

# **GCSE**

# **Physical Education**

General Certificate of Secondary Education **B453** 

Developing Knowledge in Physical Education

# **Mark Scheme for June 2010**

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All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the Report on the Examination.

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Any enquiries about publications should be addressed to:

OCR Publications PO Box 5050 Annesley NOTTINGHAM NG15 0DL

Telephone: 0870 770 6622 Facsimile: 01223 552610

E-mail: publications@ocr.org.uk

|                    | Multiple choice   | Maulia | Deticuele/Additional Cuidence  |
|--------------------|---|--------|--|
| Question<br>Number | Expected Answer   | Marks  | Rationale/Additional Guidance  |
| 1                  | Which one of the following is a role of the school in promoting an active, healthy lifestyle?           |        | For all multi choice questions from 1-15 accept any written indication of the answer eg circle/tick/cross out and then |
|                    | (a) Running health awareness programmes   | [1]    | tick etc. If two or more indicated then no marks but give BOD if not completely  |
| 2                  | Which one of the following is an example of a national governing body?                                  |        | clear.   |
|                    | (c) Lawn Tennis Association   | [1]    |  |
| 3                  | Which one of the following is a positive effect of sponsorship on participation in physical activities? |        |  |
|                    | (c) More funds available to purchase equipment  | [1]    |  |
| 4                  | Which one of the following best describes the frequency element of the FITT principle of training?      |        |  |
|                    | (d) How many times a week you exercise  | [1]    |  |

| Section A - M      | ultiple choice   |       |  |
|--------------------|--|-------|--|
| Question<br>Number | Expected Answer  | Marks | Rationale/Additional Guidance  |
| 5                  | Which one of the following is <u>not</u> a hazard found on a grass playing field?                                |       | For all multi choice questions from 1-15 accept any written indication of the answer eg circle/tick/cross out and then |
|                    | (c) Concussion   | [1]   | tick etc. If two or more indicated then no marks but give BOD if not completely  |
| 6                  | Which one of the following training methods is mostly aerobic?   |       | clear.   |
|                    | (c) Continuous training  | [1]   |  |
| 7                  | Which one of the following precautions would you take to minimise the risk of injury in a sports hall?           |       |  |
|                    | (a) Check that the equipment is well maintained  | [1]   |  |
| 8                  | Which one of the following is an effective personal hygiene method to avoid minor infections following exercise? |       |  |
|                    | (c) Wash and dry your feet after exercise  | [1]   |  |

| Section A - I      | Multiple choice   |       |  |
|--------------------|---|-------|--|
| Question<br>Number | Expected Answer   | Marks | Rationale/Additional Guidance  |
| 9                  | There are many long term effects of exercise and training on the body. Which one of the following is a long term effect on the heart?  (a) Increase in stroke volume  | [1]   | For all multi choice questions from 1-15 accept any written indication of the answer eg circle/tick/cross out and then tick etc. If two or more indicated then no marks but give BOD if not completely |
| 10                 | Mental preparation is important when participating in physical activity. Which one of the following best describes the purpose of mental preparation for a young person who is exercising to keep generally fit?  (b) To concentrate effort and forget about stressful events | [1]   | clear.   |
| 11                 | What value is cartilage in trying to maintain an active, healthy lifestyle?  (a) Protect bones from wear and tear   | [1]   |  |
| 12                 | Which one of the following is an intrinsic motive for participating in the role of a leader in a physical activity?   |       |  |
|                    | (d) To enjoy leading a physical activity session  | [1]   |  |

