

Candidate Name	Centre Number	Candidate Number
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**GCSE**

197/02

**PHYSICAL EDUCATION  
PAPER 2**

A.M. WEDNESDAY, 21 May 2008

1½ hours

For Examiner's use only		
Question	Maximum mark	Mark awarded
<b>1</b>	<b>20</b>	
<b>2</b>	<b>20</b>	
<b>3</b>	<b>20</b>	
<b>4</b>	<b>20</b>	
<b>5</b>	<b>20</b>	
<b>QWC</b>	<b>5</b>	
<b>Total</b>	<b>105</b>	

**INSTRUCTIONS TO CANDIDATES**

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** the questions.

Write your answers to all the questions in the spaces provided in this question-and-answer booklet.

**INFORMATION FOR CANDIDATES**

The mark allocation for each part of a question is shown in brackets.

You will be awarded marks for the quality of written communication.

Answer **all** the questions in the spaces provided.

1. (a) Give **three** reasons why an increase in physical fitness levels may help to improve sporting performance. [3]

(i) .....

(ii) .....

(iii) .....

(b) In the table below, name **two skill related** physical fitness components and suggest reasons for their importance in a named sporting activity/position. [4]

	Sporting activity/Position	Skill related physical fitness component	Reasons for their importance
(i)	.....	.....	..... ..... ..... .....
(ii)	.....	.....	..... ..... ..... .....

(c) “Flexibility can benefit sporting performance.”

(i) Define flexibility. [1]

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.....

(ii) Give **two** reasons to explain why flexibility exercises should form a part of all training programmes. [2]

(I) .....

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(II) .....

.....

(iii) Describe the correct procedures for a recognised test of flexibility. [2]

Name of test .....

Procedures .....

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.....  
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(d) "A good level of cardiovascular endurance is the foundation upon which other forms of training can be developed."

(i) Define cardiovascular endurance. [1]

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.....

(ii) Give a **specific** example of where cardiovascular endurance is needed in a sporting activity of your choice. [1]

.....  
.....

(iii) What is the meaning of the term **VO<sub>2</sub> max**? [1]

.....  
.....

(iv) Explain the meaning of the term **recovery rate**. [1]

.....  
.....

(v) Describe the procedures for a test where **recovery rate** is used as an indicator of cardiovascular endurance. [2]

Name of test .....

Procedures .....

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(vi) Describe the procedures for a test where **VO<sub>2</sub> max** is used as an indicator of cardiovascular endurance. [2]

Name of test .....

Procedures .....

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**Total Mark**

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\_\_\_\_\_

2. “Performance will be most successful if the athlete’s **muscle fibre type** best matches the demands of the sporting activity.”

(a) (i) Name **one** type of muscle fibre. [1]

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(ii) Explain why this muscle fibre type is suitable for a sporting activity of your choice. [2]

.....

.....

.....

(b) (i) Explain what is meant by **aerobic** threshold. [1]

.....

.....

(ii) Explain what is meant by **anaerobic** threshold. [1]

.....

.....

(iii) Which energy systems would be the main provider of energy in a: [2]

- 60 second rally in tennis;
- smash in tennis?

Activity	Energy system
60 second rally in tennis	
Smash in tennis	

(c) What **specific** advice regarding safety/risks would you give when introducing a newcomer to a named sporting activity? [5]

Name of sporting activity .....

	<b>Aspect of safety/risks</b>	<b>Advice given</b>
(i)	..... .....	..... ..... ..... ..... .....
(ii)	..... .....	..... ..... ..... ..... .....
(iii)	..... .....	..... ..... ..... ..... .....

(d) “Good joint mobility is essential for efficient performance in most sporting activity.”

Name and give an example of the type of synovial joint that:

- (i) allows the widest range of movements;
- (ii) permits movement in only one plane.

[4]

Description of synovial joint	Type of synovial joint	Name of joint
(i) Allows the widest range of movement		
(ii) Permits movement in only one plane		

(iii) **Describe** an example of a movement in sport which involves (I) flexion/extension and (II) adduction/abduction. [4]

(I) flexion/extension

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(II) adduction/abduction.

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.....

**Total Mark** \_\_\_\_\_

3. (a) Name **three** factors which could affect **water loss** when taking part in sporting activity. [3]

(i) .....

(ii) .....

(iii) .....

(b) (i) What term is used to describe ‘the amount of energy needed to keep a person alive and healthy’? [1]

.....

(ii) What is the **energy balance equation** and why is it important for a sportsperson? [2]

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.....

(iii) What **nutrient** in our diet supplies energy during **intense** exercise? [1]

.....



(c) “Health is a state of complete physical, mental and social well-being.”

Explain how **taking part in sporting activity** can help a person’s physical, mental and social well-being. [5]

<b>Physical well-being</b>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<b>Mental well-being</b>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<b>Social well-being</b>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

(d) (i) Identify **four long-term** effects of training.

[4]

(I) .....

.....

(II) .....

.....

(III) .....

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(IV) .....

.....

(ii) Explain how **long-term training** can help to improve performance in a named sporting activity. [4]

Name of sporting activity .....

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**Total Mark**

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\_\_\_\_\_

4. (a) (i) What is meant by an **open** skill? [1]

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.....

(ii) What type of practice is best used to learn **open** skills? [1]

.....

(iii) On the continuum below, suggest **one** factor which could cause the movement of a penalty, in hockey/football, from X<sub>1</sub> to X<sub>2</sub>. [1]



.....

