



## **General Certificate of Secondary Education**

# **Physical Education 3581/W Full Course**

### *Specification A*

## **Mark Scheme**

*2007 examination - June series*

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

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- 1 (a) (i) Award one mark for a correctly stated reason why taking regular exercise can generally improve health.

Examples include:

- it can help to reduce tension/ stress
- it can help to reduce the chance of getting illnesses and disease
- it can help to improve sleep and sleep patterns
- it can help tone up the body/ lead to improvements in posture
- it can improve basic levels of strength
- it can improve basic levels of stamina
- it can improve basic levels of flexibility
- it can improve fitness levels

Accept the above plus any other suitable examples.

*(max 1 mark)*

- (ii) Award up to **two** marks for correctly explaining why the amount of exercise carried out, might vary between individuals.

Examples include:

- Energy requirements might vary/ due to factors such as age/ gender/ and activity/exercise level/level of performance
- The actual physical or psychological condition of an individual may also vary/ such as possible illness or injury/which could prevent them from exercising.

Accept the above plus any other suitable examples.

*(max 2 marks)*

- (b) (i) Award **one** mark for being able to state what power is, i.e. the combination of the (maximum) amount of speed with the (maximum) amount of strength.

*(max 1 mark)*

Award **one** further mark for a correct example such as:

- Rugby players pushing in the scrum generating power to push back opponents
- Sprinter in athletics pushing off from starting blocks in the start phase.

Accept the above plus any other suitable examples.

*(max 1 mark)*

- (ii) Award **one** mark for being able to state what reaction time is, i.e. the amount of time taken to respond to something/ the speed of response to external events.

*(max 1 mark)*

Award **one** further mark for a correct example such as:

- Fielder catching a ball close to a bat
- Racket player responding to a hard hit shot.

Accept the above plus any other suitable examples.

*(max 1 mark)*

- (c) Award up to **two** marks for **each** different description and example of how strength and stamina can affect your ability to carry out everyday tasks. Candidates can make both positive and negative comments.

Examples include:

Lack of strength or increased strength/ could make it more difficult or easier to

- Stand on your feet/all day/for a long period of time
- Carry shopping or heavy objects/over a long distance/for a long period of time
- Open jars/which are tightly shut
- Complete housework/for a sustained amount of time/in a large area
- Carry children/over a considerable distance/for a long time
- Consider references to static/dynamic/explosive strength – if qualified

Lack of stamina could make it more difficult to

- Stack shelves/repeatedly/for a long period of time
- Keep walking/for a period of time/while shopping
- Work/for long hours.

Accept the above plus any other suitable examples.

Candidates can make both positive and negative comments.

*(max 4 marks)*

- (d) (i) Award up to **two** marks for a correct explanation and example of good posture:
- The correct position the body is held in/ when standing, walking or sitting/standing upright/with a straight back/head up/upright/ with ease

Accept the above plus any other suitable examples.

*(max 2 marks)*

- (ii) Award **one** mark for a correct explanation of muscle tone and **one** more for a description of how it can help with good posture.

Examples include:

- The tension which remains in the muscles/ even at rest/ which enables the body to keep the muscles in the correct position
- The body being kept primed and ready for instant action/with the joints held firm by extensor and flexor muscles working at the same time.

Accept the above plus any other suitable examples.

*(max 2 marks)*

2 (a) (i) Award **one** mark for **each** correctly named bone:

- Femur
- Patella
- Tibia
- Fibula.

*(max 3 marks)*

(ii) Award **one** mark for **each** correctly named muscle:

- Gluteals
- Quadriceps
- Hamstrings
- Gastrocnemius/calf
- Soleus.

*(max 2 marks)*

(b) (i) Award up to **two** marks for correctly explaining what extension is:

- The increasing of an angle/between two bones
- A joint which is straightened so that one of the bones of the joint moves/away from the other
- The action of opening/ a joint.

*(max 2 marks)*

(ii) Award **one** further mark for **each** correct example given:

- Straightening the leg at the knee when kicking a football
- Straightening the arm at the elbow when throwing a ball
- A correct actual example such as performing a triceps extension.

Accept the above plus any other suitable examples.

*(max 2 marks)*

(iii) Award **one** mark for **each** correctly named muscle which must correspond to the answer given in (ii) above:

- Straightening the leg at the knee – quadriceps
- Straightening the arm at the elbow – triceps.

