GCSE Physical Education

Guidance about responding to higher order and extended answer questions, and associated exemplars.

Unit 1: The Theory of Physical Education (5PE01/5PE03)

December 2012
**Background**

In February 2012 Edexcel informed centres about the planned change to the extended answer questions in unit 1 for the following papers – 5PE01 (full course) and 5PE03 (short course). The notification can be accessed here: http://www.edexcel.com/quals/gcse/gcse09/pe/pages/viewNotice.aspx?notice=2713. In June 2012 we also posted hard copies of the updated sample assessment materials, and informed centres about further changes to the question papers: http://www.edexcel.com/quals/gcse/gcse09/pe/pages/viewNotice.aspx?notice=2892. A copy of both statements can be found in the appendix.

To further support centres through these changes, we have collated example of responses which adequately responded to the following questions in summer 2012:

- Q04b (Q25 in 5PE03)
- Q06
- Q12 (Q29 in 5PE03)
- Q13

These questions – ‘describe’, ‘explain’, ‘discuss’ represent the question types which will appear in GCSE Physical Education question papers for 5PE01 and 5PE03 from Summer 2012 onwards.

**Unit 1: The theory of Physical Education – Assessment Objectives**

The following assessment objectives are tested within the question papers for 5PE01 and 5PE03:

- AO1: **Recall**, select and communicate their knowledge and understanding of physical activity.
- AO2: **Apply** skills, knowledge and understanding in physical activity.
- AO3: **Analyse** and **evaluate** physical activity, and **identify** action to bring about improvement.

It is vital that candidates are able to do this in relation to a healthy, active lifestyle.

The Assessment Object percentage allocation for 5PE01 and 5PE03 is shown below:

<table>
<thead>
<tr>
<th>Assessment Objectives</th>
<th>AO1</th>
<th>AO2</th>
<th>AO3</th>
<th>Total for AO1, AO2 and AO3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5PE03 (Short course)</strong></td>
<td>20-30%</td>
<td>5-15%</td>
<td>0-10%</td>
<td>40%</td>
</tr>
<tr>
<td><strong>5PE01 (Full course)</strong></td>
<td>20-30%</td>
<td>0-7%</td>
<td>8-18%</td>
<td>40%</td>
</tr>
</tbody>
</table>
Command words

The tables below identify command words used in examination and the updated sample assessment materials. The command words carry an increasing level of demand in terms of required response. This list is not definitive.

‘One mark’ command words which test factual knowledge will often be used to form ‘part’ questions (a), (b), (bii) and so on. Normally a single word answer or a single sentence is required to address these questions.

Typical ‘one mark’ command words

<table>
<thead>
<tr>
<th>Plot</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many...</td>
</tr>
<tr>
<td>Identify</td>
</tr>
<tr>
<td>Tick the most relevant</td>
</tr>
<tr>
<td>What level</td>
</tr>
<tr>
<td>State</td>
</tr>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Which of the following</td>
</tr>
<tr>
<td>Give (an example/advantage)</td>
</tr>
<tr>
<td>Select</td>
</tr>
<tr>
<td>When</td>
</tr>
<tr>
<td>Classify</td>
</tr>
<tr>
<td>Complete (the statements/gaps)</td>
</tr>
<tr>
<td>Briefly describe/ define/outline</td>
</tr>
</tbody>
</table>

‘Two or more mark’ command words require more detail than one mark answers. They involve the candidate giving a series of points which must be linked in order to achieve the marks available in the mark scheme. The number of marks available will indicate the depth of the required answer.

Typical ‘two or more marks’ command words

<table>
<thead>
<tr>
<th>Describe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compare</td>
</tr>
<tr>
<td>Explain</td>
</tr>
</tbody>
</table>
Command words used in extended answer questions are shown below. Extended answer questions are marked out of six marks and, as with the examples above, demand linkage of points to show the required level of development.

<table>
<thead>
<tr>
<th>Typical command words used in extended answer questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discuss</td>
</tr>
<tr>
<td>Assess (relative importance) / Evaluate</td>
</tr>
<tr>
<td>Explain</td>
</tr>
</tbody>
</table>

Please note that the command words associated with ‘two or more marks’ and ‘extended answer questions’ can interchange depending on the knowledge candidates are required to demonstrate.
Examples of candidate responses

**Question 4b: Explain the requirements of a balanced diet.**

In Summer 2012 the question targeted the following topic area ‘1.1.5: Your personal health and wellbeing’. Below are examples of top scoring responses with their associated commentary.