(b) Explain how only giving knowledge of results (KR) may **not** improve the performance of an individual or team. [4]

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(c) Guidance is required whenever new skills are being learnt. There are three main types of guidance: visual; verbal and manual/mechanical.

Explain when **each** of the **three** types of **guidance** would be best used by a teacher to improve performance. [5]

(i) **Visual** .....

.....  
.....

(ii) **Verbal** .....

.....  
.....

(iii) **Manual/mechanical** .....

.....  
.....



5. (a) Name **three** changes in sporting performance you would expect to see as a result of **long-term practice**. [3]

- (i) .....
- (ii) .....
- (iii) .....

(b) “Effective feedback for a sports performer should be **easily understood**.”

Describe **four other ways** in which a teacher/coach can give feedback to make it effective for a sports performer. [4]

- (i) .....  
.....
- (ii) .....  
.....
- (iii) .....  
.....
- (iv) .....  
.....

(c) (i) Give **two** reasons for setting **short-term** goals in sport. [2]

- (I) .....  
.....
- (II) .....  
.....

(ii) “In sport, goal setting is important.”

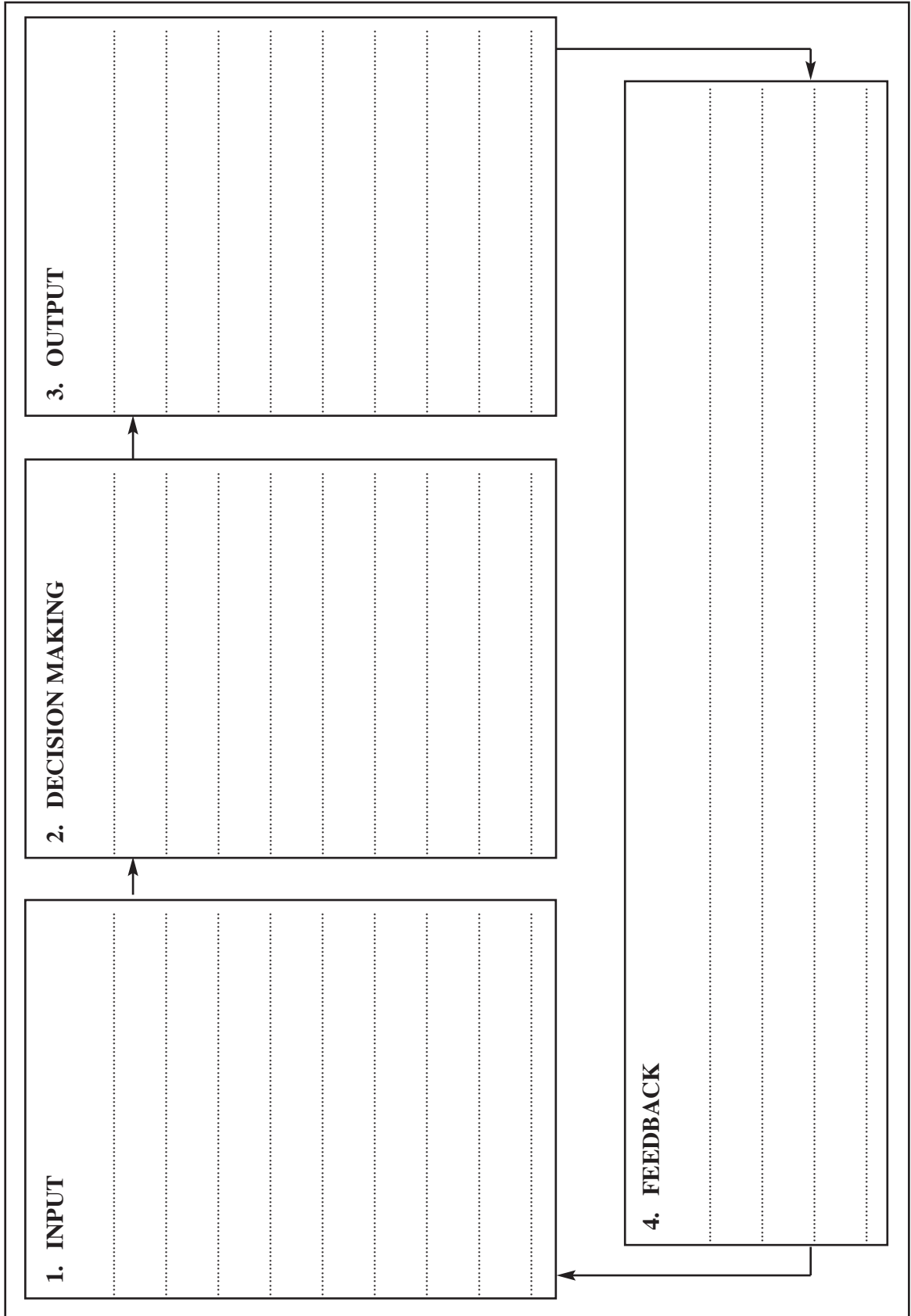
**Using sporting examples**, outline **three** principles that goal setting should focus on. (You may use SMART principles to help you.) [3]

- (I) .....  
.....
- (II) .....  
.....
- (III) .....  
.....

(d) The diagram below is a model of a basic information processing model.

Describe how a skill from your **named sporting activity** is performed at **each** stage, using the information processing model. [8]

Model of Information Processing System .....  
NAME OF SPORTING ACTIVITY .....



Total Mark