| Section A - I      | Multiple choice   |       |  |
|--------------------|---|-------|--|
| Question<br>Number | Expected Answer   | Marks | Rationale/Additional Guidance  |
| 13                 | Which one of the following is the <u>least</u> effective way to learn physical activity skills?  (d) Reading a coaching manual  | [1]   | For all multi choice questions from 1-15 accept any written indication of the answer eg circle/tick/cross out and then tick etc. If two or more indicated then no marks but give BOD if not completely |
| 14                 | Which one of the following is the best example of how knowledge of results can motivate a young person?  (a) To show a young person that they have run a distance quicker than they have before | [1]   | clear.   |
| 15                 | Which one of the following best describes the vascular shunt mechanism?  (b) The redistribution of blood during exercise  | [1]   |  |
|                    | Total   | [15]  |  |

| Question<br>Number | Expected Answer   | Marks | Rationale/Additional Guidance |
|--------------------|---|-------|-------------------------------|
| 16                 | Describe how the British Olympic Association might help you if you were an Olympic athlete. |       | Do not accept: - Sponsorship. |
|                    | Three marks max. One mark for each correct response   |       |                               |
|                    | 1 The BOA selects Team GB/select the best   | 1     |                               |
|                    | 2 Helps prepare and acclimatise before the Olympics   | 1     |                               |
|                    | 3 Organises visits to the host city prior to the Olympic Games                              | 1     |                               |
|                    | 4 Has an (exclusive) preparation camp   | 1     |                               |
|                    | 5 With the (best) facilities for Team GB/places to stay                                     | 1     |                               |
|                    | 6 Provide some (top class) equipment/kit  | 1     |                               |
|                    | 7 Provides (top-class) facilities at the British Olympic Training                           |       |                               |
|                    | Centre/places to train (Austria)  | 1     |                               |
|                    | 8 Runs programmes which assist athletes throughout their training                           | 1     |                               |
|                    | 9 Help with funding/providing discounts at national and local sports                        |       |                               |
|                    | centres   | 1     |                               |
|                    | 10 Helping athletes find jobs (which fit around their training and                          |       |                               |
|                    | competition)  | 1     |                               |
|                    | 11 Help with travel   | 1     |                               |
|                    |   | [3]   |                               |

| Question<br>Number | Expected Answer  | Marks | Rationale/Additional Guidance                            |
|--------------------|--|-------|--|
| 17                 | Explain how assessment courses in physical education can help to promote an active, healthy lifestyle.                       |       | If list then 1 mark max. Explanation needed for 4 marks. |
|                    | Four marks max. One mark for each correct response.  1 Raises awareness of positive reasons/health benefits of participation | 1     |  |
|                    | 2 Enjoyment/fun of following these courses leads to a healthy lifestyle  | 1 1   |  |
|                    | 3 Measures health/fitness/diet   | 1     |  |
|                    | 4 Educates about health and fitness  | 1     |  |
|                    | 5 Helps to set goals for better health/fitness/diet  | 1     |  |
|                    | 6 School provides resources/(better) equipment that can be used by all   | 1     |  |
|                    | 7 Encourages participation because of the practical element/you have to  |       |  |
|                    | participate in practical activities to complete the course   | 1     |  |
|                    | 8 Provides role models in the school/others want to copy successful  |       |  |
|                    | pupils/others around you are motivated   | 1     |  |
|                    | 9 You get to try new/a range/different games/activities/different  |       |  |
|                    | opportunities  | 1     |  |
|                    | 10 You make friends with others who participate and this encourages you  |       |  |
|                    | to participate in games  | 1     |  |
|                    | 11 You get reward/a certificate/qualification through participation  | 1     |  |
|                    | 12 Links often made with outside clubs/agencies which encourage  |       |  |
|                    | participation outside school   | 1     |  |
|                    | 13 Extra-curricular activities are often taken up for exam candidates to   |       |  |
|                    | improve/curricular activities are often taken up for exam candidates to  |       |  |
|                    | improve  | 1 1   |  |
|                    |  | [4]   |  |

