

General Certificate of Secondary Education

Physical Education 3587 Short Course

Specification B

Written Paper

Mark Scheme

June examination - 2008 series

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What attaches muscle to bone? (a) Tendon (1 mark) Name two body systems involved in providing energy for movement and (b) physical activity. Two systems from.... circulatory respiratory digestive accept cardiovascular (2 marks) (C) (i) What type of joint is found at the shoulder? Ball and socket (accept....synovial) (accept freely moveable) (1 mark) (ii) Name two types of movement at the shoulder? Two from... Flexion; • Extension

A1

- Abduction •
- Adduction •
- Circumduction •
- Elevation
- Depression •
- Rotation •

accept...forwards/ backwards/ up/ down/ circling (for max one mark.)

(2 marks)

(d) (i) Why is local muscular stamina important for effective performance?

Because it enables groups of muscles to keep going (one mark)

- By maintaining or repeating contractions
 - Without getting tired
 - Thereby perform longer

(ii) Explain how local muscular stamina can be measured.

By timing how long a specific task can be maintained (one mark)

Without significant rest or time for recovery

By counting the number of times an exercise can be repeated consecutively (one mark)

- Without significant hesitation
- · Until exhausted, or

• Within a time limit

Do not accept...bleep test

((3+1, 2+2, 1+3)) (4 marks)

(e) Why does fatigue occur during physical activity?

Fatigue occurs because:

- Muscles can no longer repeat their contractions
- The capability for physical work is diminished
- Oxygen supply is reduced
- Glycogen store in the muscles is depleted
- Glycogen store in the liver is depleted
- Glucose in the blood is depleted
- Lactic acid in the muscles is produced
- Blood sugar level drops
- accept...(for max three marks)...

...you have worked hard/ you have been doing strenuous activity for a long time/ you are unfit

- ...the body is tired/ you haven't eaten/ slept/ haven't trained
- ...energy used up
- ...you haven't rehydrated

(5 marks)

(a) What does a sports administrator do?

A person who organises/ arranges fixtures/ events/ displays/ rotas/ matches/ funding/ the paperwork. Do not accept...administers sport

(1 mark)

(b) Give two reasons why people watch sport.

Two such as:

A2

- To be informed
- To be educated/ to learn
- To be entertained
- To be inspired
- For enjoyment/ excitement/ fun
- For social interaction/ to be part of a fanbase/ family tradition
- Because they're interested
- Because it's their job (eg journalist)
- To be associated with success
- To follow heroes/ watch favourite players/ role models

(2 marks)

(c) Give three ways in which groups such as senior citizens can be encouraged to participate in sport and physical activity.

Three might include:

- Focusing publicity/ promotions/ campaigns
- Providing appropriate facilities/ equipment
- Providing affordable prices
- Providing special sessions at convenient times
- Offer a variety of activities
- Providing specialist coaches
- Providing one to one support
- Providing appropriate competition
- Playing with participants of similar ability
- Ensuring ease of access/ community availability/ linked transport
- Offering socialising opportunities

(3 marks)

(d) Why might a person want challenge in his/ her physical activity?

Include challenge in order to:

- Increase workload
- Lose weight
- Improve body awareness/ image
- Gain a feeling of well-being/ satisfaction/ confidence
- Relieve boredom/ stimulate interest/ increase motivation/ enjoyment
- Engage a purpose/ aim (eg to raise money)
- Engage in something not attempted before
- Achieve a target/ goal/ play at a higher level/ get fitter

- Overcome a fear
- Experience success
- Record a PB/ raise personal standards
- be selected for representative honours
- become a professional

(4 marks)

(e) How can television increase the enjoyment of sport and physical activity?

By offering or presenting:

- Pre-views/ build up/ follow up
- Different angles/ close-ups
- A better overall view
- Action replays
- Action commentary
- Action explanations/ analysis
- Interviews
- Access to the event (no ticket needed, no travel, no expenses, no effort)
- Programmes at convenient times
- Access to witnessing high standards/ high profile events
- Live and recorded events (including highlights)/ repeats
- Documentaries/ behind the scenes
- A (24/7) reporting/ information service
- Light entertainment eg quizzes
- Show new sports/ favourite sports

(5 marks)

B1

General physical fitness varies from person to person.