This question asks for an explanation of the requirements of a balanced diet rather than purely identification, therefore, whilst some credit could be gained for identifying, most marks were allocated for the reasons why specific nutrients were required in the diet. The mark scheme was broken down to allow credit for identifying the components of a balanced diet and linking each type of component to its specific function, i.e. explaining/giving a reason why required. The components were grouped together: macronutrients (point 3 in the mark scheme); micronutrients (point 4 in the mark scheme) and ‘other’ (water and fibre point 5 in the mark scheme). Point 1 in the mark scheme was awarded for identification of the components of a balanced diet and point 2 credited an explanation of the term ‘balanced diet’.

Whilst no credit would be gained for simply saying that a balanced diet requires a ‘balance between all food groups’ (as not explaining term balanced diet), this response offers further information; all seven food groups that make up a balanced diet are identified: fats; carbohydrates; proteins; fibre; water; vitamins and minerals, (point 1 in the mark scheme). Having attempted to identify what is a balanced diet (a mix of each of the food groups); the response then explains why they are required: ‘fats and carbohydrates for energy’, (point 3); ‘fibre to help food through the digestive system’ (point 5); ‘vitamins and minerals for overall health’ (point 4). The role of protein is also identified but this is a repeat of point 3 as credit has already been awarded for explaining a role of specific macronutrients. Similarly the role of water is a repeat of point 5 as credit has already been given for the role of the ‘other’ aspects of the balanced diet. This response gained maximum marks.
This response achieves points 3, 5, 4 and 1, achieving maximum marks for question. The response opens with reference to macronutrients and micronutrients before giving more detail about the function of these groups. Carbohydrate is identified as a macronutrient and linked to energy release (achieving point 3); although reference is made to slow energy release this does not negate the link to energy at level 2. Fibre is then identified and its role in providing roughage is given (point 5); an example of a specific mineral is then given and its associated role: calcium making bones stronger; (point 4); finally water is also identified completing the requirements for Point 1: macronutrients; micronutrients; fibre and water.
(b) Explain the requirements of a balanced diet.

The requirements of a balanced diet is the correct amount from each food group:

- Carbohydrates = for energy (quick)
- Fats = for energy (slow)
- Protein = to repair muscles
- Fibre = to help you digest
- Water = to keep you hydrated
- Minerals
- Vitamins

The correct portions of each of these result in a balanced diet.

(Total for Question 4 = 5 marks)
To have a balanced diet you need to eat the optimal ratio of nutrients. You must intake plenty of carbohydrate and protein to supply energy and build muscle. Other nutrients such as water are vital to keep the body hydrated. Fibre is needed to maintain healthy body systems. Fats, minerals and vitamins are also needed in their required doses in order for the body to work efficiently.

This response achieves points 2, 3, 5 and 1, achieving maximum marks for the question. Credit is given for the phrase ‘eat the optimal ratio of nutrients’ (point 2) demonstrating knowledge of the meaning of balanced diet. Carbohydrates and proteins are listed as providing energy and building muscle, this was credited (point 3) but care should be taken when combining groups that it is clear which requirement is required for which function i.e. carbohydrates do not build muscle. Credit for ‘water vital to keep the body hydrated’ (point 5) and finally point 1 is achieved when remaining groups are listed (fats, minerals and vitamins).
(b) Explain the requirements of a balanced diet.

In a balanced diet you would need 55% carbohydrates, 30% protein and 15% of fats. You also need water, vitamins and minerals, fibre and dairy.

You should alternate between macro and micro fats.

You need water so you do not become dehydrated.

Protein is needed for muscle growth and repair. You need carbohydrates and fat as an energy source.