| Question<br>Number | Expected Answer  | Marks | Rationale/Additional Guidance |
|--------------------|--|-------|-------------------------------|
| 18                 | Other than frequency, what are the other components of the FITT principle? |       |                               |
|                    | Three marks for:   |       |                               |
|                    | 1 Intensity  | 1     |                               |
|                    | 2 Time   | 1     |                               |
|                    | 3 Type   | 1     |                               |
|                    | 4 Tedium   | 1     |                               |
|                    |  | [3]   |                               |

| Question<br>Number | Expected Answer  | Marks | Rationale/Additional Guidance                 |
|--------------------|--|-------|---|
| 19                 | Describe, using practical examples, how the control of emotions can help with the management of stress in physical activities.               |       | Do not accept: - Manages stress.              |
|                    | Four marks max. One mark for each correct response (Max of two marks without practical examples).  |       | If no practical examples then max of 2 marks. |
|                    | 1 Relaxes you/takes away pressure  | 1     |   |
|                    | 2 Practical example, eg controlling anxiety in a tennis game   | 1     |   |
|                    | 3 Keeps you calm/'chilled'/lowers arousal/controls arousal/positive self-talk  | 1     |   |
|                    | 4 Practical example, eg calms you down before performing a gymnastics  |       |   |
|                    | floor routine  | 1     |   |
|                    | 5 Therefore do not get carried away/over-excited/more angry  | 1     |   |
|                    | 6 Practical example, eg less angry when someone fouls you in hockey  | 1     |   |
|                    | 7 Can make decisions more effectively/makes you more confident   | 1     |   |
|                    | 8 Practical examples, eg a cricket captain can set a field calmly and  |       |   |
|                    | effectively  | 1     |   |
|                    | 9 Less likely to be physically abusive/violent   | 1     |   |
|                    | 10 Practical example, eg will not retaliate if punched in rugby  | 1     |   |
|                    | 11 Less likely to make inflammatory comments/avoid criticising others  | 1     |   |
|                    | 12 Practical example, eg no back-chat to ref in football   | 1     |   |
|                    | 13 Be able to see other people's point of view/weigh things up more  |       |   |
|                    | rationally   | 1     |   |
|                    | 14 Practical examples, eg can see why another player in netball is angry   |       |   |
|                    | because you have fouled them   | 1     |   |
|                    | 15 Focussing/will not miss important cues/hearing the whistle/officials decisions that might lead to foul play/to ignore the crowd/makes you |       |   |
|                    | work harder (on what is important)   | 1     |   |

| Section B – Short Answer Questions |  |       |                               |
|------------------------------------|--|-------|-------------------------------|
| Question                           | Expected Answer  | Marks | Rationale/Additional Guidance |
| Number                             |  |       |                               |
|                                    | 16 Practical example, eg being focused in basketball will enable you to  |       |                               |
|                                    | react quickly to referee decisions                                       | 1     |                               |
|                                    | 17 More likely to show etiquette which may lead to less stress           | 1     |                               |
|                                    | 18 Practical example, eg in golf letting someone through who may be a    |       |                               |
|                                    | quicker player   | 1     |                               |
|                                    | 19 Official shows no favouritism therefore less likely for player stress | 1     |                               |
|                                    | 20 Practical example, eg a hockey umpire will not get involved in        |       |                               |
|                                    | arguments and therefore player/officials feel less stressed              | 1     |                               |
|                                    | 21 Mental rehearsal/imagery/to imagine success                           | 1     |                               |
|                                    | 22 Practical example a gymnast imagines a successful floor routine       | 1     |                               |
|                                    | . 37   | [4]   |                               |