*(max 1 mark)*

(c) (i) Award **one** mark for **each** correctly described pulse point. Note that some might be correctly named and for others a description of their exact location may be accepted.

- Radial pulse/at the base of the thumb on the inside of the wrist
- Temporal pulse/just over the temple at the side of the forehead
- Carotid pulse/on either side of the neck
- Femoral pulse-in the groin.

*(max 2 marks)*

(ii) Award up to **three** marks for a correct explanation.

Examples:

- The heart rate lets you know how quickly the blood is being pumped around the body
- This is effectively providing the energy to allow the body to exercise
- There are certain zones or areas which the heart rate can be increased to or worked in
- The speed of your recovery rate is a general indicator of your fitness levels
- The quicker you are able to return your pulse to its resting rate the fitter you are
- Monitoring the rate can be used as a training indicator to make sure you are working at the correct levels
- Varying the pulse rate can be used relative to the principle of overload
- Safety aspects can be considered to ensure you are not working at too high a level.

Accept the above plus any other suitable examples.

*(max 3 marks)*

- 3 (a) (i) Award up to **two** marks for explaining what is meant by specificity:
- A training method or system/which is particularly suited to one particular sport or one particular aspect of fitness
  - Concentrating on one particular area/such as building up strength in the legs/or working on increasing endurance.

Accept the above plus any other suitable examples.

*(max 2 marks)*

- (ii) Award up to **two** marks for explaining what is meant by overload:
- Making the body work harder/in order to improve it
  - Having a capacity for training/then increasing this
  - Frequency of training/training more often
  - Intensity of training/training harder
  - Duration of training/training for longer.

Accept the above plus any other suitable examples.

*(max 2 marks)*

- (b) (i) Award **one** mark for **each advantage** of choosing circuit training:
- It is quick and easy to set up
  - It requires little specialist equipment – if any
  - Many people can work in a fairly small area
  - It can be adapted to many different forms
  - It can work on skill or fitness, or both – accept one component of fitness only once
  - Levels or targets can easily be increased
  - It is one of the most effective ways of training.

Accept the above plus any other suitable examples.

*(max 2 marks)*

- (ii) Award **one** mark for a correct **disadvantage**:
- Not really suitable for only one person
  - Someone needs to set up and run the circuit
  - Not suitable for very specific training such as weight training
  - May not be possible to monitor everyone at once
  - Incorrect technique can lead to safety concerns
  - Possible boredom/tedium factors
  - Possible specialist equipment needed

Accept the above plus any other suitable examples.

*(max 1 mark)*

- (c) (i) Award up to **two** marks for correctly stating what muscular endurance is:
- The ability to use voluntary muscles /many times/without getting tired
  - The amount of dynamic strength in a muscle/with its ability to keep working/for a long period of time.

Accept the above plus any other suitable examples.

*(max 2 marks)*

(ii) Award up to **two** marks for correctly describing a way of increasing muscular endurance:

- Sit-ups/performing a sit-up for a maximum period
- Chin-ups/performing chin-ups for a maximum period
- Dips/performing dips for a maximum period
- Press-ups/performing press-ups for a maximum period
- Low weights/high repetitions

Award one mark maximum for just identifying a training method or exercise with no further development.

Accept the above plus any other suitable examples.

*(max 2 marks)*

(d) (i) Award up to **two** marks for correctly describing static stretching:

- Extending a limb (or limbs) beyond the normal range/and holding the position for a period of time e.g. ten seconds
- Describing an actual stretching movement such as a hamstring stretch/holding this position for a period of time e.g. ten seconds.

Accept the above plus any other suitable examples.

*(max 2 marks)*

(ii) Award up to **two** marks for correctly describing active stretching:

- A movement is extended beyond its normal limit/this is then repeated rhythmically over a period of time e.g. twenty seconds
- Describing an actual movement, such as head rotations, first in one direction and then in another/rhythmically over a period of time e.g. twenty seconds.

Accept the above plus any other suitable examples.

*(max 2 marks)*



4 (a) Award **one** mark for each of the following:

- R – Rest
- I – Ice
- C – Compression
- E – Elevation.

*(max 4 marks)*

(b) (i) Award up to **two** marks for correctly stating what fatigue is:

- When the body, or parts of the body, get so tired/through the amount of work they have been called on to do/that they stop working properly or sometimes altogether.