(Total for Question 4 = 5 marks) 5

This response achieves points 2, 1, 5 and 3, achieving maximum marks for this question. Point 2 is credited for reference to specific percentages of macronutrients that should form the balanced diet, demonstrating knowledge that fats should be eaten in smaller quantities than carbohydrates. All groups are listed (with the addition of ‘diary’ which is ignored) to gain point 1. The reason for inclusion of water (point 5) and protein (point 3) is also given.
In Summer 2012 question 6 targeted the following topic area ‘1.2.2: A healthy, active lifestyle and your cardiovascular system’. Below are examples of top scoring responses with their associated commentary.

**Question 6**

**6i (Describe the impact of diet on the cardiovascular system).**

This part of the question was allocated three marks. It asks for a description of the impact of diet on the cardiovascular system, as a three mark question requiring a description, candidates were expected to develop a point as indicated in these sample responses, all of which achieved maximum marks for the question. The expectation was that candidates would approach their response from a ‘negative’ viewpoint of diet and the majority did, although this was not essential.

**6ii (Describe the impact of rest on the cardiovascular system).**

This part of the question was allocated two marks which could be gained by referring to short or long term implications.

(i) The majority of responses focused on the negative impact of a fatty diet, but in this example the candidate has identified too much salt as a negative (point 1 in the mark scheme); this is developed by linking to the cardiovascular system identifying a potential increase in blood pressure as a result of a high salt diet (point 2 in the mark scheme) and finally by linking this aspect of a poor diet to increased risk of heart disease (point 3 in the mark scheme). Reference to cholesterol is not incorrect but does not gain additional credit as this point is already achieved in relation to salt.
(ii) In this example the candidate refers to adaptation (point 1 in the mark scheme) and heart returning to resting heart rate (point 2 in the mark scheme).

(i) In this example the response is more ‘typical’, excess fatty foods resulting in fatty deposits (point 1 in the mark scheme) blocking arteries (point 2 in the mark scheme) leading to heart attack (point 3 in the mark scheme). This response gains maximum marks for fully describing this potential impact.

(ii) In the second part of the response the answer is less typical, (due to use of negatives) but still gains full credit. Reference is made ‘needing rest otherwise not able to return to resting heart rate’ (point 2 in the mark scheme) and this is linked to allowing rest so that the heart becomes stronger, reducing resting heart rate, an example of a training adaptation therefore point 1 is also achieved.
This candidate achieves maximum marks for this question. In part (i) they link a high fat intake and LDL’s with clogged arteries leading to possible heart disease. In part (ii) there is reference to adaptation of the heart and an immediate effect of a return to resting heart rate.
In this response the candidate takes a slightly different approach, identifying what will not happen if you have a balanced diet, this response gained full marks: cholesterol will not build up (point 1 in the mark scheme); reducing the chance of high blood pressure and heart attack. It also has protein to let the heart muscles become stronger and more tone so more blood can be pump around the body at once.

(ii) Impact of rest on the cardiovascular system.

Rest on the cardiovascular system is when the body is not doing any exercise and is at resting heart rate, it lets the heart muscles recovery and grow which cause a hypertrophy.
This example gives more typical correct responses achieving maximum marks for the question. In part (i) a diet ‘high in fats’ is linked to increased risk of heart disease due to increased blood pressure and the associated build-up of cholesterol. In part (ii) there is clear reference to the rest allowing the heart to ‘return to resting heart rate’ and heart muscle repairing linked to hypertrophy.
Questions 12 and 13 are extended answer questions. They are marked using a levels based mark scheme rather than a points based mark scheme that is used for the rest of the paper. This means that a candidate is judged on the 'level' of their response, not solely on the number of relevant points they make. The command word for question 12 is 'discuss', therefore to gain more than a level 1 a response had to show developed discussion points, similarly with question 13 the command word used was explain, therefore developed explanation points were required to access level 2 or 3. Further guidance about the use of command words can be found in the command word section of this support documentation.

In Summer 2012 question 12 targeted the following topic area '1.1.4: Physical activity as part of your healthy, active lifestyle’. Below are examples of top scoring responses with their associated commentary.

**Commentary - Q12 (Discuss the use of target setting to improve performance).**

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Target setting can be used to improve performance. If the target is realistic it can keep you motivated to work towards your goal, for example.

Eshan might set a target of running 3 km in 15 minutes. This can provide a physical challenge as he tries to beat the time. He pushes his body to the limit as he strives towards his goal. By using a measurable target Eshan can check his improvement. For instance, he might improve his time for 3 km from 20 minutes to 19 minutes. This means that not only has his physical well-being improved, but his self-esteem is also better which may result in improved performance. Eshan feels better about himself, understands that he is improving and will try to keep getting better.

