

CONFERENCE VERSION



GCSE MARKING SCHEME

AUTUMN 2020

**PHYSICAL EDUCATION - COMPONENT 1
SHORT COURSE
C555U10-1**

INTRODUCTION

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

GCSE PHYSICAL EDUCATION
COMPONENT 1 (SHORT COURSE)
AUTUMN 2020 MARK SCHEME

Question	Mark Scheme	AO1	AO2	AO3	Total
1. (a) (i)	<p>Name the component of fitness required by Player A and Player B to hold Player C as shown in the image above.</p> <p>Accept strength or muscular endurance.</p> <p>The key words in the question are “to hold player C as shown in the image above”.</p>	1			1
(ii)	<p>Justify your reasons for choosing the fitness component named in question ai above.</p> <p>The response must relate to a correct answer to question ai.</p> <p>STRENGTH = need to apply force and / or overcome the resistance of the players weight in order to HOLD the player in the lineout.</p> <p>MUSCULAR ENDURANCE = repeated lifting of players requires the muscles to work repeatedly during the lifts.</p> <p>Look out for definitions being given as justification. Read all responses carefully.</p>		2		2
(b) (i)	<p>Taking part in physical activities and sports can help to keep an individual healthy.</p> <p>Define the term health.</p> <p>Health is defined as “state of complete physical, mental and social well-being and not merely the absence of illness or disease”.</p> <p>Accept any similar response.</p>	1			1

Question	Mark Scheme	AO1	AO2	AO3	Total
(ii)	<p>Identify three possible social benefits of taking part in physical activities.</p> <p>Accept any 3 different social benefits, such as:</p> <ul style="list-style-type: none"> - Increased confidence - Teamworking and development skills of cooperation - Self-fulfilment - Challenge - Increased self-worth - Increased respect from peers - Chance to meet friends and create new friendships - Mixing with people of similar interests - Acceptance within the team / club and expansion of roles undertaken within the team / club, e.g. secretary, coach etc. 	3			3
(c)	<p>Explain the mental and physical risks to individuals who lead a sedentary lifestyle.</p> <p>There will be many different responses to the question. Mental and physical must be explained for full marks to be awarded.</p> <p>MENTAL:</p> <ul style="list-style-type: none"> - no involvement therefore no satisfaction - no feel good factor from taking part in sport / physical activity - no excitement of participating - no opportunity to release stress, tension or aggression - boredom - feeling of isolation - lack of self-worth - poor body self-image <p>PHYSICAL:</p> <ul style="list-style-type: none"> - increase in weight - decreased muscle tone - deterioration in good posture - reduced bone density - reduced flexibility and / or strength - more associated health risks - more prone to illness / disease - reduced life expectancy - increased blood pressure - reduced overall physical fitness - less able to cope with everyday demands of living. <p>Accept any reasonable responses. Street language may be used making reference to some of the above.</p> <p>AN EXPLAIN QUESTION. 2 x2 marks</p>		4		4

Question	Mark Scheme	AO1	AO2	AO3	Total
(d)	<p>Evaluate the reasons for and the potential benefits to the player following the diet plan shown.</p> <p>Reasons for diet and potential benefits to the player:</p> <p>The reasons for the diet may be varied but there should be definite links made between the diet, the needs of the player, demands of the position / sport.</p> <p>General dietary considerations may make reference to:</p> <ul style="list-style-type: none"> - balance of 7 nutrients required for good health - different types of food are required for the body to function properly - different foods have different energy values- can be related to the needs of the player - high energy training and competition requires different energy intake to less demanding activities player can target specific energy requirements and set specific diet - to aid performances diet could be sport / position specific / player specific. <p>POTENTIAL BENEFITS</p> <ul style="list-style-type: none"> - increased muscle size and tone - increase in weight - increase in muscle strength - increase in power - change in body shape and size - improved energy levels - reduced recovery periods(time) after training or competing - achieve target BMI - improved effectiveness on the field of play, e.g. clearing out at ruck - enhanced sport specific / position specific fitness - improved endurance in game leading to greater effectiveness and - reduced injury risk <p>THERE WILL BE MANY OTHER RESPONSES. READ CAREFULLY.</p> <p>AWARD A BAND THEN ALLOCATE MARKS</p> <p>SEE BANDED RESPONSE SHEET</p>	2		4	6

