

PHYSICAL EDUCATION

Paper 0413/11
Theory

Key messages

- Candidates should ensure that they use examples of physical activities from the list of physical activities identified in the syllabus.
- Candidates should note the number of marks awarded in questions to ensure they answer the question in appropriate depth.
- Candidates should consider using prose in some of their responses to ensure their answers are suitably detailed.

General comments

The majority of candidates answered all questions and there was no evidence to suggest that there was insufficient time to complete the paper. The standard of responses was generally good with answers clearly expressed and examples chosen well in many cases.

Comments on specific questions

Question 1

Most candidates identified both muscle groups.

Question 2

- (a) This was generally a well-answered question. Most candidates knew some characteristics of the associative stage of learning. There was confusion from some weaker candidates who described a different stage of learning.
- (b) Many candidates showed some knowledge of the cognitive stage of learning but some gave a limited response to the benefits of visual guidance at this stage.
- (c) This was a well-answered question. Many candidates demonstrated a good knowledge of the topic.

Question 3

- (a) (i) The majority of candidates identified the appropriate muscle fibre type.
- (ii) Most candidates demonstrated a very good understanding of the muscle fibre types. Stronger answers gave a clear comparison between the muscle fibre types rather than describing features of one type.
- (b) This question was often well answered. Many candidates correctly identified the appropriate type of respiration used by each performer and many used the equations or components of them as a basis for providing a description.

Question 4

This was a well answered question. Most candidates were precise in their use of terms.

Question 5

- (a) Most candidates gained at least partial credit. However, a number of candidates did not provide sufficient detail to gain full credit.
- (b) Candidates needed to suggest an exercise that would improve each component of fitness. Weaker candidates were sometimes too vague.
- (c) Most candidates could describe the advantages and disadvantages of circuit training well and gained full credit.
- (d) Many candidates recognised the benefits of extra-curricular clubs. Some weaker candidates did not apply this understanding to describe specifically the benefits for social health and well-being.

Question 6

- (a) Generally, this was a well-answered question. Most candidates understood blood doping and many gained credit for describing withdrawing blood from the body. However, a number of candidates then did not develop their answer further and some described the benefits of blood doping rather than detail about the process.
- (b) Most candidates were able to gain at least partial credit with a specificity of knowledge shown by many.

Question 7

- (a) There was some confusion over the nature of a skill and ability with weaker candidates sometimes reversing the features. Stronger answers were often succinct and clear.
- (b) (i) Candidates who gained full credit usually chose a games activity. These often provided several opportunities for both open and closed skills to be clearly identified.
(ii) The stronger candidates could justify an appropriate choice by considering a number of factors.

Question 8

- (a) Most candidates gained full credit by identifying the structures in the diagram successfully.
- (b) This was a well-answered question and most candidates were able to describe the role with sufficient detail and clarity.
- (c) Most candidates were able to name and describe a breathing volume. However, some weak candidates described a different volume to the one they had named.

Question 9

- (a) Many candidates gave an appropriate response.
- (b) Stronger candidates tended to achieve full credit by considering issues such as technique. Weaker candidates could often only provide one way.
- (c) Most candidates gained credit for an explanation demonstrating some understanding of this method.

Question 10

Most candidates gained at least partial credit for identifying the missing component of blood and/or the missing function. The benefits for the performer proved to be more challenging.

Question 11

- (a) (i) Most candidates demonstrated an ability to read this table and to extract relevant information.
- (ii) Many candidates gained credit by identifying the component and giving an accurate description.
- (b) Many candidates correctly supplied a suitable activity, the missing component of fitness and a test for power. Stronger candidates could also name the test for coordination.

Question 12

- (a) This was well-answered by the majority of candidates. A small number of weak candidates reversed the position of the muscles.
- (b) (i) Most candidates were able to identify different types of movement that occur at the elbow and shoulder.
- (ii) Most candidates recognised that the elbow was more stable than the shoulder. Stronger candidates were able to give some explanation for this.

Question 13

- (a) Most candidates were able to name a suitable method of training. Stronger candidates fully were able to provide appropriate reasons for their chosen method.
- (b) Weaker candidates tended to give a limited response and typically did not explain the effect a factor would have on a performer's VO_2 max.
- (c) Most candidates were able to state two short-term effects of exercise.
- (d) Most candidates gained credit and showed a good understanding of issues relating to the dangers of overtraining. A small number of weak candidates confused this with the term overload.