However, a target must be feasible, e.g. don’t use 3 km in 1 minute as a target, as this is impossible, and Eshan may be demoralized and refuse to train. If he cannot meet it, a time-bound target can add pressure on Eshan to achieve a target within perhaps 2 months, so he can shine upon the pressure and work harder to fulfill it. A target must also be realistic to your sport, for example Eshan would not want a target of scoring 100 m in 10 seconds if he is training for a long distance event. Similarly, he would not improve his performance in a long distance event.
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This is a level three response as the points raised are developed discussion points, there is a reason or link made between aspects of target setting and the value this provides in improving performance. For example, the statement ‘if the target is achievable (aspect of SMART) it can keep you motivated’. Had this statement finished here it would have been a valid simple point about the value of target setting, but the response continues, giving an example and how this provides the motivation through ‘physical challenge’ and ‘pushing his body to strive for the goal’.

This is followed by a second discussion point: measurable - allows you to check improvements (simple so far but then adds example and impact of this) - e.g. - understands improving - and so will continue to try.

A third developed discussion point focuses on realistic goals; the aspect of SMART is identified, a valid example is given and the impact of setting an impossible goal is explained, i.e. a refusal to train.

There is a final developed discussion point linked to time-bound goals, an example of completing in two months is given (simple statement) then the impact is explained, ‘so that he can strive upon the pressure and work harder to fulfil the goal’.

This candidate does not simply list the aspects of SMART, or simply describe them. There is an attempt in each statement to follow the point made through providing information about an aspect of SMART target setting and how this will impact on performance.
This level three response provided good balance when addressing the question. Values of target setting such as motivation and structure were stated although not developed as discussion points, however, several discussion points were made, for example there was discussion around the value of setting ‘specific’ targets. Specific was described as “exactly what Eshan wants to achieve” and examples given and the impact of this was also discussed, “this helps to...focus his training on...”.

Statements where responses include words such as ‘because’; ‘therefore’; ‘this helps to’; ‘so that’ are likely to result in developed statements, i.e. a point is being expanded. Further evidence of this is in the second paragraph where the focus moves to measurable; there is an
example, followed by a reason for making targets measurable (to track progress) so that a judgement can be made “whether his training is working or needs to be altered accordingly”.

Had the response stated measurable to track progress this would have been a ‘simple’ statement without development, the addition of the phrase “so that a judgement can be made whether his training is working or needs to be altered accordingly” makes the statement developed. A third discussion point is made in relation to ‘achievable’ The aspect of SMART is identified and correctly described – “not striving for something that he cannot possibly achieve” and then the impact of this is explained: “therefore will de-motivate him when he does not achieve”.
In this example of a level 3 response developed discussion points have been made in relation to measurable, achievable and time-bound aspects of SMART. Measurable is linked to tracking and planning progression towards a goal with the development that ‘without measurable goals you will not be able to set reachable targets or test how much your fitness is improving’. This additional point gives a reason why it is necessary to have measurable targets rather than just saying we need them. Achievable is developed as linked to being able to reach the goal and the fact that it ‘won’t be seen as impossible’ which in turn ‘promotes a can do attitude meaning less chance of giving up’. Time-bound is important when setting goals as it motivates the performer to complete goals in a timed and set deadline, this puts pressure on the performer to improve their performance in preparation for the deadline.
This response develops discussion points around several aspects of SMART and uses examples to support the points being made. For example, 'specific' is correctly identified as an aspect of SMART and the term is described as meaning there is a 'defined outcome so you know exactly what you are aiming for', this is supported with an example of a specific target, thus developing the point further. The second developed discussion point re measurable links the principle of measurable with 'can be timed or recorded', so that 'progress or lack of it can be identified'. Achievable is correctly identified and described and the impact of this is stated 'which means targets can be reached as this gives hope and motivation...'. This is also further supported with a relevant example. The principle of 'realistic' is also identified, and an example given but the point is not developed as no impact of having an unrealistic goal is given in the response. However there is another developed point at the end of the response in relation to 'time-bound'.
This concept is accurately described and a problem with not setting time-bound goals is identified: ‘as without progress can be slow and difficult to record, leading to a lack of interest or progress. Eshan may keep putting off beginning to train’.
This response develops discussion points linking the following aspects of SMART with their corresponding values in relation to goal setting and performance. The response terminates with a conclusion that recaps the values of goal setting and the impact this has. The principle ‘specific’ is explained through description (‘focused on what he wants to improve’) and supporting relevant example of ‘shooting skills’ for a footballer. Measurable is discussed in terms of ‘allowing you to see improvement’ so that ‘you know your training is working’. Achievable is discussed, linking achievable and realistic to ‘goals you can reach’ which means that ‘you are more motivated by your improvement’.
In Summer 2012 question 13 targeted the following topic area ‘Topic area 1.2.1: Physical activity and your healthy mind and body’. The extracts below have been selected to provide a range of examples of developed explanation points all from candidates who achieved six marks for this question. Extracts are given to avoid repetition of points, to give a greater coverage of activities and to allow focus on specific aspects of content, covering areas of indicative content from the mark scheme. All of the extracts give examples of developed statements that explain risks and how they are reduced.

