OCR
Oxford Cambridge and RSA

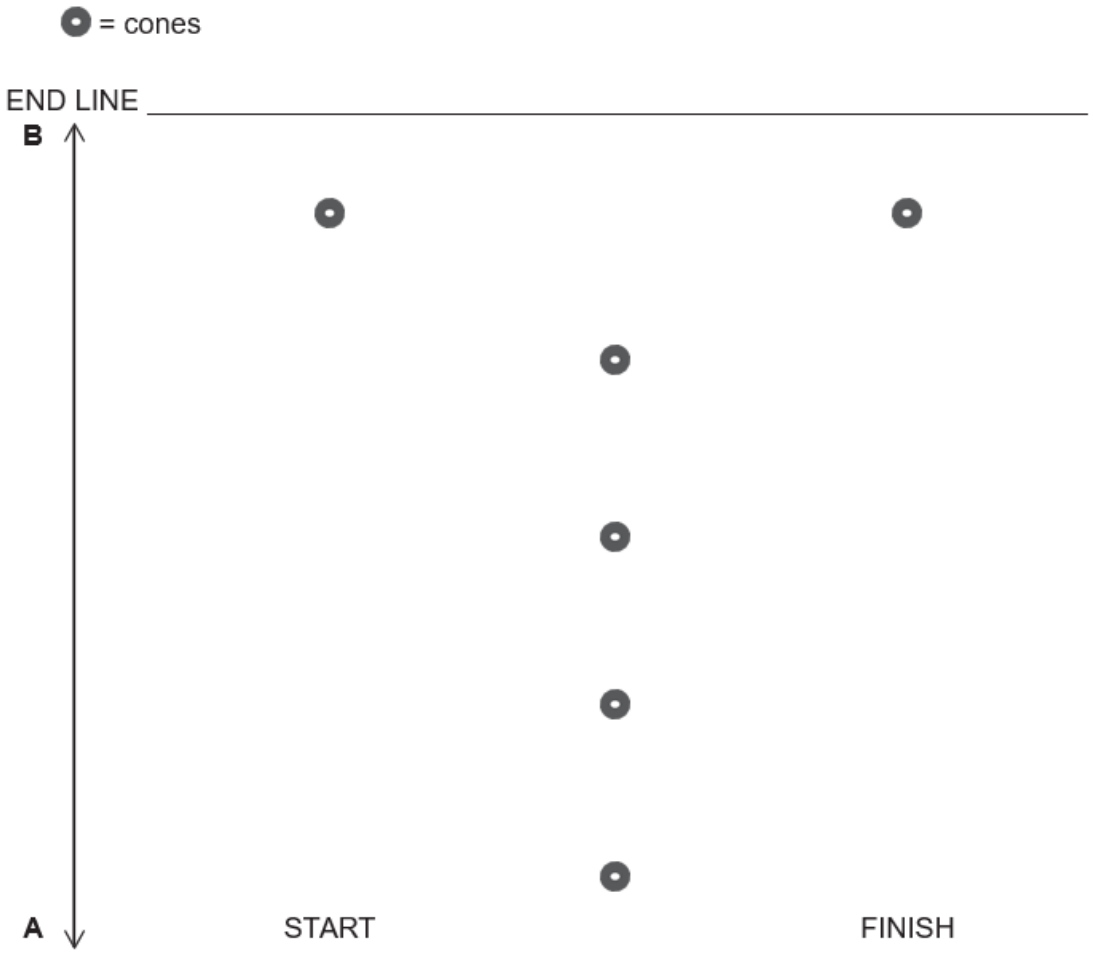
GCSE Physical Education

J587/01 Physical factors affecting performance

Question Set 8
Section B: Physical Training

1 (a) (i) The Illinois Agility Test is a suitable test that can measure a performer's agility.

Complete **Fig. 1** by drawing the specified route taken by a performer completing the Illinois Agility Test.



[1]

Fig. 1

1 (a) (ii) Using the Illinois Agility Test, a basketball coach assessed the agility of an under eighteen male and female basketball team. After a 6 week training programme both teams were retested.

Use the tables below to analyse the data and answer the following questions.

Agility Test Rating		
Males	**Females**	**Rating**
<15.2	<17.0	Excellent
16.1-15.3	17.9-17.1	Good
18.1-16.2	21.7-18.0	Average
18.3-18.2	23.0-21.8	Fair
>18.3	>23.0	Poor

Males	Time	Retest time	Females	Time	Retest time
Martin	18.4	18.0	Fayha	17.8	17.7
Paul	15.3	15.2	Mary	22.2	22.4
Andrew	23.5	22.5	Sheila	18.5	18.5
Aakash	17.7	18.1	Siobhan	24.1	23.2
Brian	16.1	16.1	Janet	17.1	17.2

Identify the male with the slowest agility time and the female with the quickest agility time.

Slowest Male:

.....

Quickest Female:

..... **[1]**

1 (a) (iii) Identify the players who are rated 'good' following the retest. **[1]**

1 (a) (iv) Identify the player who made the most improvement from the first test to the retest. **[1]**

2 Reaction time and speed are important fitness components required for a 100 m sprinter.

Define the fitness components of reaction time and speed and explain their importance to a 100m sprinter. **[4]**

3 (a) (i) **Fig. 2.1** shows the national norms for the sit and reach test for 16–19 year olds.

Gender	Excellent	Above average	Average	Below average	Poor
Male	>14	11–14	7–10	4–6	<4
Female	>15	12–15	7–11	4–6	<4

Fig. 2.1

Fig. 2.2 shows a set of sit and reach results for a GCSE PE class.

Name	Gender	Age	Measurement
Emma	Female	16	15.5
Abdul	Male	16	9.5
Olivia	Female	16	11
Noah	Male	16	12
Farah	Female	16	16
Liam	Male	16	3.5

Fig. 2.2

Name the fitness component that is measured using the sit and reach test. **[1]**

3 (a) (ii) Using the values in **Fig. 2.1** state how many students in **Fig. 2.2** are in the average range. **[1]**

3 (a) (iii) Analyse the results in **Fig. 2.2** and suggest reasons for the differences between students who were scored as excellent compared to those who were given a poor rating. **[2]**

4 Specificity is one principle of training that would allow a gymnast to focus on relevant exercises suited to their routine.

Using practical examples, explain the use of other principles of training in a gymnastic training programme.

Evaluate reasons why some gymnasts may use beta blockers within their training programme. **[6]**

5 Before an athlete participates in a sprint they will complete a warm up to prepare their bodyand mind for the race.

Using practical examples, describe the components of a warm up and evaluate the different mental preparation techniques that could be used to fully prepare the athlete for the race. **[6]**

6 Using practical examples from sport, explain the principles of training and goal setting to optimise a personal training programme. **[6]**

Total Marks for Question Set 7: 30

Oxford Cambridge and RSA

Copyright Information

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact The OCR Copyright Team, The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge