

Cambridge National

Sport Science

Level 1/2 Cambridge National Award in Sport Science **J802**

Level 1/2 Cambridge National Certificate in Sport Science **J812**

OCR Report to Centres June 2015

OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of candidates of all ages and abilities. OCR qualifications include AS/A Levels, Diplomas, GCSEs, Cambridge Nationals, Cambridge Technicals, Functional Skills, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

It is also responsible for developing new specifications to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support, which keep pace with the changing needs of today's society.

This report on the examination provides information on the performance of candidates which it is hoped will be useful to teachers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding of the specification content, of the operation of the scheme of assessment and of the application of assessment criteria.

Reports should be read in conjunction with the published question papers and mark schemes for the examination.

OCR will not enter into any discussion or correspondence in connection with this report.

© OCR 2015

CONTENTS

Cambridge Nationals

Level 1/2 Cambridge National Award in Sport Science J802

Level 1/2 Cambridge National Certificate in Sport Science J812

OCR REPORT TO CENTRES

Content	Page
R041: Reducing the risk of sports injuries	4
R042: Applying principles of training	8
R043: The body's response to physical activity	9
R044: Sport psychology	10
R045: Sports Nutrition	11
R046: Technology in Sport	12

R041 Reducing the risk of sports injuries

Level 1/2 Cambridge National Award in Sport Science J802

General

Centres are reminded that marking schemes are used as a basis for judgements and each examiner's professional judgement is used in finally deciding the marks awarded based on a rigorous standardised procedure. A 'levels' mark scheme relates to the final question (Q15). The mark scheme for this final question has a number of criteria separated into levels. Levels also include statements related to the quality of written communication. The levels mark scheme also includes indicative content that is expected in responses to the question and this content is taken into consideration when awarding marks. Examiners use ticks to indicate the number of marks given for questions 1 – 14 but use other annotations on Q15 as it is not '1 tick = 1 mark'.

Candidates are reminded that they must check near the end of the examination that they have answered all the questions set. Once again, candidates left questions unanswered especially Question 1 related to posture and question 11 related to Emergency Action Plans.

Generally, candidates showed that they had covered the specification well but a minority of the candidates' misread questions and simply wrote all they knew about the topic rather than responding directly to the requirements of the question. When a question is divided into sections, for example, Question 4, centres and their candidates are reminded to keep referring back to the stem of the question to check what is required.

Question 15, as in previous examination series demanded more extended writing from candidates and some wrote giving the appropriate level of detail about extrinsic factors influencing the risk of injury to sports performers. Some candidates were unable to access the full range of marks because the quality of their written communication was not appropriate for this level of examination. The poor standard of literacy for many candidates was particularly striking this year, with some candidates unable to give a fluent account in their answer. Centres and their candidates are reminded that spelling and the quality of their expression are taken into account when awarding marks for this question. Centres are again advised to continue to give help, advice and writing practice to their candidates.

Candidates should be familiar with the style of language used in the specification, because relevant technical language is often used in the examination questions. Candidates should be familiar with the command words used in examinations questions so that their written responses match the requirements of each question. For example, the command word 'describe' requires more than a one-word answer with the expectation that the candidate expands their response and addresses fully the requirements of the question. The command 'explain' is also often misunderstood. This command requires candidates to give reasons for their answer and may be linked to the requirement for sports' injury practical examples.

Comments on individual questions

Question 1 a, b, c and d.

Many candidates scored few marks for these questions related to posture. The technical terms related to the descriptions in each part of the question were not well expressed and many candidates simply did not give any response to any part of this question. Candidates are reminded that all aspects of the specification can be examined in any one series and centres are reminded that all the theoretical elements of the specification must form part of the scheme of learning for each candidate.

Question 2

Successful candidates were able to identify inherent weaknesses as a cause for further injury but few scored the full two marks available for this question.

Question 3

The majority of candidates could name a psychological factor, although a minority of candidates mixed up the term psychological with physiological. The descriptions for some, however, that tried to link the psychological factor with how it might cause injury were often too vague or irrelevant. The better candidates clearly linked the factor with injury, for example aggression linked to careless tackling in a sport such as football.

Question 4 a, b, c and d.