Question 14

- (a) Most candidates were able to draw a simple diagram of the lever with correct labels. Some weaker candidates confused the type of lever.
- (b) Weaker candidates found it difficult to identify an appropriate example of this type of lever.

Question 15

- (a) Most candidates gained at least partial credit with many achieving full credit.
- (b) Some candidates named an activity rather than providing a skill. The output was generally answered more effectively than the decision-making stage.

Question 16

- (a) Most candidates showed a good understanding of this topic and provided well-developed answers.
- (b) Very weak candidates did not explain how the factors affected a person as they get older. Stronger candidates fully explained a range of factors.
- (c) Some of the stronger candidates provided some excellent and thoughtful points in response to this question, which showing a very good understanding of the topic and range of issues involved. Some weaker candidates resorted to repetition.

PHYSICAL EDUCATION

Paper 0413/12
Theory

Key messages

- Candidates should ensure that they use examples of physical activities from the list of physical activities identified in the syllabus.
- Candidates should note the number of marks awarded in questions to ensure they answer the question in appropriate depth.
- Candidates should consider using prose in some of their responses to ensure their answers are suitably detailed.

General comments

The majority of candidates answered all questions and there was no evidence to suggest that there was insufficient time to complete the paper. The standard of responses was generally good with answers clearly constructed in many cases.

Comments on specific questions

Question 1

Many candidates were able to identify two of the bones and gained full credit.

Question 2

- (a) Many candidates accurately gave a definition of fitness using the definition from the syllabus but some confused fitness with elements of health and well-being.
- (b) Weaker candidates found it difficult to appreciate the relationship between health and fitness and as a result tended to resort to a definition of these terms.
- (c) This was answered well and the majority of candidates gained at least partial credit.

Question 3

- (a) Most candidates answered this well and many gained full credit.
- (b) Some weak candidates did not identify an appropriate physical activity to use in their responses. Stronger candidates tended to answer with clarity.
- (c) This was generally answered well and most candidates demonstrated a good understanding of the topic.

Question 4

Most candidates correctly described the type of movement and the agonist. However, some candidates confused the type of movement or used imprecise terms.

Question 5

- (a) (i) Most candidates named components of fitness but stronger candidates applied their answers to the cycle race shown in the photograph. Some weaker candidates limited responses to general descriptions of components of fitness.
- (ii) Most candidates answered this well and responses clearly demonstrated a good understanding of how to carry out an appropriate test.
- (b) This was often answered well but some candidates gave one correct reason and then repeated the point for the second response.

Question 6

- (a) A number of candidates named a physical activity rather than a skill and some of the skills named were not linked to appropriate physical activities. Candidates who gave well-developed answers often did so by using skills from games activities. Feedback was particularly well responded to by stronger candidates.
- (b) Many candidates gained partial credit. There was some confusion shown by weaker candidates between this and other syllabus areas. Stronger candidates developed their answers beyond a basic definition to gain full credit.

Question 7

- (a) (i) The majority of candidates answered well. A number of weaker candidates left this question blank and others labelled components other than those listed in the question.
- (ii) Some candidates found it difficult to provide an example of this type of lever. Many strong candidates gave a correct response.
- (b) Most candidates were able to give an appropriate response for acceleration. Weaker candidates generally found it more difficult to do the same for the other terms.

Question 8

- (a) Most candidates were able to provide an appropriate definition.
- (b) The majority of candidates showed a strong understanding of the topic and were able to provide an appropriate graph. Many were able to gain full credit however some weak candidates confused the labelling of axes.
- (c) Many candidates responded well and showed an ability to explain. A number of candidates identified physical activities but not skills, which meant their responses were vague.

Question 9

Many candidates demonstrated some understanding of the pyramid with a number gaining full credit for the question. Some candidates confused the levels with other syllabus terms.

Question 10

- (a) (i) Almost all candidates identified the muscle fibre type correctly.
- (ii) Most candidates were able to identify the characteristics of fast-twitch muscle fibres. Fewer candidates applied this understanding to suggest benefits.
- (b) This question was generally well answered. Many candidates were able to identify a force with an appropriate explanation. However, a second force was typically less successfully named and used by weaker candidates.

