



General Certificate of Secondary Education

Physical Education 3581

Specification A

Mark Scheme

2005 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.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Physical Education Specification A

- 1 (a) (i) Award up to **two** marks for a correct description of posture:
- the position in which a person holds their body
 - standing upright/ with very little effort
 - the position the body is held in/ when standing, walking or sitting
 - straight back/head up.

Accept the above plus any other suitable example.

(2 marks)

- (ii) Award **one** mark for **each** correct example of poor posture identified.

Examples include:

- curved back leading to permanent deformity of the spine
- strained back and abdominal muscles
- bowed back (lordosis)/ rounded shoulders (kyphosis)/ sideways curvature (scoliosis).

Accept the above plus any other suitable examples.

(2 marks)

- (iii) Award **one** mark for a correct explanation of muscle tone and **one** for 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.

(2 marks)

- (b) (i) Award **one** mark for a correct explanation of balance and **one** mark for a correct example from a physical activity.

Balance

- the ability to retain the centre of mass above the base of support
- physical stability in which the weight of the body is distributed evenly.

Physical activity examples

- a gymnast being able to maintain a controlled handstand
- a sprinter holding themselves in the set position at the start of a race
- maintaining good footwork when landing in netball or basketball
- footballer maintaining position on ball when being tackled
- player preparing to shoot/move/save.

Accept the above plus any other suitable examples.

(2 marks)

- (ii) Award **one** mark for a correct explanation of co-ordination and **one** mark for a further example from a physical activity.

Co-ordination

- the ability to use two or more body parts together
- the ability to properly control your body when performing a physical activity
- balanced or skilful movement.

Physical activity examples

- a pole vaulter linking all the sequences of their jump
- a tennis service action
- batting in cricket or rounders.

Accept the above plus any other suitable examples.

(2 marks)

- (c) (i) Award a maximum of **two** marks: **one** mark for correctly explaining what dehydration is and **one** further mark for correctly explaining how it can be avoided.

Example

- having an abnormally low water content in the body / drinking sufficient amounts of water
- rapid loss of water from the body / drinking sufficient amounts of water.

(2 marks)

- (ii) Award a maximum of **three** marks: **one** mark for the correctly identified deficiency, or problem, **one** mark for the description and **one** further mark for correctly identifying how it could be caused.

Examples include:

- obesity / which is being extremely overweight / which can be caused by eating too much and exercising too little
- anorexia / which is being extremely underweight/ and is caused by eating insufficient amounts of food
- scurvy / which causes swollen bleeding gums, subcutaneous bleeding, anaemia, bruising and pain in the joints / caused by lack of vitamin C/ contained in fruit and vegetables
- rickets / which is where the bones fail to form and harden / caused by a lack of vitamin D
- anaemia/in the blood/which is an iron deficiency.

Accept the above plus any other suitable examples.

(3 marks)

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

- humerus
- radius
- ulna.

(3 marks)

(b) (i) Award **one** mark for **each** example of each joint.

Gliding – the small bones in the hands and the feet/vertebrae
Condylloid – in the wrist.

(2 marks)

(ii) Award **one** mark for the correct description of the movement and **one** for the example.

Rotation

- the swivelling of a joint / such as turning the head from side to side
- where a bone moves freely around in a curve / such as the arm at the shoulder.

Abduction

- the movement of a bone or limb away from the body / lifting the leg upwards and outwards sideways from the hip.

Accept the above plus any other suitable examples.

(4 marks)

(c) (i) Award **one** mark for **each** correctly identified part of the breathing system other than the air passages which were included in the question.

Examples:

- trachea
- alveoli
- bronchioles lungs
- diaphragm
- mouth
- nasal cavity or nose
- larynx
- pharynx
- intercostal muscles
- bronchus, bronchi.

(3 marks)

(ii) Award up to **three** marks for a correct description of how respiration takes place.

Examples:

- the process by which the body / takes in oxygen / and gives out carbon dioxide
- the process of the lungs / inspiring / and expiring
- reference to aerobic and anaerobic respiration is also acceptable.

Accept the above plus any other suitable examples.

(3 marks)

3 (a) Award up to **two** marks for each correct explanation of the following terms.

- (i) Frequency – how many times you train or perform a particular activity, / which must be increased, perhaps from twice a week to every other day.
Accept the above plus any other suitable examples.

(2 marks)

- (ii) Intensity – how hard you train on a particular exercise or activity. / This also needs to be increased by working harder gradually each session, such as increasing the number of repetitions or sets.
Accept the above plus any other suitable examples.

(2 marks)

- (iii) Duration – how the time, or length of time a particular exercise or activity is performed. / It could be the length of each session or the amount of time spent on each particular aspect within a session that increases.
Accept the above plus any other suitable examples.

