

# **CAMBRIDGE NATIONALS**

Examiners' report

SPORT SCIENCE

**J802, J812** 

R042 (moderated) R043 (moderated) R044 (moderated) R045 (moderated) R046 (moderated) Summer 2018 series

Version 1



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## Introduction

Our Lead Moderators' reports are produced to offer constructive feedback on centres' assessment of moderated work, based on what has been observed by the moderation team. These reports include a general commentary of accuracy of internal assessment judgements; identify good practice in relation to evidence collation and presentation and comments on the quality of centre assessment decisions against individual Learning Objectives. This report also highlights areas where requirements have been misinterpreted and provides guidance to centre assessors on requirements for accessing higher mark bands. Where appropriate, the report will also signpost to other sources of information that centre assessors will find helpful.

OCR completes moderation of centre-assessed work in order to quality assure the internal assessment judgements made by assessors within a centre. Where OCR cannot confirm the centre's marks, we may adjust them in order to align them to the national standard. Any adjustments to centre marks are detailed on the Moderation Adjustments report, which can be downloaded from Interchange when results are issued. Centres should also refer to their individual centre report provided after moderation has been completed. In combination, these centre-specific documents and this overall report should help to support centres' internal assessment and moderation practice for future series.

## R042 General overview

All centres included a unit recording sheet with the candidate's work that was to be moderated. Centres need to ensure that all centre and candidate details are entered into the appropriate sections at the top of the unit recording sheet. Centres are also reminded that the final piece of work should not be presented in plastic wallets/folders or as loose sheets of paper, but treasury tagged with the URS as the front sheet.

This qualification requires centres to use one of the two model assignments provided by OCR. All centres have used the model assignments as required by OCR. Within the model assignment there is a witness statement the centre should adopt this for LO3. 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.

When submitting candidates work for moderation the work should have the unit recording sheet at the front followed by the evidence for each Learning Outcome in Learning Outcome order.

Where witness statements are used as part of the evidence centres must ensure that they are personalised and not generic. Only LO3 requires a witness statement as part of the evidence in this unit. Where the power point notes are included centres should ensure that the type size enables reading with ease.

Centres are reminded that the evidence produced must be produced solely by the individual candidate there is no group work in this qualification.

Centres should ensure that they have a robust internal standardisation process and that all deliverers are assessing to the same standard and that the same level of detailed evidence is produced both in terms of candidate work and witness statements. The work submitting should also be in chronological order and annotated according to LO's

#### LO1 – Know the principles of training in a sporting context

The majority of candidates were able to describe the principles of training in a sporting context and in some cases the candidates where able to support their work with very good examples from sport. In order to access MB3 candidates need to include detailed sporting examples which demonstrate an understanding of the principle they are associated with. Many candidates used recent examples. It would be beneficial if all candidates used sporting examples relating to the last four to five years.

#### LO2 – Know how training methods target different fitness components

All candidates were able to describe aerobic and anaerobic exercise supported with relevant examples of training methods. All candidates identified the components of fitness. Many described them in great detail. The marking criteria only asks for identification so often candidates included too much detail in this section. All candidates mentioned training methods specific to the components of fitness. However, these were often briefly described. The focus of this LO is on the description of aerobic and anaerobic exercise and the descriptions of the training methods. A minority of candidates included the depth of description that is required for the training methods. In order to access MB3, where possible, there should be a detailed description of two different training methods for each component of fitness. 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. It is important that candidates include information on 'in combination' as without this they cannot achieve a mark in MB3. This could be evidenced by means of a section at the end of the LO detailing 'in combination'.

#### LO3 – Be able to conduct fitness tests

The majority of candidates correctly completed different fitness tests on individuals and were able to evaluate the recorded data. Candidates, where possible, should complete a fitness test for all of the components of fitness identified in LO2. The majority of candidates included a description of the tests participated. All candidates should include a detailed description of the test preferably with a diagram. MB2 and MB3 require candidates to interpret the tests with reference to normative data. It is important that every candidate includes the normative data that has been used for interpretation. MB2 and MB3 also mentions reliability and validity not all candidates included information on these. These should be mentioned after the tests as how the tests were administered could be commented on. In order to access MB3 candidates should include information relating to maximal and sub-maximal tests and the reason for the order in which the tests were carried out. Witness statements are an integral part of the evidence for this LO. Many centres completed a detailed witness statement. The model assignment contains a witness statement this should be used in conjunction with the evidence provided by the candidate rather than a generic OCR witness statement.

#### LO4 – Be able to develop fitness training programmes

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. Where balance and flexibility have been identified as weaknesses in LO3 they should be included as part of the areas to be improved within 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 provided a detailed six week training programme, this is the recommended time-scale for a 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 the candidates were also able to briefly evaluate the effectiveness of a training programme. In order to access MB3 it needs to be obvious where the principles of training have been incorporated and the evaluations needs to be more detailed to include ideas for improvement which are specific and justified. 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 to access to MB3. Therefore, candidates cannot base their training programme on professional athletes as they will not have been able to carry out the fitness tests on a professional athlete as is required for LO3.

## R043 General overview

All centres included a unit recording sheet with the candidate's work that was to be moderated. Centres need to ensure that all centre and candidate details are entered into the appropriate sections at the top of the unit recording sheet. Centres are also reminded that the final piece of work should not be presented in plastic wallets/folders or as loose sheets of paper, but treasury tagged with the URS as the front sheet.

This qualification requires centres to use one of the two model assignments provided by OCR. All 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.