Candidates often forgot the question at the start of this series of sub-sections. The question deals with the benefits of a warm up and candidates often forgot this as they progressed through the sub-sections. Some candidates scored low marks because they simply repeated the phrases used in the question, for example for increase in heart rate, candidates wrote 'these increase the heart rate'. The better candidates would identify the increase in heart rate, for example, as a physical factor and then explained that this would result in more oxygen being available or more blood being transported to the working muscles.

Question 5

Some candidates scored highly for this question because they used their identified sport to clearly show that they understood each element of a warm up. Many candidates scored lower marks because they left out a plan for mobility exercises and dynamic movements. These terms are clearly unfamiliar to many candidates.

Question 6

The majority of candidates scored the full three marks for this question and could identify three specific needs that should be considered when planning a warm-up and cool down. Some candidates misread the question and described the elements of a warm up and/or cool down rather than the needs such as the age of the group or environmental aspects for example.

Question 7 a, b and c

Many candidates scored well, showing a good awareness of appropriate responses to those with asthma, diabetes and epilepsy.

Question 8

Most candidates scored the available mark and identified the statement as false.

Question 9

This question asked for a description but some candidates gave very little information in their answer. To score the full two marks, each of the two points required a description.

Question 10

This question was well answered, again showing generally a good awareness of symptoms for the medical conditions identified in the specification.

Question 11

The Emergency Action Plans are not well known by the majority of candidates, many of whom simply left this question unanswered. Candidates are reminded to fully revise all aspects of the specification and to be able to give practical examples where necessary. Some candidates showed a good awareness of these plans and gave an accurate response to each plan.

Question 12

Many candidates found parts of this question too difficult and left some aspects unanswered. The symptoms and treatment of a sprained ankle was generally well-known but less so shin splints and an open fracture. A sizeable proportion of candidates were unable to differentiate between chronic and acute injuries.

Question 13 a and b.

Although most candidates showed that they could recall each part of the acronym SALTAPS by making notes before answering the question, the practical application proved too difficult for many. Centres should bear in mind that this specification seeks to relate theory to practice throughout and candidates will be expected not just to have the knowledge of theories related to sports injuries, but also to be able to apply the theories and concepts to practical scenarios.

Question 14

The majority of candidates showed a good understanding of the term elevation, although those that did not gain the mark simply repeated the word elevation in their answer with little further information to show that they understood the term.

Question 15

This question is marked using a levels mark scheme and the quality of written communication is taken into consideration. The level of written communication was strikingly poor this year, with many candidates unable to fluently express themselves on paper. Too many answers were illegible and many answers made little sense. Otherwise, this question was answered well with many candidates identifying several different extrinsic factors and then showing how these factors might directly influence injury. The better candidates also used practical examples to develop their answers. Those that scored less well had little idea of what extrinsic factors meant and wrote extensively about intrinsic factors and scored little if any marks. Those candidates who used short, clear and accurate sentences scored well.

Level 1/2 Cambridge National Certificate in Sport Science

Unit R042: Applying principles of training

Unit R043: The body's response to physical activity

Unit R044: Sport psychology

Unit R045: Sports nutrition

Unit R046: Technology in sport

This qualification requires centres to use the Model Assignments provided by OCR. Since September 2013 there have been two Model Assignments for Units R042; R043; R044; R045 and R046

For all units the majority of centres have used the model assignments as required by OCR. Where these have been used it was clear to see that the candidates knew what tasks they had to do for this unit and candidates responded well to the tasks set.

Centres are reminded that OCR unit recording sheets must form the front sheet for all work submitted. All of the sections on the unit recording sheets need to be completed.

General

Where evidence is provided through a presentation centres are encouraged to provide a witness statement detailing the learner's response to any questions that have been asked in order to best support the mark awarded. Where witness statements are used as part of the evidence centres must ensure that they are personalised and not generic. Centres should also ensure that the witness statements record what the candidate has done to meet the assessment criteria rather than simply repeat or paraphrase the criteria itself.

All work should be presented in a logical order and signposted where necessary. Only the final version of the work should be submitted.

Where the power point notes are included, or where the work is handwritten, centres must ensure that the type size/legibility of the writing enables the evidence to be easily read.

Work should be sent to the moderator promptly once centres receive the email detailing the sample required. Centres need to ensure that they send the correct candidates work.

Centres are reminded that use of centre devised templates, apart from those provided within the OCR model assignments, is not allowed. For further advice about this please contact the OCR Customer Contact Centre, Tel. 01223 553998.