(a) What are the long-term benefits of regular exercise?

Long term benefits:

To the skeletal muscular system such as:

- Stronger skeletal muscle
- Increase muscle fibre girth
- Stronger connective tissue
- Increase repeat muscle contractions
- Elasticity in skeletal muscle
- Greater range of movement at joints

To the respiratory system such as :

- Increased vital capacity
- Increased VO2 max
- Increased tidal volume

To the circulatory system such as :

- Increased stroke volume
 - Increased cardiac output
- Stable blood pressure
- Lower resting heart rate
- 'Clearer' vascular network
- Increased production of red blood cells
- Increased capilliarisation
- Increased recovery rates

To the digestive system such as:

- Higher metabolic rate
- Efficient disposal of waste products

To mental/social/physical health such as:

- Reduced risk of heart attack
- Reduced cholesterol
- Look good/ feel good

Accept (for one mark) increases in:

- Strength/ speed/ stamina/ suppleness
- Improved body shape
- Efficiency of body systems

(b) **Describe key features of a safe health-promoting physical activity** programme for a person in the 14-19 age range.

Safe health promoting programme:

- Resistance exercises to improve strength
- eg weight training

- Short distance exercises to improve speed
- eg shuttle running
- Repetitive exercise to improve muscular stamina
- eg circuit training
- Long duration exercises to improve cardio-vascular stamina
- eg long distance running/ jogging
- mobility exercises to improve suppleness
- eg static or dynamic stretching
- Regular exercise
- Frequent exercise
- Building up intensity gradually
- Variety in exercise
- Adequate rest/ recovery replenishment of fluids
- Involve a training partner or have supervision
- Be sure the method is 'fit for purpose' and matches fitness needs
- Not exercising when injured
- Warming up/ cooling down

Do not accept...answers related to diet

NB **both** parts of the question must be answered to gain full marks.

(15 Marks)

B2

Many factors can influence a person's participation in sport and physical activity.

(a) How do personal economics determine the sport the physical activity that a person can afford to take part in?

Wealth:

Money determines how much time is available (*one mark*) Money determines what activities can be afforded (*one mark*) by:

- Having money available to spectate...
 - To buy literature, specialist TV channels
 - To pay for tickets, travel to watch live professional events/ matches
 - Having money available to undertake courses to qualify as officials, coaches, choreographers
 - Having money available to play/ perform/ to pay match/ tournament fees...
 - To pay club fees/ membership fees
 - To pay coaching fees/ lessons
 - To pay insurance
 - To buy kit/ footwear and equipment
 - To pay facility hire
 - To pay travel costs
 - Some activities involve high cost of associated socialisation
 - Some activities are cheap (eg jogging)
 - Concessions may be available for identified groups eg. Juniors, OAPs, UB40 holders/ Passport to Leisure, the disabled in order to encourage participation

NB answers from the 'negative' perspective are acceptable providing they are not simply a reverse repetition of something already stated.

(b) How does the environment of the place where a person lives affect opportunities for participation in sport and physical activity?

Environment:

The home environment determines the first opportunities and experiences *(one mark)*, and provides the basis for local traditions *(one mark)*.

- Urban environments offer:
 - Community, school, club and local authority facilities such as...
 - Sports centres, swimming pools, parks (pitches/ courts), and gyms
 - For many and varied sports and physical activities
- Country environments offer:
 - Open spaces, rivers, canals, lakes, forests, hill/ moorland for...
 - Outdoor/ adventure sports and physical activities

- Mountain environments offer extreme conditions for:
 - Ultimate challenge and expeditions
- Costal environments offer:
 - Open water, surf and beach for...
 - Sailing and other water sports
- Colder environments:
 - Snow/ ice for activities on a seasonal basis such as...
 - Skiing/ skating/ sliding activities
- Warmer environments offer:
 - Year round opportunities for...
 - Extended competition or...
 - Out of season training and preparation

Accept

- Participation may be reduced by the social environment (not the "done thing")
- Participation may be restricted due to pollution (especially urban environments)
- Participation may be restricted due to lack of access

NB both parts of the questions must be answered to gain full marks.

(15 marks)

MARKING CRITERIA FOR QUALITY OF WRITTEN COMMUNICATION

3587 / 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.	2 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