Question 11

- (a) Most candidates were able to interpret the information from the graph to answer the question.
- (b) Most candidates answered this question well. Strong responses showed a good breadth of understanding of the issues involved.

Question 12

- (a) (i) Candidates needed to apply the named principles of overload. Many were able to do this but weaker candidates confused the principles with other syllabus terms. Some weaker candidates either did not name the principles of overload or named principles without the application.
 - (ii) This was often answered fully correctly.
- (b) Most candidates gained at least partial credit. There was a wide range of well-developed answers seen, the stronger answers provided clear detail as to how the recovery time was affected.

Question 13

- (a) The majority of candidates gained at least partial credit. Some candidates focused on listing different side effects from taking prohibited performance-enhancing drugs and did not always link this to the protection of the health of the performer.
- (b) Most candidates gained credit for the effect of anabolic steroids. The inclusion of some inappropriate physical activities limited marks for some candidates. In some weak responses there was confusion between beta blockers and stimulants.

Question 14

- (a) Most candidates were able to gain at least partial credit for this question with many achieving full credit. Generally, weaker candidates found the trachea easier to identify.
- (b) Many candidates were able to identify characteristics of alveoli. The explanation was less accurate in many cases. Some weaker explanations were not appropriate for the associated characteristic.
- (c) Most candidates gained credit for the description of minute ventilation and many candidates also correctly identified the change. Vital capacity was typically not as precisely understood.

Question 15

- (a) (i) Some candidates showed some understanding of risk. Fewer were able to show sufficient understanding of a perceived risk to be able draw a comparison between the two types.
 - (ii) Many candidates gained credit for an example of a real risk and a strategy. The strongest candidates were able to give an appropriate example of a perceived risk with a strategy.
- (b) Most candidates gained at least partial credit for this question. Sometimes the activity was repeated and so the response did not fulfil the full requirements of the question. Some weaker candidates gave examples of inappropriate injuries.

PHYSICAL EDUCATION

Paper 0413/13
Theory

Key messages

- Candidates should ensure that they use examples of physical activities from the list of physical activities identified in the syllabus.
- Candidates should note the number of marks awarded in questions to ensure they answer the question in appropriate depth.
- Candidates should consider using prose in some of their responses to ensure their answers are suitably detailed.

General comments

The majority of candidates answered all questions and there was no evidence to suggest that there was insufficient time to complete the paper. The standard of responses was generally good. Many candidates chose examples well.

Comments on specific questions

Question 1

Most candidates gained full credit for identifying different joint types.

Question 2

- (a) Many of candidates identified the levels correctly.
- (b) Most candidates answered this question well and many gained full credit. Those who did not usually found the characteristics of the participation level more difficult.
- (c) Many candidates described a variety of strategies that schools might use to encourage participation. Some weak candidates suggested physical education lessons.

Question 3

This was a well answered question and most candidates were able to give succinct and clear responses.

Question 4

- (a) Some candidates confused the agonist and antagonist muscles but the majority answered this question well.
- (b)(i) Most candidates gained credit with a common response being the forming of a connection between muscle and bone.
- (ii) This was answered well by many candidates who typically gave two suitable causes.
- (iii) Candidates generally demonstrated a good understanding of the reasons for using ice and compression, many gained full credit. However, a few weak candidates repeated the reasons.

Question 5

- (a) Most candidates gained full credit and demonstrated a good understanding of the topic.
- (b) Most candidates were able to identify both how and where this is stored.
- (c) Some candidates did not use appropriate physical activities. When correctly identifying physical activities, some weaker candidates gave unrelated situations when aerobic and anaerobic respiration are used within the activity, rather than when a situation required a change.

Question 6

- (a) Most candidates gained full credit for taking information from the table and completing an accurate bar chart. Some weaker candidates did not complete the axes.
- (b) Most candidates gained at least partial credit. Weaker candidates tended to repeat their first point rather than considering other advantages.
- (c) The majority of candidates made suitable suggestions and gained at least partial credit.
- (d) Most candidates provided suitable responses. The stronger candidates tended to include a range of different advantages. Some very weak candidates made vague points about money that were left undeveloped.

Question 7

- (a) Most candidates were able to explain a difference. The examples given were generally less strong and some weak responses were limited to naming activities.
- (b) Most candidates identified the stage of learning and many went on to give a good description. Some weak candidates did not successfully identify the stage of learning.
- (c) Most candidates achieved partial credit. Some candidates did not develop their answers fully. Some of the weaker responses suggested that candidates did not fully note the requirement to describe differences.