Accept the above plus any other suitable examples.

*(max 2 marks)*

(ii) Award up to **two** marks for correctly giving an example of fatigue occurring in a physical activity:

- A games player being so tired near the end of a game/that their skill levels decrease and/or they are no longer able to carry on.

Accept the above plus any other suitable examples.

*(max 2 marks)*

(c) Award up to **three** marks for a correct response. Each response can consider the back position, the leg position and the location of the item to be carried:

- The back should be kept straight/the legs should be bent/the item to be carried should be held close to, and secure to, the body
- Other factors which might be considered include wearing the correct footwear, using more than one person for particularly heavy equipment, not lifting or lowering until told to do so
- Accept sport/activity specific examples, e.g. carrying a javelin, moving heavy equipment on an astro pitch surface.

Accept the above plus any other suitable examples.

*(max 3 marks)*

- (d) (i) Award up to **two** marks for the short term effect. Note that the effect must be stated and then briefly described for both marks to be awarded.
- Lack of co-ordination/particularly walking or driving or handling any form of equipment
  - Drunkenness/which can result in vomiting, balance problems and severe headaches and vision impairment
  - As a depressant/which actually slows down the action of the brain.

Accept the above plus any other suitable examples.

*(max 2 marks)*

- (ii) Award up to **two** marks for a correct answer. Note that the effect must be identified and some description must follow.
- Greater risk of serious diseases/such as heart disease. Lung cancer and chronic bronchitis
  - The development of 'smokers cough'/which can leave sufferers short of breath or breathless
  - Other effects include – frequent sore throats, shortness of breath, nose, throat and chest irritation, headaches, dizziness, nausea and lack of concentration.

Accept the above plus any other suitable examples.

*(max 2 marks)*

5 (a) Award **one** mark for **each** correctly stated 'user group':  
Just a reference to "age" = one mark maximum.

- Unemployed
- Mother and toddler
- Shift workers
- Disabled
- Senior citizens

Accept the above plus any other suitable examples.

*(max 3 marks)*

(b) (i) Award up to **two** marks for a correct response.

- General teaching staff attitude can influence, either positively or negatively
- The experience of staff in various activities, or a range of activities can be influential
- The playing ability and level of staff expertise can be influential
- Specific staff interest in particular activities will usually lead to a rise in participation in that particular activity.

Accept the above plus any other suitable examples.

*(max 2 marks)*

(ii) Award up to **two** marks for a correct response.

- Good facilities or a lack of suitable ones/will affect levels positively or negatively.
- Specific facilities, such as squash courts or fitness suites/ will encourage specific participation in particular sports or activities.

Accept the above plus any other suitable examples.

*(max 2 marks)*

(iii) Award up to **two** marks for a correct response.

- Specific links can encourage extra participation/pupils will be able to continue an activity outside of school
- Sports not catered for in school could be covered outside of school/this would enable pupils to take up new activities
- Links with such organisations as Youth Sports Trust etc.

Accept the above plus any other suitable examples.

*(max 2 marks)*

(c) (i) Award **one** mark for a correctly named international sporting competition:

- Olympic Games
- Commonwealth Games
- World Cups (soccer, rugby, cricket)
- Wimbledon
- Hong Kong Sevens (consider overseas centres)

*(max 1 mark)*

- (ii) Award **one** mark for **each** correctly described advantage of hosting competitions. Note that one word answers are not sufficient; there must be an accompanying brief description.
- Financial gain/more money through visitors, tourists etc.
  - Better facilities/these may have to be built or upgraded for competition
  - Improved road or travel links/which have to be upgraded or provided
  - Extra facilities/such as competitor villages which are then available afterwards
  - The profile of sport is raised/making sport more successful or popular in that area
  - Automatic qualification/often for the hosts in many competitions
  - Can advantage home competitors/they will have the 'home' support.

Accept the above plus any other suitable examples.

Repetitive use of "more" (or equivalent) = two mark maximum.

*(max 3 marks)*

- (iii) Award **one** mark for **each** correctly described disadvantage of hosting competitions. Note that one word answers are not sufficient; there must be an accompanying brief description.
- May be a target/for terrorism or political statements
  - The country or area might not be able to cope/with the number of people wanting to attend
  - It can be very expensive/could leave a large debt to be paid off later
  - Pressure on the hosts to do well/simply because they are the hosts.