Commentary - Q13 (Explain the use of target setting to improve performance).

Example from area 1 of indicative content:

Firstly, it is important to perform a risk assessment before an activity begins to ensure that the pitch is clear of any obstacles or dangers (glass or sticks on the floor can cause participants to fall or cut themselves) and that the surface of the playing area is safe.

In this extract the candidate identifies risk assessment as a risk reduction measure, they explain that it is important to clear obstacles such as sticks or glass off of the playing surface so that performers do not trip on them, causing them to fall or cut themselves.

This response is based on boxing; this specific extract identifies and explains the importance of fitness in reducing risk of injury. High levels of stamina are identified as important to ‘keep blocking punches’ otherwise ‘he would get tired and would be vulnerable to punches from opponent’. Punches from the opponent represent the risk.
Example from area 2 of indicative content:

In this extract the importance of a warm up is explained. The risk of straining a muscle when stretching for the ball is minimised through the warm up because the muscles have been lengthened.

Cycling is the named activity in relation to this extract. The risk of crashing is identified, the risk reduction measure is also identified as using age categories, and how this reduces the risk of crashing is then explained: 'younger children, who don’t go as fast, don’t get in the way of faster adults on the circuit'.

Example from area 3 of indicative content:

In this extract from a level 3 response there are two consecutive developed statements, although identified as linking to area three of the indicative content as specific injuries identified, they could equally be considered as representing ‘technique’ in area 1 and ‘protective equipment’ in area 4 of the indicative content:

There are many ways to prevent risks. Firstly, by having a marked 'X' in the centre of the trampoline. This ensures that the participant stays as far from the edge as possible to prevent falling off and possible injuries to the body i.e. fractures, sprains, broken bones. Another way to reduce physical health risks is by having thick safety mats which surround the trampoline. This is there to cushion the landing if the participant does fall off the trampoline. The mats reduce the severity of injuries, i.e. instead of breaking a bone, the affected area may just be sprained. Participants are forbidden

The first identifies the 'X' in the middle of the trampoline as the risk reduction measure; this is explained through providing a focus that keeps the performer away from the edge of the trampoline, reducing the risk of falling and possibly breaking a bone. The next paragraph makes reference to 'thick safety mats', their presence is explained to 'cushion the landing' if the performer was to fall, reducing the severity of the fall due to the cushioning, maybe experiencing a sprain rather than a break.
Example from area 4 of indicative content:

In this example risk of a specific injury is identified (stress fracture), the risk reduction measure (wearing sensible footwear) is identified and then there is an explanation linking the length of the game and the need to reduce the impact on joints such as the knee and ankle over this time period. Compare this to a response that simply states that to reduce chance of stress fractures you should wear appropriate footwear. The example above offers more depth in their response and an explanation re how risk is reduced rather than simply a description.

In this extract the removal or ‘taping’ of jewellery (safety rule) is identified as a protective measure, the explanation is that by doing this risk of it catching and ripping an ear are removed as the item of jewellery will not get caught.