Question 8

- (a) (i) Most candidates were able to identify a fitness component successfully.
 - (ii) Many candidates gained full credit for this question. Most candidates were able to match an appropriate test to the named fitness component.
- (b) Candidates demonstrated a good understanding of the topic with many gaining full credit.

Question 9

- (a) (i) and (ii) Most candidates were able to extract information from the graph to answer both questions well.
- (b) Many candidates achieved partial credit on this question. There seemed to be some confusion from weaker candidates about the term. Stronger candidates however gave some good responses typified by a careful use of language.

Question 10

Most candidates gained credit for giving two functions of the skeleton. The benefits of the named functions were less well described and weaker candidates tended not to apply these to the named activity or chose an inappropriate activity.

Question 11

- (a) Most candidates were able to identify the three structures. Many also described a function of the valve. Stronger candidates also gave a detailed description of the function of structures **A** and **B**.
- (b) Most candidates demonstrated a very good understanding of this topic.

Question 12

- (a) Most candidates could describe at least one exercise and many were able to suggest a relevant benefit. The second exercise was typically less well described with some candidates providing vague responses.
- (b) Some candidates confused psychological benefits with physiological benefits. The majority of candidates who correctly identified this key term were able to answer well.

Question 13

- (a) Some candidates gave excellent definitions to gain credit. However, some candidates were not sufficiently specific with their language or confused this with other syllabus terms.
- (b) Most candidates identified the activity and gave at least one correct reason with many candidates able to provide two.

Question 14

- (a) Stronger candidates achieved full credit and linked their response to the information given in the question. Weaker candidates typically did not give a reason for their answers or could only give a reason for some principles.
- (b) Candidates gave a wide range of causes of anxiety and generally answered the question well.
- (c) Candidates who developed their answers fully tended to perform well with many achieving full credit and demonstrating a good understanding of the topic.

Question 15

- (a) Strong candidates answered this question well. Some weak responses were quite limited and sometimes did not note the headings provided and so made an irrelevant response.
- (b) Most candidates gained full credit with many responses tending to relate to the ease that the performer can attract sponsorship. Stronger candidates tended to go further and consider other benefits.

Question 16

- (a) Some weaker candidates gave undeveloped responses that were left vague. Very weak candidates could not mention more than relaxing and contracting without sufficient detail. Stronger candidates clearly linked to the effect on the chest cavity and/or ribs.
- (b) Many candidates were able to define this term although some confused this with other syllabus terms or used language imprecisely in their responses. Those candidates who defined the term usually gained at least partial credit for the benefits.
- (c) Most candidates gained at least partial credit for this question.

PHYSICAL EDUCATION

Paper 0413/02
Coursework

Key messages

- Where activities require certain assessment conditions supportive evidence must be provided, usually on the filmed evidence. Piste markers in skiing, measured wind speed in sailing, referenced rock climbing pitch difficulty and golf handicap are all examples.
- Activity-specific information must be entered onto the Generic Order of Merit form. This should include times (e.g. for Personal Survival), assessment conditions, representative standards and other relevant information.
- Assessment sheets should be placed together at the top of the submission without any other information attached to the sheets. Please place any other supporting evidence and all logs at the bottom of the submission. Do not mix other information with the Order of Merit forms.
- Centres should avoid using phones and tablets to film candidates. The result is often that the picture is in a narrow format resulting in restricted evidence. The use of cameras fixed to/held by the candidate must be avoided as this often gives very little evidence of skill and technique.
- All activities must use standard, internationally accepted, equipment.
- In Track and Field Athletics evidence should include a close-up of the measuring tape and stopwatch. Careful measurements are also required. Running event times, once totalled for sprints, must use the mark below (e.g. 55.2 in girl's 200 m should have a mark of 21). Jumps and throws should be measured from the landing point back to the start line. Roughly approximating a distance using a tape lying alongside the event area is not appropriate.
- All logs should be submitted in Hill Walking and in Weight Training for Fitness, not just the logs for the sample.
- Hill Walking evidence must support navigational skills. Candidates must be assessed as individuals even though they participate in groups. It should be noted that the evidence needs to support detailed navigational skills rather than being just a view of candidates walking. Candidate interviews should be filmed whilst participating.
- Weight Training for Fitness logs must be completed as the activity is undertaken. Generally, candidates need a greater understanding of the principles that underpin this activity. All sections of the form must be completed and more than one sheet is required to provide an effective programme. Filmed evidence must support the logs and demonstrate candidates' understanding of the effectiveness of each exercise. In particular, the filmed evidence must include the optimum performances.
- In Personal Survival candidates should complete the tasks in the order stated and as a continuous task.