(2 marks)

- (b) (i) Award up to **one** mark for correctly identifying a correct type of physical activity.

Example – either endurance identified specifically or an activity/event which clearly requires high endurance levels.

(1 mark)

- (ii) Award up to **two** marks for explaining what altitude training is.

- this involves performers going to specific areas where they are able to train at high altitude at heights significantly above sea level
 - the air becomes less dense/ and the pressure of the oxygen decreases.
- Accept the above plus any other suitable examples.

(2 marks)

- (iii) Award up to **two** marks for correct examples of benefits gained.

- This means that some actual physiological changes occur, / which increases the oxygen carrying capacity of the blood
- Increases red blood cells
- Improves overall standard of performance.

(2 marks)

- (c) (i) Award up to **two** marks for correctly stating what muscular endurance is.

Examples

- 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.

(2 marks)

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

Examples:

- 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.

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

Accept the above plus any other suitable examples.

(2 marks)

- 4 (a) (i) Award up to **two** marks for a correct answer. Note that the effect must be identified and some description must follow.

Examples:

- greater risk of serious diseases / such as heart disease, lung cancer, and chronic bronchitis
- the development of ‘smoker’s 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.

(2 marks)

- (ii) 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 coordination / 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.

(2 marks)

- (iii) Award up to **two** marks for the long-term effect. Note that the effect must be stated and then briefly described for both marks to be awarded.

- Mental illness / such as hallucination, memory loss, depression, brain damage and extreme confusion
- Physical illnesses or diseases / such as damage to the liver, muscles and heart; damage to the digestive system; damage to the immune system.

Accept the above plus any other suitable examples.

(2 marks)

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

Examples:

- 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, eg carrying a javelin.

Accept the above plus any other suitable examples.

(3 marks)

- (c) (i) Award up to **two** marks for a correct explanation of what feedback is.

Example:

- This is the information a performer receives back from a performance. / It can be in the form of continuous; terminal; knowledge of results; knowledge of performance; internal, intrinsic; external, extrinsic; positive or negative.

NB Just a list of types of feedback is not acceptable.

(2 marks)

- (ii) Award up to **two** marks for identifying what motivation is.

Examples:

- It is an incentive /or desire to do well / and this in turn means that the performer is more likely to want to do well / and will therefore put more effort into acquiring the skills necessary which in effect can increase the levels of skill acquisition.

(2 marks)

- (iii) Award up to **two** marks for the effect of motivation on skill acquisition.

- Motivation can be either intrinsic, considering such factors as internal drive; satisfaction or pride; a challenge; to keep fit; or for enjoyment / or extrinsic, considering such factors as external rewards such as money; prizes; cups or medals. / This in turn leads to greater interest in acquiring skills / which in turn leads to higher levels of skill acquisition.

Note that negative effects are also acceptable.

(2 marks)

- 5 (a) (i) Award up to **four** marks for identifying the provisions made by schools. These include the following:
- Providing a broad and balanced PE provision
 - covering the six identified activity areas within the national curriculum
 - providing timetabled lessons within the core programme for all pupils
 - providing extra provision which could be in the form of GCSE provision or similar such as JSLA
 - cross-curricular provision across different subject areas
 - opportunities to adopt different roles
 - a compulsory activity – National Curriculum.

Note that an appropriate list is acceptable **or** one or more aspects further developed.

Accept the above plus any other suitable examples.

(4 marks)

- (ii) Award up to **two** marks: **one** mark for stating what extra curricular activities are and **one** further mark for a suitable example.

Extra-curricular: provision made in addition to the normal school timetable, over and above the statutory provision.

Examples include:

- lunchtime and after school practices
- clubs
- teams
- societies
- trips.

NB Just naming a sport/activity without relating it to the above is not acceptable.

Accept the above plus any other suitable examples.

(2 marks)

- (b) Award up to **three** marks for identifying greater participation and up to **three** further marks for considering the management and officials' roles. **NB MAXIMUM = 4 MARKS!**

Greater participation

- a greater level of social acceptability for women to taking part in sport/as it is no longer thought of as unfeminine
- greater opportunities as more sports, activities and clubs are being formed/ Women's soccer is now the fastest-growing sport in the country
- equal opportunities/ which allows women more chances to take part in sport
- changing attitudes in schools/ which now allows access to more sports for girls as part of their timetabled provision
- events are now open to women/ which they were not allowed to compete in before/ e.g. marathons and distance events, pole vault.

Accept the above plus any other suitable examples.

Management and officials' roles

- more provision equals more opportunities/ and as more clubs and organisations are formed/ more vacancies arise for women
- equal opportunities/ means that women are not now discriminated against/ and can now have roles in male sports/ eg. Wendy Thoms and Karen Brady in soccer and female referees in snooker etc.