Band	AO1 2 Marks	AO3 4 Marks
3		<p>4 marks</p> <p>Excellent evaluation of the reasons for, and potential benefits to, the player following the type of diet. The answer is balanced and detailed. Excellent use of technical terminology. Punctuation, grammar and spelling are very good.</p>
2	<p>2 marks</p> <p>Good knowledge of dietary issues and the benefits of following the specific diet outlined.</p>	<p>2-3 marks</p> <p>Good evaluation of the reasons for, and potential benefits to, the player following the type of diet. The answer is quite well balanced with some detail. Good use of technical terminology. Punctuation, grammar and spelling are generally good.</p>
1	<p>1 mark</p> <p>Limited knowledge of dietary issues and benefits of following the specific diet outlined.</p>	<p>1 mark</p> <p>Limited evaluation of the reasons for, and potential benefits to, the player following the type of diet. The answer is largely descriptive with some errors in punctuation, grammar and spelling.</p>
0	Not attempted/no evaluation.	Not attempted/no evaluation.

Question	Mark Scheme	AO1	AO2	AO3	Total
2. (a) (i)	<p>Complete the table below by naming the arm bones A, B and C shown in the image of the hockey player.</p> <p>Three bones as required to be identified correctly: A – Radius B – Ulna C – Humerus</p>	3			3
(ii)	<p>Explain why it is important for the hockey player to have good coordination.</p> <p>Coordination is required by the hockey player in order to be able to:</p> <ul style="list-style-type: none"> - perform skills such as stopping the ball, dribbling the ball, passing and shooting at goal. Without good coordination the player would not be - as effective or efficient in her performance. <p>This is an EXPLAIN question. Accept any appropriate response. 1+1=(2) marks</p>		2		2
(b) (i)	<p>Explain the plane of movement of the hockey player's legs shown in the image opposite.</p> <p>Sagittal plane divides the body vertically into right and left halves.</p> <p>Forward / upward and backward motions of the legs takes place when the player is moving (forwards in the image).</p>		2		2

Question	Mark Scheme	AO1	AO2	AO3	Total
(ii)	<p>Explain using examples, the main characteristics of Aerobic and Anaerobic fitness.</p> <p>This is an EXPLAIN question.</p> <p>For full marks aerobic and anaerobic fitness characteristics must be explained. There will be a variety of strategies observed in answering the question.</p> <p>THE DEPTH OF THE RESPONSES GIVEN WILL ALSO DEPEND UPON THE MARKS TO BE AWARDED.</p> <p>AEROBIC</p> <ul style="list-style-type: none"> - The energy released in aerobic activity needs a sufficient supply of oxygen (O₂) to the tissues. - With enough O₂ present the activity can go on for long periods of time at a moderate intensity. - Muscles need O₂ to contract and in aerobic respiration the O₂ required enters the body by breathing. - Possible inclusion also of chemical equation for aerobic respiration. <p>ANAEROBIC</p> <ul style="list-style-type: none"> - When energy is produced anaerobically no O₂ is used in its initial release. This happens in activities requiring a burst of energy. - The demands of the body for O₂ means the CV system does not have time to supply the demand. - Energy is produced without the presence of O₂ by the chemical Adenosine Triphosphate-ATP. - This system provides an immediate source of energy which can only be sustained for a short period of time. - Training of the sportsperson may be specific to building up muscles to retain more ATP-CP. <p>LOOK FOR BASIC / MAIN POINTS WITH EXPLANATION. 4 MARKS = 2+2=(4)</p>		4		4