R042: Applying principles of training

LO1 - In a most cases candidates were able to describe the principles of training in a sporting context and in some cases the candidates were able to support their work with very good examples from sport, particularly in the components of fitness and the principles of training.

LO2 - Candidates were able to describe how training methods targeted different fitness components and it was very encouraging to see that in many pieces of work the candidates were able to support their descriptions with good examples of methods of training. In most cases this supporting evidence was examples taken from sporting activities. For MB2 and MB3 candidates are asked how training methods can target fitness components both individually and in combination; very few candidates were able to do this effectively.

LO3 - In most cases candidates correctly completed different fitness tests on individuals and were able to evaluate the recorded data. MB2 and MB3 require candidates to interpret the tests with reference to normative data. In some cases no normative data was included. MB2 and MB3 also mention reliability and validity and again not all candidates included information on these. These should be mentioned after the tests as how the tests were administered could be commented on. The model assignment contains a witness statement and this should be used in conjunction with the evidence provided by the candidate.

LO4 – The majority of candidates were able to design and develop a training programme which included both the principles of training and the methods of training relating to the information gained in LO3. It is important to include the information gained in LO3 as a means of clarifying the aims of the programme. It is recommended that there is an introduction to the programme which includes information as detailed in the specification under 'design a fitness training programme'. The majority of candidates were able to show their understanding of the knowledge gained in LO1 and LO2 and put into practice what they have learned. In most cases candidates were also able to briefly evaluate the effectiveness of a training programme. In order to access MB3 it needs to be clear where the principles of training have been incorporated and the evaluation needs to be detailed and include ideas for improvement which are specific and justified. Assessors could complete a witness statement for this task and state what individual support and guidance the candidates were given as stated in the grading band. It is important to note that the training programme should be carried out by the subject it is designed for in order that the programme can be evaluated thus enabling the candidate access to MB3.

R043: The body's response to physical activity

LO1 - Candidates were able to locate, identify and describe key components of the musculo-skeletal and cardio-respiratory systems, together with their roles in producing movement and physical activity. Both were supported with a range of examples. Candidates need to comprehensively describe the role of the cardio-respiratory system in physical activity supported by a wide range of examples in order to achieve MB3. Candidates must reference their work, especially where diagrams taken from other sources are used, which is often the case.

LO2 – Many candidates were able to identify a range of benefits of cardio-respiratory fitness; however, some candidates focused on the signs and symptoms of the illnesses rather than how cardio-respiratory fitness could benefit them. The vast majority of candidates were able to identify the benefits of muscular strength and endurance and muscular flexibility this was supported with clear and relevant examples.

LO3 and LO4 – the evidence for these LO's asks for the short term and long term effects of exercise on the musculo-skeletal and cardio-respiratory systems to be identified, measured and recorded. Not all candidates had participated in tests and therefore they were not able to provide results which they could use as evidence for both short term and long term effects of exercise.

As the marking criteria for LO3 and LO4 also asks for a description of the adaptations recorded, this means that the evidence must relate to the results produced so that they will be specific to the activity/activities participated in rather than generic. Candidates have to include a description of the adaptations recorded and an explanation in order to access MB2 and MB3. In LO4 the long term effects are not always applied. Adaptations tend to be researched but not linked to the data/activities candidates have recorded. There is often little evidence of the timescale that has been considered for the long term activities.

LO3 draws upon skills/knowledge and understanding from other units and it is important that the centre assessor indicates where this has been acknowledged in their internal assessment.

R044: Sport psychology

LO1 – All candidates included a range of definitions of personality and provided information on the different personality types and approaches. Attempts were made to provide an explanation of the links between personality and sport. There needed to be more of a focus on supporting the links with a range of sporting examples and more in-depth descriptions. MB3 asks for comprehensive information on different personality types and approaches. The evidence for this needs to be more substantial than just a list.

LO2 – All candidates defined motivation and described the main theories. These theories were supported with clear and relevant examples of the implications for sport and exercise movement. MB3 asks for a comprehensive description of the main theories; centres need to ensure that candidates focus on all theories not just NACH and NAF where marks are being awarded in this band.

LO3 – All candidates identified a range of types and reasons for aggression. They described the theories of aggression supported by relevant examples. In order to access MB2 and MB3 candidates need to include a more in-depth description of the reasons for aggression and support these with a range of relevant sporting examples.