| Section B -        | Short Answer Questions   |       |   |
|--------------------|--|-------|---|
| Question<br>Number | Expected Answer  | Marks | Rationale/Additional Guidance                       |
| 20                 | Identify two major muscle groups of the upper body that are used when performing a standing throw of a ball. Explain how an active lifestyle can keep muscles healthy. |       | Mark first two only for the muscle groups.          |
|                    | Five marks available.  |       | Do not accept: - Voluntary and involuntary muscles. |
|                    | Two marks max for: (mark first two only)   |       |   |
|                    | 1 Deltoids   | 1     |   |
|                    | 2 Trapezius  | 1     |   |
|                    | 3 Latissimus Dorsi   | 1     |   |
|                    | 4 Pectorals  | 1     |   |
|                    | 5 Biceps   | 1     |   |
|                    | 6 Triceps  | 1     |   |
|                    | 7 Abdominals   | 1     |   |
|                    | Accept other relevant muscle groups  |       |   |
|                    | Three marks max for: (explain how activity can keep muscles healthy)   |       |   |
|                    | 8 Makes them stronger/more powerful  | 1     |   |
|                    | 9 Bigger/hypertrophy/more toned  | 1     |   |
|                    | 10 Less likely to strain/injury  | 1     |   |
|                    | 11 Good blood/oxygen supply  | 1     |   |
|                    | 12 Increase tolerance to lactic acid/tire less easily  | 1     |   |
|                    | 13 Can keep going/helps (muscular) endurance   | 1     |   |
|                    |  | [5]   |   |

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| Section B -        | Short Answer Questions   |                         |   |
|--------------------|--|-------------------------|---|
| Question<br>Number | Expected Answer  | Marks                   | Rationale/Additional Guidance                 |
| 21                 | Why is lactic acid produced in our muscles? Briefly describe the effects of lactic acid.   |                         | Do not accept: - Cramp for effects (point 6). |
|                    | Four marks max. One mark for each correct response.  |                         |   |
|                    | <ul> <li>Two marks max for:</li> <li>1 Produced because of lack of oxygen</li> <li>2 After prolonged/hard high intensity exercise/overworked/working too hard</li> </ul> | 1                       |   |
|                    | Three marks max for:  3 Causes fatigue/tiredness  4 May cause us to stop  5 Performer has to slow down/decreases effectiveness  6 Can hurt/painful/aches/soreness        | 1<br>1<br>1<br>1<br>[4] |   |

| Section B - S | Short Answer Questions  |       |  |
|---------------|---|-------|--|
| Question      | Expected Answer   | Marks | Rationale/Additional Guidance                          |
| Number        |   |       |  |
| 22            | Explain, using practical examples, how you might motivate a young person to be involved as an <u>official</u> in a physical activity. |       | If no practical examples or inferred then 3 marks max. |
|               | Six marks max. One mark for each correct response.  |       |  |
|               | 1 To try something different/novel/variety in life/let them have a  |       |  |
|               | go/experience officiating/past-time   | 1     |  |
|               | 2 Show them/teach/coach them how to officiate   | 1     |  |
|               | 3 Give praise   | 1     |  |
|               | 4 Give rewards/badges   | 1     |  |
|               | 5 To make money   | 1     |  |
|               | 6 To gain qualifications  | 1     |  |
|               | 7 To get involved in an activity even though you may not be a very good   |       |  |
|               | practitioner  | 1     |  |
|               | 8 Show them role models   | 1     |  |
|               | 9 To try at low level at first/have a go to see whether you enjoy it/set goals  | 1     |  |
|               | 10 Opportunities to make friends/join with others   | 1     |  |
|               | 11 Good for enjoyment/fun   | 1     |  |
|               | 12 Help to be active/get exercise/be more healthy show how it might help health/fitness   | 1     |  |
|               | 13 Show how it might help you become a better performer/better at your  | 1     |  |
|               | sport   | 1     |  |
|               | 14 To help others/give something back to the activity (if ex-player)  | 1     |  |
|               | 15 As a career route/chance to participate in high level events/Olympics  | 1     |  |
|               | 16 Make it a rota of responsibility/all have to officiate at some time/   |       |  |
|               | fairness/leadership opportunities/want to be a role model   | 1     |  |
|               |   | [6]   |  |