The candidate has based their response on hammer throwing. In this example they explain how wearing a thick leather glove can reduce the risk of injury, specifically blistering, to the hand. The reason it reduces risk is because it reduces the force exerted on the hands.
This extract identifies a risk of sustaining a fracture in downhill skiing. The risk reduction measure is identified as following safety rules of the activity, the development of this through an example of a ‘rule of the slopes’, to always look up the slope before joining it thereby reducing the risk of crashing in to someone already on the slope.

The need for mats in gymnastics is identified to reduce risk of breaks or paralysis in extreme cases. The mats avoid the ‘impact of the hard floor’.
Appendix 1

Communication to centres regarding changes to the structure of extended questions in the summer 2012 question papers for 5PE01 and 5PE03

GCSE from 2009 | Physical Education
14 February 2012

Amendment to GCSE Physical Education full and short course examination from summer 2012

Please note that the longer question(s) at the end of the written examination paper on both the GCSE PE full and short course will no longer contain supporting bullet points (scaffolding).

The decision to remove the scaffolding was taken after we found that the 2011 award resulted in grade boundaries that did not cover as wide a range of marks as we would have wished. After the summer, we began consultation with Ofqual to put in place actions that would address this for all our centres and candidates.

Questions from summer 2012 onwards will reflect the format of the first set of published sample assessment materials that are available on our website. To support you further, we've also prepared additional exemplars of the longer question(s) and mark schemes.

You'll find all of these on the GCSE PE page under 'sample assessment materials'.

Please continue to prepare your candidates for these papers as described in the specification and the sample assessment materials.

If you have any questions about this, please email the Physical Education Assessment Team at physicaleducation@pearson.com or contact the Subject Advisor, Penny Lewis, at PEandSportSubjectAdvisor@edexclexperts.co.uk or by calling 0844 576 0036 (+44 (0)1204 770696 for centres outside the UK).
Appendix 2

Communication regarding changes to the structure of question papers for 5PE01 and 5PE03 from summer 2013 onwards.

GCSE from 2009 | Physical Education
13 June 2012

Additional Sample Assessment Materials and change on the examination paper from summer 2013

Please note that we have reviewed the specification and have made some additional minor changes to the examination papers on both the GCSE PE full course (5PE01) and short course (5PE02).

To support centres through this change we have prepared updated sample assessment materials and mark schemes and these are available on the GCSE PE homepage.

From Summer 2013, there will be some minor changes to question types used to assess candidate responses. Please note the written examination paper will still contain multiple choice, short answer and long answer responses.

The changes are outlined below.

Unit 1 – Full Course (5PE01)

- We have made a small reduction in the number of single word response questions, and have replaced these with short answer questions that are marked out of 3 or 4 marks.
- As per the changes in summer 2012, the longer answer questions will not contain supporting bullets.

Unit 3 – Short Course (5PE03)

- We have reduced the number of multiple choice questions and will no longer use the ‘whether two linked statements are true and/or false’ multiple choice question type.
- We have also made a small reduction in the number of single word response questions and replaced these with short answer questions that are marked out of 3 or 4 marks.
- As per the changes in summer 2012, the longer answer question will not contain supporting bullets.

The total marks available for the written examination paper for both full and short course remains the same, and there will still be common questions between the full and short course written examination papers. There have been no changes to the controlled assessment unit. The content and topics in the specification remain the same.

Please continue to prepare your candidates for these papers as described in the GCSE 2012 linear
specification for first assessment in 2014 and the 2013 sample assessment material.

If you have any questions about this, please email the Physical Education Assessment Team at physicaleducation@pearson.com or contact the Subject Advisor, Penny Lewis, at TeachingPEandSport@pearson.com or by calling 0844 576 0036 (+44 (0)1204 770696 for centres outside the UK).

Letter to centres - Update on GCSE Physical Education full course (5PE01) and short course (3PE01) examination from Summer 2013

Frequently asked questions - Changes to the structure of GCSE Physical Education full and short course examination from summer 2013

Link to sample assessment material:

5PE01:
http://www.edexcel.com/migrationdocuments/GCSE%20New%20GCSE/5PE01_SAM_WEB.pdf

5PE03:
http://www.edexcel.com/migrationdocuments/GCSE%20New%20GCSE/5PE03_SAM_WEB.pdf