock  close to the surface (1)  The pressure of the magma causes  the rock strata to ‘dome’ upwards (1) | (2x1) | (2) |
|  |  |  |  |  |
|  | 1.1.4 | Occurs at great depths beneath the earth’s surface (1)  Is a large mass of rock, without any layers (It is massive) (1)  It does not have a floor (1)  **[ANY TWO]** | (2x1) | (2) |
|  |  |  |  |  |
|  | 1.1.5 | (a) Granite (1) | (1x1) | (1) |
|  |  |  |  |  |
|  |  | (b) Intrusive (1) | (1x1) | (1) |
|  |  |  |  |  |
|  |  | © Exfoliation (1 | (1x1) | (1) |
|  |  |  |  |  |
|  |  | (d) Mass magma forces rock layers upwards (2)  When overlaying sedimentary rocks are eroded, the intrusion is exposed as a dome on the surface (2) | (2 x2) | (4) |
|  |  |  |  |  |
| 1.2 |  |  |  |  |
|  | 1.2.1 | magma (1) |  |  |
|  |  |  |  |  |
|  | 1.2.2 | intrusive (1) |  |  |
|  |  |  |  |  |
|  | 1.2.3 | largest (1) |  |  |
|  |  |  |  |  |
|  | 1.2.4 | lopolith (1) |  |  |
|  |  |  |  |  |
|  | 1.2.5 | pipe (1) |  |  |
|  |  |  |  |  |
|  | 1.2.6 | laccolith (1) |  |  |
|  |  |  |  |  |
|  | 1.2.7 | batholith (1) | [7x1] | [7] |
|  |  |  |  |  |
|  |  |  |  |  |
| 1.3. |  |  |  |  |
|  | 1.3.1 | Pile of rounded core stones balancing on top of one another (1)  (**Concept**) | (1x1) | (1) |
|  |  |  |  |  |
|  | 1.3.2 | Batholith(1)  Laccolith (1)  [**ANY ONE]** | (1x1) | (1) |
|  |  |  |  |  |
|  | 1.3.3 | The core stones are well rounded (2) | (1x2) | (2) |
|  |  |  |  |  |
|  | 1.3.4 | The base of the tor is still joined to the original granite rock (2)  Tors develop from igneous rocks, which are not easy to erode (2) During the development of tors, the core stones were joined when rain water seeped into the cracks and joints (2)  (**Any TWO**) | (2x2) | (4) |
|  |  |  |  |  |
|  | 1.3.5 | Igneous rocks cool down below the surface (2)  Cooling magma results in cracks and joints in the rock (2) Chemical weathering occurs as ground water seeps into the cracks and joints (2)  Joints and cracks are widened through erosion (2)  The eventual removal of overlying rock layers, exposes the core stones (2)  The joints and cracks are further widened through mechanical weathering and erosion (2)  (**Any FOUR**) | (4x2) | (8) |
|  |  |  |  | **[38]** |
|  |  |  |  |  |