Accept the above plus any other suitable examples.

Repetitive use of "more" (or equivalent) = two mark maximum.

*(max 3 marks)*

- (d) (i) Award **one** mark for identifying what a centre of excellence is:
- A specialist facility (or venue) for providing a range of support services for high level elite performers
  - Top class facilities for training and/or competition
  - Accept actual examples

*(max 1 mark)*

- (ii) Award **one** mark for each valid reason:
- Sports science back-up
  - Physios
  - Dieticians
  - Psychologists
  - Video analysis
  - Rehabilitation
  - Coaching
  - Residential facilities
  - Secure/safe environment
  - Specialist equipment.

Accept the above plus any other suitable examples.

*(max 3 marks)*

- 6 (a) (i) Award **one** mark for correctly stating what etiquette is:
- A convention or unwritten rule in an activity/which is not an enforceable rule but is usually observed.
- (max 1 mark)*

- (ii) Award **one** mark for **each** correct example of etiquette: (cause and effect)
- Soccer – if a player is injured/the opposition kick the ball out of play to stop the game
  - Soccer – after a ball is kicked out to stop play/the ball is given back to the other team
  - In cricket – batters are clapped out on to the pitch/as they come out to bat
  - Shaking hands after a match/with the officials.

Accept the above plus any other suitable examples.

*(max 2 x 2 marks)*

- (b) (i) Award **one** mark for **each** correctly identified way in which sponsorship can help a sports performer.
- Through direct cash payments
  - Paying for entry fees
  - Providing equipment, apparatus
  - Providing clothing, footwear
  - Paying accommodation costs
  - Providing coaching
  - Providing training facilities.

Accept the above plus any other suitable examples.

*(max 3 marks)*

- (ii) Award up to **two** marks for describing a form of sponsorship which would be unacceptable. Award **one** mark for the unacceptable form plus **one** additional mark for stating why:
- Tobacco firms/because it would be encouraging people to smoke and this is clearly an identified health risk
  - Alcohol firms/because it could be seen to be encouraging under age drinking and also alcohol abuse which is clearly dangerous.

Accept the above plus any other suitable examples.

*(max 2 marks)*

- (c) (i) Award up to **two** marks for a correct response. The benefit must be stated, and the way in which it actually assists:
- Finance, spectators paying to watch an event/or helping to pay for it either taking place or contributing to players' wages etc.
  - Support, spectators cheering on their team/ can help them to be more successful.

Accept the above plus any other suitable examples.

*(max 2 marks)*

- (ii) Award up to **two** marks for a correct response. The problem must be stated, and the way in which it actually disrupts:
- Crowd behaviour/competitions can be disrupted or even stopped altogether if crowds riot or misbehave
  - Crowd control/controlling crowds and marshalling them can be very expensive and can raise health and safety issues.

Accept the above plus any other suitable examples.

*(max 2 marks)*

- (d) (i) Award up to **three** marks for **each** correct response as follows:
- **One** mark for correctly identifying an example of the event
  - **One** mark for what the political or financial issue was or how it affected the event
  - **One** further mark for describing what happened – which must be linked to the example.

Examples include:

- Political interference in an Olympic Games resulting in a boycott of Moscow in 1980/when as a protest about the Russian invasion of Afghanistan/some countries such as the USA and Great Britain advised its competitors against going to the games. Some even prohibited their athletes from taking part.
- The apartheid system in South Africa/segregated particular racial groups and did not allow them equal rights./ Not only were they denied sporting access in their own country but South Africa was then banned from much international sport including the Olympic Games from 1964 until 1992.

Accept the above plus any other suitable examples.

*(max 6 marks)*

**MARKING CRITERIA FOR QUALITY OF  
WRITTEN COMMUNICATION**

**3581/W**

High Performance	Candidates spell, punctuate and use the rules of grammar with almost faultless accuracy, deploying a range of grammatical constructions; they use a wide range of specialist terms adeptly and with precision.	4 - 5 marks
Intermediate Performance	Candidates spell, punctuate and use the rules of grammar with considerable accuracy; they use a good range of specialist terms with facility.	2 –3 marks
Threshold Performance	Candidates spell, punctuate and use the rules of grammar with reasonable accuracy; they use a limited range of specialist terms appropriately.	1 mark
Below Threshold Performance		0 marks