DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION
Department of Curriculum Management
Educational Assessment Unit

Track 2

**Annual Examinations for Secondary Schools 2014**

# FORM 4 GEOGRAPHY (OPTION) Marking Scheme

The aim of this Marking Scheme is to ensure a greater degree of objectivity in marking the examination papers. However, when answers different from those listed below are given, it is at the discretion of the teacher whether to give the marks or not.

| Question | Marks | Breakdown of marks | Answer |
|---|---|---|---|
| **1** | **12** | | |
| a | 4 | 2 marks x 2 | • Museum<br>• 874059 |
| b | 3 | 1 mark for GR<br>1 mark for measure in cm<br>1 mark for measure in km | 804040<br>Accept any answer from 3.6 km to 4.2 km. |
| c | 2 | 1 mark for named activity and 1 mark for evidence | *Any two answers from:*<br>• Farming – names of farms as Old Park Fm and Cobnor Fm<br>• Forestry – Oldpark Wood, Oakwood<br>• Tourism – hotel, leisure centre, caravan site<br>*Accept any other relevant answer.* |
| d | 3 | 1 mark x 3 | 1 mark for the enlarged grid box with grid references.<br>1 mark for the drawing of the secondary road.<br>1 mark for the location of the farm. |
| **2** | **8** | | |
| a | 6 | 1 mark x 6 | 1. Pinatubo<br>2. Fuji<br>3. Mt St. Helens<br>4. Paracutin<br>5. Rocky<br>6. Andes |

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| b | 2 | 1 mark x 2 | Plate 7 – Pacific<br>Plate 8 - Nazca |
| **3** | **12** | | |
| 3 | 12 | 2 marks x 6 | Anticyclone<br>Depression<br>Depression<br>Depression<br>Anticyclone<br>Anticyclone |
| **4** | **8** | | |
| a. | 6 | 2 marks x 2<br><br><br><br><br>1 mark x 2 | - **Crust:** The crust is <u>solid</u>.<br>- **The mantle** is the <u>widest</u> section of the Earth for it has a thickness of approximately 2,900 km.<br><br>**Outer Core:**<br>It is extremely <u>hot</u> with temperatures up to 5,500 degrees Celsius.<br>**Inner Core:** This layer is believed to be <u>solid</u> because of the immense pressure placed upon it. |
| b. | 2 | 2 marks | The convection currents move the plates.<br>Where convection currents diverge (move apart) near the Earth's crust, plates move away from each other.<br>Where convection currents converge (meet), plates move towards each other. |
| **5** | **12** | | |
| a. | 4 | ½ mark x 8 | **Upland river features** – V shaped valleys; waterfalls; gorges; interlocking spurs<br>**Lowland river features** – meanders; ox-bow lakes; flood plain; deltas |
| b. | 8 | 1 mark x 8 | **V shaped valleys** – As a river flows over steep slopes, the water makes <u>vertical</u> erosion.<br>**Waterfalls** – A waterfall will form where a band of harder rock lies over a softer rock. The river flows over the edge of the harder, more |

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| | | | resistant rock, into the plunge pool. The softer rock is eroded from below, creating an overhang.<br>**Gorge -** A steep sided valley forms when the waterfall retreats.<br>**Meanders** – As the river erodes laterally, to the right side and then to the left, it forms large bends called meanders.<br>**Flood plain** – A flood plain is the area around a river covered by water in times of flood. A flood plain is a very fertile area due to the rich alluvium deposited by flood waters. *Accept silt and sediment.*<br>**Deltas** – Deposition at the mouth of a river can form deltas. A delta is formed when the river deposits its material faster than the sea can remove it. |
| **6** | **8** | | |
| 6 | 8 | 1 mark x 8 | **Physical inputs** – *One of:* land, climate, relief, water, drainage.<br>**Human inputs** – *One of:* capital, government policies, transport, buildings, machinery, fertilisers, knowledge, skills, electricity.<br>**Processes** – *Three of:* seeding, ploughing, harvesting, fertilising, shearing, digging, spraying.<br>**Positive Outputs** – *Two of:* eggs, wool, animals, leather, straw, hay, manure, fruits, cereals, money.<br>**Negative outputs** – *One of:* water pollution from pesticides, dead animals, loss of natural vegetation, pesticides kill good insects.<br>*Accept any other relevant answers.* |
| **7** | **12** | | |
| 7 | 12 | 2 marks x 6 | a. True<br>b. True<br>c. False<br>d. True<br>e. False<br>f. True |
| **8** | **8** | | |
| 8 | 8 | 2 marks x 4 | *Any four relevant points.*<br>**Pollution:**<br>- The increased use of pesticides and fertilisers has led to air and water pollution.<br>- Chemicals used on the fields are easily washed into rivers by rainwater and can seriously affect the fish, birds and plants of the river. They can also leach through the ground and into rivers. |

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| | | | - Fertilisers in water can cause rapid algae growth. This can then lead to the water being starved of oxygen; so there is not enough oxygen for other plants, and especially fish.<br><br>**Soil Erosion**:<br>- The removal of hedgerows and the change from pasture to arable farming has led to many cases of increased soil erosion.<br>- The hedges and rubble walls protected the soil from wind erosion and their removal created huge fields across which the wind could blow strongly.<br>- Arable crops do not bind the soil together as well as grass and so more soil was eroded by rainwater run-off.<br>- Also the crops did not cover the ground all year round and when the fields were ploughed they were even more susceptible to rapid erosion and flooding.<br>- The soil is exposed and vulnerable to erosion as a result of overgrazing when too many animals are allowed to graze in a restricted area.<br>- Trees, which provide protection from the wind and rain, are removed to be used as fuel.<br>- Up and down ploughing makes it easier for the rains to carry the soil away.<br>- Monoculture can also lead to the loss of nutrients and so the soil can eventually be abandoned when it gives poor yields. This will then result in soil erosion. |
| **9** | **10** | | |
| 9 | 10 | 2 marks x 2 | ***Any two Advantages from:***<br>- The dam will protect a lot of people from the floods of the Yangtze River.<br>- The dam will also protect the farmland from the floods of the Yangtze River.<br>- The dam will produce a lot of clean energy.<br>- A lot of cargo can be transported via the Three Gorges Dam.<br>- Higher water levels mean that larger vessels can be used to travel faster and can now reach the upper parts of the Yangtze River. |

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| | | 2 marks x 2<br><br><br><br><br><br><br><br>2 marks | ***Any two Disadvantages from:***<br>- A big area of land had to be flooded.<br>- Many people lost their homes as more than a thousand towns and villages were flooded.<br>- Architectural and cultural sites were lost due to this project.<br>- The natural ecosystems will be disturbed as the dam will reduce the flow of nutrients and sediment downstream.<br>- Coastal erosion can harm fishing grounds and tidal wetlands.<br><br>**Agree/Disagree** – Both are acceptable as long as a good reason is given. |
| **Total** | **90** | | |