| Question<br>Number | Expected Answer   | Marks | Rationale/Additional Guidance                   |
|--------------------|---|-------|---|
| 23                 | Describe the main functions of the skeletal system that keep the body healthy and active. |       | If no examples / descriptions then 2 marks max. |
|                    | Five marks max. One mark for each correct response.                                       |       |   |
|                    | 1 Shape/support   | 1     |   |
|                    | 2 Eg to give correct posture/supporting muscular system                                   | 1     |   |
|                    | 3 Blood cell (red) production   | 1     |   |
|                    | 4 Eg to enable us to have energy  | 1     |   |
|                    | 5 Mineral production/store  | 1     |   |
|                    | 6 Eg to keep us fit and healthy/body needs to be healthy                                  | 1     |   |
|                    | 7 Protection  | 1     |   |
|                    | 8 Eg to protect internal organs   | 1     |   |
|                    | 9 To be able to move/keep moving/being mobile   | 1     |   |
|                    | 10 Eg to be able to participate in physical exercise/acts as muscle                       |       |   |
|                    | attachment  | 1     |   |
|                    | 11 Leverage   | 1     |   |
|                    | 12 Eg to be able to make strong/effective movements                                       | 1     |   |
|                    |   | [5]   |   |

| Question<br>Number | Expected Answer   | Marks | Rationale/Additional Guidance                    |
|--------------------|---|-------|--|
| 24                 | Research indicates that most people have good intentions to exercise and to keep healthy and often start on a healthy programme, but as with New Year's resolutions, they soon give up. |       | If just SMART words identified then 3 marks max. |
|                    | Explain how you might help a young person stick to their exercise and healthy lifestyle programme and not give up too readily.  |       |  |
|                    | Five marks max. One mark for each correct response  |       |  |
|                    | 1 Set goals   | 1     |  |
|                    | 2 Encourage/praise/motivate   | 1     |  |
|                    | 3 Educate about the benefits of the programme   | 1     |  |
|                    | 4 Join others/friends to do the programme/join a club   | 1     |  |
|                    | 5 Show others who have stuck to it and benefitted/role models   | 1     |  |
|                    | 6 Show previous success/recognition of past success/recognising success   | 1     |  |
|                    | 7 Give reward for progress/extrinsic reward   | 1     |  |
|                    | 8 Give goals that are specific/short term goals/a little at a time  | 1     |  |
|                    | Measure/record their progress/let them know how they are doing  | 1     |  |
|                    | 10 Make goals achievable/realistic/within their reach/don't be too ambitious  | 1     |  |
|                    | 11 Ensure there is time available/good time management  | 1     |  |
|                    | 12 Make the activity/healthy eating enjoyable/exciting/their favourite  |       |  |
|                    | activities/foods/vary the activities/foods  | 1     |  |
|                    | 13 Show negative consequences of not following the programme  | 1     |  |
|                    | 14 Punish by withdrawal of privileges   | 1     |  |
|                    |   | [5]   |  |

| Section B – Short Answer Questions  Question   Expected Answer   Marks   Rationale/Additional Guidance |   |         |   |  |
|--|---|---------|---|--|
| Number   | Expected Allower  | IVIAINS | Rationale/Additional Guidance   |  |
| 25 *   | Explain how the media influences those who participate in physical activities.  |         | The following are GUIDELINES ONLY. Refer to Level descriptors at all times.   |  |
|  | Levels marked question  |         | Tick each point found in the indicative content.  |  |
|  | Level 1 (1-2 marks) Candidates make only one or two valid points about the media influences and describes, rather than explains, and only very superficially. Few links are made with participation. There is little or no use of technical vocabulary and sentences have limited coherence and structure. There is much irrelevant material. Errors in grammar, punctuation and spelling may be noticeable and intrusive.  Level 2 (3-4 marks) Candidates make a few valid points about media influences and demonstrate good knowledge and understanding. Good links are made with participation. There is some use of technical vocabulary and sentences for the most part are relevant and coherent. There are occasional errors in grammar, punctuation and spelling.  Level 3 (5-6 marks) Candidates make several developed points about media influences and these are fully explained possibly with advantages and disadvantages. Excellent links made with participation. Candidates demonstrate excellent knowledge and understanding of the factors involved. Candidates give relevant material that is clearly structured and using appropriate terminology and technical vocabulary. There are few if any errors in grammar, punctuation and spelling. |         | However the number of ticks on their own do not indicate the level.  View the number of ticks/points:  Level 1  1 tick to get into Level 1  Must have explanation (rather than identifying isolated points) to lift from level 1  Level 2  3 ticks to get into Level 2  Some technical vocabulary in this level  Level 3  4 few technical/spelling mistakes are acceptable for top level  Both positive and negative aspects are likely to be represented |  |