Question	Mark Scheme	AO1	AO2	AO3	Total
(c)	<p>Assess how the training of an experienced games player would be different to the training of a beginner.</p> <p>THE QUESTION LOOKS FOR A COMPARISON BETWEEN AN EXPERIENCED PLAYER AND A BEGINNER TO THE SPORT.</p> <p>Both may follow similar training sessions but there will be marked differences between the content, duration, frequency and intensity of each.</p> <p>The type of training taking place could also be different depending upon the needs of each player. There could be differences in the warm up, skills and cool down within the training sessions.</p> <p>Some candidates may refer to the experienced player as being more "Professional" in their training.</p> <p>THIS IS A BANDED RESPONSE QUESTION.</p> <p>Read the response, allocate a band then award the marks.</p> <p>LOOK FOR CONTENT OF EACH SESSION FOR BOTH, THE INTENSITY, DURATION, SKILLS AND FITNESS INCLUDED AS WELL AS REFERENCE TO PRINCIPLES OF TRAINING</p>	2		4	6

Band	AO1 2 Marks	AO3 4 Marks
3		<p>4 marks</p> <p>Excellent assessment and analysis of variations in training. The response is very detailed, clearly expressed and shows accurate use of technical language. Punctuation, grammar and spelling are very good.</p>
2	<p>2 marks</p> <p>Good knowledge of dietary issues and the benefits of following the specific diet outlined.</p>	<p>2-3 marks</p> <p>Good assessment and analysis of variations in training. The response has some detail, is adequately expressed and shows some use of technical language. Punctuation, grammar and spelling are generally good.</p>
1	<p>1 mark</p> <p>Limited knowledge of dietary issues and benefits of following the specific diet outlined.</p>	<p>1 mark</p> <p>Limited assessment and analysis of variations in training. The response has some use of technical language. Punctuation, grammar and spelling are generally good. The answer is largely descriptive with some errors in punctuation, grammar and spelling.</p>
0	Not attempted/no evaluation.	Not attempted/no evaluation.

Question	Mark Scheme	AO1	AO2	AO3	Total
3. (a)	<p>Explain why balance and power are important for speed skaters.</p> <p>Power= Speed x Strength. Short track is an explosive activity with power being required, for example, at the start of the race, or when overtaking in a sprint to the finish line.</p> <p>Balance is the ability to maintain equilibrium whether static or moving. Speed skaters require balance in order to not fall over and/or maintain maximum speed in the race.</p> <p>Accept responses which show an understanding of what power and balance are, possibly a definition with a suitable explanation / example. $1 + 1 \times 2 = (4)$</p>		4		4
(b)	<p>Draw lines to match each term below to the correct description. LOOK AT THE QUESTION BEFORE MARKING. ANSWERS ARE:</p> <p>Vital Capacity - Third of three definitions in the diagram.</p> <p>Breathing Frequency - Second of three definitions.</p> <p>Tidal Volume - First of three definitions.</p> <p>THIS IS A DRAW LINES TO MATCH QUESTION.</p>	3			3
(c)	<p>Analyse how improvements to the vital capacity of a sportsperson could enhance performance.</p> <p>Vital capacity is the largest amount of air breathed out after having inhaled air.</p> <ul style="list-style-type: none"> - the greater the amount of air breathed in allows: - greater volume of oxygen to be taken in and used - improved gaseous exchange - oxygen and glucose to combine to produce energy for the body to use - enhanced removal of CarbonDioxide from the body <p>The more efficient gaseous exchange and energy production are the greater the effectiveness of the body/sportsperson.</p>	1		3	4

Question	Mark Scheme	AO1	AO2	AO3	Total
4. (a) (i)	<p>Define the term fitness.</p> <p>Fitness is defined as the ability of an individual to meet (cope with) the demands of the environment.</p> <p>Accept any similar reasonable response.</p>	1			1
(ii)	<p>Discuss the reasons for using circuit training in order to improve sporting performance.</p> <p>AO1-1 + AO3-4</p> <p>This is a discuss question therefore candidates will highlight why circuit training may / may not be the most suitable training method to use in order to improve performance.</p> <p>READ RESPONSES CAREFULLY, AWARD A BAND THEN AWARD A MARK. See banded response sheet.</p> <p>Indicative content</p> <p>Some reasons, there will be more, regarding the use of C.T.</p> <ul style="list-style-type: none"> - circuit can be designed specifically to suit an individuals needs - circuit can develop specific fitness components as required - circuit can target specific muscles / body parts - skills can be incorporated easily into the circuit and related to the performance of skills in the specific activity - rest and work periods can be adapted in order to ensure a safe training environment - resistance, reps and sets can be varied to suit individual needs, and ensure progression - POSSIBLE NEGATIVE= top class performers may not feel that C.T. enables them to enhance skills and improve performances sufficiently - C.T. CAN BE DEVELOPED to enhance aerobic / anaerobic fitness - intensity and time of work periods can easily to altered - C.T. enables whole body workout to happen - motivation can easily be maintained by setting goals / targets and working with others to achieve set goals - a great variety of circuits can be set up to reduce tedium - C.T. does not require expensive equipment <p>AO1 = 1 + AO3 = 4</p>	1		4	5