Accept the above plus any other suitable examples.

(Maximum 4 marks)

- (c) (i) Award up to **two** marks for each identified, and explained, reason why there is increased leisure time.

Examples:

- Technological advances/ such as labour-saving devices / which leave more available time
- Greater unemployment / leaving many people with large amounts of free time
- Shorter working week / also leaving more free time
- Part time and shift work / which leaves certain times of the day where people would have time available.

Accept the above plus any other suitable examples.

(4 marks)

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

Examples:

- The leisure industry has grown / in order to cope with increased demand.
- The leisure industry has developed / to cope with the change of demand and greater need for extra provision.

Accept the above plus any other suitable examples.

(2 marks)

- (d) (i) Award up to **two** marks for correctly describing a challenging activity.

Example

- Because of the nature of the activity/ there will be challenge by way of the environment/ possibly equipment used/ and even overcoming some fears/ such as a fear of heights

NB merely naming an activity will not be sufficient for one mark.

Accept the above plus any other suitable examples.

(2 marks)

- (ii) Award up to **two** marks for clearly explaining the problem, which must be linked to the activity chosen in (i) above.

Example

- In outdoor and adventurous the climate could change or vary. / This would require that correct clothing would need to be worn and it could even cause problems with navigation if fog or heavy snow occurred
- In caving, sudden rainfall could affect the cave system. / Flooding could occur, which would then create a hazardous situation.

Accept the above, plus any other suitable examples.

(2 marks)

- 6 (a) (i) Award up to **three** marks for a correct description: **one** mark for identifying the situation and up to **two** further marks for the appropriate example or vice versa.

Examples:

- In a high profile sport such as soccer / there are more clearly identified role modes (such as David Beckham, Michael Owen) / who are sought after for endorsements by sponsors who are eager to pay them to promote their product
- If an individual succeeds at a sport (such as Paula Radcliffe) / their success attracts sponsors / who wish to be identified with their success and possibly link their products to it.

Accept the above plus any other suitable examples.

(3 marks)

- (ii) Award up to **three** marks for a correct description: **one** mark for identifying the situation and up to **two** further marks for the appropriate example or vice versa.

Examples:

- A minority sport will not be very attractive to sponsors. / Because of low levels of media coverage and public awareness an activity such as netball / will not receive much assistance and players would have to play as amateurs
- Not all sports are competed for at the highest level. / This in turn makes it less well supported with lower levels of interest. / This in turn makes it less viable for sponsors to be interested or forthcoming
- Regional examples will also be acceptable.

Accept the above plus any other suitable examples.

(3 marks)

- (b) Award **one** mark for each official clearly identified and up to **two** further marks for correctly describing what their role involves.

Examples:

- Chairperson: / this is the person in overall charge of a club/ with the major responsibilities. / They will chair meetings/ and make decisions regarding the club on their own, and with the help of other committee members
- Treasurer: / this is the person in charge of the finances of the club. / They may have to collect money/ such as match fees/ and make sure that accounts are produced for all sales and purchases
- Club captain: / this is the person who might be in charge of one or other of the playing teams. / They may have to pick or select teams/ and probably be in charge of them in a competitive situation.

Accept the above plus any other suitable examples.

(Maximum 3 marks for each)

- (c) (i) Award up to **four** marks. Award up to **two** marks for describing the positive effect and up to **two** marks for the actual example given.

Examples:

- The media can give a better understanding of performance / which enables people to either enjoy watching the activity more or even to improve their actual performance. / This can be achieved by slow motion replays of an activity (such as gymnastics) / which allows all of the movement to be shown in detail and appreciated fully
- The media will apportion a large amount of coverage to certain events. / This will raise their profile and make people more aware of them. / An example of this is the coverage of gymnastics within the Olympic Games / which triggers off an increase in participation and membership in gymnastics clubs throughout the world.

Accept the above plus any other suitable examples.

(4 marks)

- (ii) Award up to **four** marks. Award up to **two** marks for describing the negative effect and up to **two** marks for the actual example given.

Examples:

- The media may have excess coverage of certain activities. / This can discourage people from going along to see the event. / As there is much coverage of Premiership soccer on the television viewers will watch these matches / instead of watching lower level games and the revenue these lesser clubs receive is therefore reduced significantly
- The media can interfere with the timings of events. / This is done to cater for the largest viewing audiences they can have. / An example is cricket / where there are not only day/night matches but also games arranged out of normal playing seasons to make sure there are sufficient matches.

Accept the above plus any other suitable examples.

(4 marks)

<p style="text-align: center;">MARKING CRITERIA FOR QUALITY OF WRITTEN COMMUNICATION 3581/W</p>
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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