General comments

Overall the manner in which centres assessed candidates using the new criteria was excellent. The vast majority of centres submitted coursework with the required forms, used the samples database effectively, and DVD evidence was completed satisfactorily. Clearly a great deal of time and effort went into providing quality DVD evidence. Many centres fully understood that the evidence must support the awarded marks and so ensured that filming was relevant, of a high quality and that candidates were clearly identified.

However, some centres had some difficulties and a few centres found it difficult to submit coursework according to the guidelines as described in both the syllabus and the Coursework Guidelines Booklet. Careful reading of the Coursework Guidelines Booklet is essential both before teaching and before assessing activities. In particular, the detail of what needs to be provided as evidence was not fully engaged with by some centres.

Comments on specific areas

Centres should use the most up-to-date forms, which are available from the samples database.

Filming of practical activities

It is essential that centres review the filmed evidence before despatch. Consideration should be given to the following points in this review.

- Are all activities filmed?
- Are the activities presented as a continuous film without short clips?
- Does the evidence support the marks awarded?
- Are candidates clearly identified so that someone unfamiliar with them can easily identify individuals?
- Is the number/letter colour clear against the bib colour?

Many of the filmed sequences were well-planned by centres. Identification of candidates was generally good, but numbers displayed only on the back of candidates was a problem in some centres. Numbers should be shown both on the front and back. These numbers should be clearly visible on filmed sequences to ensure individual candidates can be identified. Certain colour combinations are difficult to see, e.g. yellow on white or white on light blue. Filming some games (e.g. Football, Hockey and Rugby) causes problems due to distance if numbers are only placed on the back of shirts. Candidates should not just be introduced verbally on the film.

In many cases centres provided background commentary, which was usually helpful. This should explain situations and assist with identification.

Some activities require certain assessment conditions in order to access higher marks. Centres must ensure that the filmed evidence meets these requirements in order to support the marks awarded. Where candidates are given high marks then the filmed evidence should show complex skills and may have minimal coverage of basic skills. Sometimes the level of demand and the way the filmed situations created challenge for the candidate was insufficient to support the marks awarded. Centres should film the skills/situations that support the mark awarded. This means that some evidence within a specific activity may be different for different candidates. However, where possible candidates should be filmed together.

The angle of the camera should enable the skills and outcome to be observed (e.g. a lay-up shot in basketball needs to show the player's movement towards the basket and whether the shot is successful or not). It is also important to see the number on the player throughout the movement. Fixing the camera point (usually with a tripod) improves filming but only if the initial position is good.

Centres are responsible for the production of filmed evidence and assessment. Where filming is carried out by others then the centre must ensure that those filming are fully briefed on what is required. Candidates should not be used to film other candidates or be involved in measuring/timing or any other aspect of the filming/assessment process.

Filmed evidence should be placed into continuous chapters (avoiding short clips) and be presented on as few DVDs as possible, preferably one. Evidence should not be presented by individual candidate (except where there is only one) and not on single DVDs for either an activity or a candidate.

Warm-ups should not be filmed.

Assessment of physical activities

There was a trend of marks being too generous from some centres in a range of activities. Centres need to ensure they are fully familiar with the new mark scheme format and the new criteria and assessment conditions.

Submission of other coursework material

Representative information, NGB awards (as long as the award syllabus is included) or graded achievement (e.g. golf handicap) all helped to support the marks when provided by some centres. Please keep this information brief. Many centres submitted very helpful additional information this year. Some centres provided very lengthy notes on each individual candidate. Where possible this information should be written onto the Generic Order of Merit Form.

Range of physical activities

The range of activities offered by candidates varied considerably from centre to centre. Popular activities were: a wide range of games activities, Track and Field Athletics, Cross-Country Running, Personal Survival and Competitive Swimming.

Football, Basketball, Badminton, Netball and Rugby were very popular. In Outdoor and Adventurous activities both Hill Walking and Skiing were popular.