Band	AO1 2 Marks	AO3 4 Marks
3		<p>4 marks</p> <p>Excellent, well reasoned discussion of how circuit training could improve performance. The response is very detailed, clearly expressed and shows accurate use of technical language. Punctuation , grammar and spelling are very good.</p>
2	<p>2 marks</p> <p>Good knowledge of dietary issues and the benefits of following the specific diet outlined.</p>	<p>2-3 marks</p> <p>Good discussion of how circuit training could improve performance. The response has some detail, is adequately expressed and shows some use of technical language. Punctuation, grammar and spelling are generally good.</p>
1	<p>1 mark</p> <p>Limited knowledge of dietary issues and benefits of following the specific diet outlined.</p>	<p>1 mark</p> <p>Limited discussion of how circuit training could improve performance. The response may be generic with some errors in punctuation, grammar and spelling.</p>
0	Not attempted/no evaluation.	Not attempted/no evaluation.

Question	Mark Scheme	AO1	AO2	AO3	Total
(a) (iii)	<p>Identify two reasons why sportspersons should perform all circuit training exercises using correct technique.</p> <p>Accept any reasonable response. There may be generic answers to the question. LOOK FOR duplication in/of points being made.</p> <ul style="list-style-type: none"> - to prevent injury - to ensure body parts and correct muscle groups are being used correctly (sequenced) - to ensure that correct "form" is used linking training to actual activity - any skills used in training can be linked directly to performance - to groove skills and techniques - to perform more efficiently and / or effectively - to be able to repeat actions when under pressure <p>2x1=(2)</p>	2			2

Question	Mark Scheme	AO1	AO2	AO3	Total
(b) (i)	<p>Explain why it is important for a sports person to include flexibility training as part of a fitness programme.</p> <p>There are many reasons for stretching before exercising.</p> <p>These may be generic to training, sports and individual playing positions in a particular activity. The question asks for an explanation but examiners can accept answers which contain some amplification of a statement.</p> <p>POSSIBLE RESPONSES TO INCLUDE;</p> <ul style="list-style-type: none"> - there are a variety of ways to stretch - stretching eases the muscles and joints used in the activity into action - stretching prevents injury - stretching enables a greater range of movement - can be progressive in nature to assist sports person - helps to focus / concentrate the mind - can be specific or general in nature in terms of joints, muscles, the amount of whole body activity involved. <p>Accept 2x1=(2)</p>		2		2
(ii)	<p>Identify three methods of stretching.</p> <ul style="list-style-type: none"> - ACTIVE - DYNAMIC - PASSIVE 	3			3
(b) (iii)	<p>Using sporting examples, explain how improved flexibility can improve performance.</p> <p>There will be many different responses but the following may be central to the responses give:</p> <ul style="list-style-type: none"> - greater range of movement therefore more efficient and / or effective performances. - reduced chance of injury therefore improved performances <p>EXAMPLES MAY BE PROVIDED TO SUPPORT THE ABOVE, E.G. COLIN JACKSON HURDLING etc.</p> <p>E.g. High jumper bending over bar.</p> <p>Cr edit any acceptable responses after careful reading but some amplification is required.</p>		2		2

QUESTION	AO1	AO2	AO3	TOTAL
1	8	5	4	17
2	5	8	4	17
3	4	4	3	11
4	7	4	4	15
TOTAL	24	21	15	60