| Section B – Short Answer Questions |  |          |                 |
|------------------------------------|--|----------|-----------------|
| Question                           | Question Number  | Question | Question Number |
| Number                             |  | Number   |                 |
| 25 *                               | Indicative content   |          |                 |
| continued                          | 1 Wide/intense/regular coverage of sport on TV   |          |                 |
|                                    | 2 Internet/web-sites encourages interest and therefore participation                               |          |                 |
|                                    | 3 Press/written media extensive coverage   |          |                 |
|                                    | 4 Encourages general interest in sport/physical activities/exercise                                |          |                 |
|                                    | 5 Gives ideas about new/novel activities   |          |                 |
|                                    | 6 Promotes/educates about benefits to health/well being  |          |                 |
|                                    | 7 Show consequences of low activity levels   |          |                 |
|                                    | 8 Can inform about how to participate  |          |                 |
|                                    | 9 Can inform about where to participate  |          |                 |
|                                    | 10 Entertains and therefore attracts participation (Wimbledon and tennis)                          |          |                 |
|                                    | 11 Media attracts sponsorship/funding to clubs/individuals that may then                           |          |                 |
|                                    | encourage more participation   |          |                 |
|                                    | 12 Can lead to rule changes  |          |                 |
|                                    | 13 Leading to advertising linking products with active living/draws                                |          |                 |
|                                    | attention to activity (via product)  |          |                 |
|                                    | 14 Activity can be perceived as fashionable/cool thing to do/raise status                          |          |                 |
|                                    | 15 Media can attract funds for facilities/equipment participation can give                         |          |                 |
|                                    | prizes   |          |                 |
|                                    | 16 Shows successful sportspeople that inspires others to participate in different ways/role models |          |                 |
|                                    | Negative aspects:  |          |                 |
|                                    | 17 Negative view that media may link activity to undesirable factors for                           |          |                 |
|                                    | some people/alcohol/competitiveness etc  |          |                 |
|                                    | 18 The availability of media may stop people participating in sport/making                         |          |                 |
|                                    | couch potatoes   |          |                 |
|                                    | 19 Can give activities a bad name/make it seem dangerous   |          |                 |
|                                    | 20 Coverage can be limiting/only some sports represented   |          |                 |
|                                    | 21 Over-emphasis on male/able bodied sport   |          |                 |
|                                    | 22 Can encourage aggression  |          |                 |
|                                    | 23 Can encourage nationalism/prejudice/jingoism  |          |                 |
|                                    | 24 Can lead to events being on at different times/days-affecting                                   |          |                 |
|                                    | participation  | [6]      |                 |
|                                    | Total  | [45]     |                 |
|                                    | Paper Total  | [60]     |                 |

OCR (Oxford Cambridge and RSA Examinations)
1 Hills Road
Cambridge
CB1 2EU

### **OCR Customer Contact Centre**

### 14 – 19 Qualifications (General)

Telephone: 01223 553998 Facsimile: 01223 552627

Email: general.qualifications@ocr.org.uk

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