LO4 – All candidates explained the relationship between arousal and sport performance. They made reference to many theories of arousal/anxiety in relation to performance, supported by a range of examples. Some candidates included details and record sheets of two completed anxiety tests. Some candidates only provided evidence of carrying out one anxiety test. Candidates are required to carry out anxiety tests therefore the details/records of the two different anxiety tests they have carried out need to be included. There is a witness statement within the model assignment. It is recommended that this is used as part of the evidence for this LO.

LO5 – All candidates mentioned a range of psychological strategies in relation to enhancing performance. There tended to be limited application of sport psychology techniques to enhance sport performance. The emphasis need to be on the psychological strategies not on how to improve the skill itself. For MB2 and MB3 candidates need to produce a more detailed and comprehensive assessment of the impact on performance using relevant evaluation.

LO5 draws upon skills/knowledge and understanding from other units and it is important that the centre assessor indicates where this has been acknowledged in their internal assessment.

R045: Sports Nutrition

LO1 – All candidates were able to describe what nutrients are and their role within a healthy balanced diet. All candidates described the characteristics of a balanced diet. In order to access MB3 candidates need to comprehensively describe what nutrients are and their role in a balanced diet.

LO2 – All candidates were able to outline the importance of nutrition before, during and after exercise. Some candidates were able to identify different activity types and describe dietary requirements. All candidates described the use of dietary supplements and some demonstrated an understanding of the issues associated with their use. In order to access MB3, candidates need to show well developed understanding of the issues associated with their use.

LO3 – All candidates provided a definition of malnutrition. All candidates outlined the effects of over-eating, under-eating and dehydration; some made limited reference to sport participation and performance. In order to access MB2 and MB3 some candidates need to include a more in-depth description and make clearer reference to sports performance and participation than was often in evidence.

LO4 – Some candidates produced a diet plan and evaluated it. This LO states ‘be able to develop a diet plan for a sports performer’, therefore the diet should relate to someone who is a sports performer and wants to change their diet in order to improve performance. Some of the candidates designed diet plans for non-performers. In order to access the top of MB2 and MB3 these need to include more information on the timing of the meals and portion sizes. Also if the diet plan is for four weeks there should be a wider range of foods within the plans and there should be a plan for each of the four weeks. All candidates evaluated their plans in detail. It is important to note that the diet programme should be carried out by the subject who it is designed for in order that the programme can be evaluated, thus enabling the candidate full access to MB3.

LO3 draws upon skills/knowledge and understanding from other units and it is important that the centre assessor indicates where this has been acknowledged in their internal assessment.

R046: Technology in Sport

LO1 - Candidates outlined the use of technology to enhance performance, game play and spectatorship in sport, often giving a very limited range of examples. In order to access MB2 and MB3 candidates need to provide a more detailed description using more of the sub-headings in the specification and a better range of examples.

LO2 - Candidates were able to identify some possible positive effects of sports technology. Descriptions of these effects tended to be limited and not always linked to positive effects. In order to access MB2 and MB3 candidates need to provide a more detailed description using more of the sub-headings in the specification.

LO3 - Candidates were able to identify some possible negative effects of sports technology. In order to access MB2 and MB3 candidates need to provide a more detailed description using more of the sub-headings in the specification.

LO4 – All candidates were able to provide evaluations of varying quality of the impact of technology in a chosen sporting area. Most candidates described the use of this technology and some had relevant discussion of the impacts it had, in particular the impact of 'hawk eye' on sport. Attempts to make an overall judgement were limited for most candidates; those that were able to do this did so with some plausible justifications.

LO2 draws upon skills/knowledge and understanding from other units and it is important that the centre assessor indicates where this has been acknowledged in their internal assessment.

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

OCR Customer Contact Centre

Education and Learning

Telephone: 01223 553998

Facsimile: 01223 552627

Email: general.qualifications@ocr.org.uk

www.ocr.org.uk

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored

Oxford Cambridge and RSA Examinations
is a Company Limited by Guarantee
Registered in England
Registered Office; 1 Hills Road, Cambridge, CB1 2EU
Registered Company Number: 3484466
OCR is an exempt Charity

OCR (Oxford Cambridge and RSA Examinations)
Head office
Telephone: 01223 552552
Facsimile: 01223 552553

© OCR 2015