When submitting candidates work for moderation the work should have the unit recording sheet at the front followed by the evidence for each Learning Outcome in Learning Outcome order.

No witness statements are required as evidence for any LO in this unit. Where the power point notes are included centres should ensure that the type size enables reading with ease.

Centres are reminded that the evidence produced must be produced solely by the individual candidate there is no group work in this qualification.

Centres should ensure that they have a robust internal standardisation process and that all deliverers are assessing to the same standard and that the same level of detailed evidence is produced both in terms of candidate work and witness statements. The work submitting should also be in chronological order and annotated according to LO's

# LO1 – Know the key components of the musculo-skeletal and cardio-respiratory systems, their functions and roles

The majority of candidates were able to locate, identify and describe key components of the musculo-skeletal and cardio-respiratory systems which are the requirements for the first part of the marking criteria for this LO. The second part of the marking criteria for this LO requires candidates to describe the role of the musculo-skeletal system in producing movement supported with examples. The majority of candidates provided evidence linking the musculo-skeletal system and movement. This part of the LO also requires candidates to describe the role of the cardio-respiratory system in physical activity supported with a range of examples. In order to achieve a mark even at the top of MB1 this needs to be mentioned. The majority of candidates do not provide enough detail in this section which limits their ability to achieve above MB1 for the second part of the LO. To achieve a mark in either MB2 or MB3 for the second part of the LO there needs to be a detailed description focusing on movement and physical activity supported by a wide range of examples.

# LO2 – Understand the importance of the musculo-skeletal and cardio-respiratory systems in health and fitness

The majority of candidates were able to identify a range of benefits of cardio-respiratory fitness in everyday life. However, some candidates focused on the signs and symptoms of the illnesses rather than how cardio-respiratory fitness could prevent or reduce the illnesses. The 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. In order to access MB3 the examples should relate to everyday life and sport.

### LO3 – Be able to assess the short-term effects of physical activity on the musculoskeletal and cardio-respiratory systems

The evidence for this LO asks for the short term effects of exercise on the musculo-skeletal and cardiorespiratory systems to be identified, measured and recorded. Some candidates evidenced participation in tests, however, not all candidates had participated in tests therefore they were not able to provide the evidence (results) on which they could base their evidence to support the adaptations for both short term and long term effects of exercise. Often candidates produced generic information on the short term effects of physical activity on the musculo-skeletal and cardio-respiratory systems. Many candidates participated in tests and provided generic information. In order to access the top of MB2 and MB3 candidates have to include a description of the adaptations recorded and an explanation of why the adaptations on the musculo-skeletal and cardio-respiratory systems occurred. In order to evidence this there needs to be linkage between the data recorded and the generic information and the adaptations. It is recommended that centres refer to the specification with reference to the effects on the body systems.

## LO4 – Be able to assess the long-term effects of physical activity on the musculoskeletal and cardio-respiratory systems

The evidence for this LO asks for the long term effects of exercise on the musculo-skeletal and cardiorespiratory systems to be identified, measured and recorded. Some candidates evidenced participation in tests, however, not all candidates had participated in tests therefore they were not able to provide the evidence (results) on which they could base their evidence to support the adaptations for both short term and long term effects of exercise. There is often little evidence of the time-scale that has been considered for the long term activities. Often candidates produced generic information on the long term effects of physical activity on the musculo-skeletal and cardio-respiratory systems. Many candidates participated in tests and provided generic information. In order to access the top of MB2 and MB3 candidates have to include a description of the adaptations recorded and an explanation of why the adaptations on the musculo-skeletal and cardio-respiratory systems occurred. In order to evidence this there needs to be linkage between the data recorded and the generic information and the adaptations. It is recommended that centres refer to the specification with reference to the effects on the body systems and ensure that suitable tests are carried out in order to provide the evidence of adaptations. Often the training programme designed for R042 LO4 is used. Where this is used the centre needs to ensure that additional tests are carried out in order to gain the necessary evidence for this LO.

## R044 General overview

All centres included a unit recording sheet with the candidate's work that was to be moderated. Centres need to ensure that all centre and candidate details are entered into the appropriate sections at the top of the unit recording sheet. Centres are also reminded that the final piece of work should not be presented in plastic wallets/folders or as loose sheets of paper, but treasury tagged with the URS as the front sheet.

This qualification requires centres to use one of the two model assignments provided by OCR. All 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.

When submitting candidates work for moderation the work should have the unit recording sheet at the front followed by the evidence for each Learning Outcome in Learning Outcome order.

Where witness statements are used as part of the evidence centres must ensure that they are personalised and not generic. Only the last section of LO4 requires a witness statement as part of the evidence in this unit. Where the power point notes are included centres should ensure that the type size enables reading with ease.

Centres are reminded that the evidence produced must be produced solely by the individual candidate there is no group work in this qualification.

Centres should ensure that they have a robust internal standardisation process and that all deliverers are assessing to the same standard and that the same level of detailed evidence is produced both in terms of candidate work and witness statements. The work submitting should also be in chronological order and annotated according to LO's

### LO1 – Understand the relationship between personality and sports performance

The majority of candidates included a range of definitions of personality and provided information on the different personality types and approaches. Where definitions are included they must be referenced and interpreted in the candidates own words. Attempts were made to provide an explanation of the links between personality and involvement and performance in sport. In order to access the top of MB2 and MB3 although candidate have defined the personality traits, many need to focus more on the inclusion of a range of sporting examples which explain accurately and in detail the link between personality and performance in sport.

#### LO2 – Know how motivation can affect sports performance

The majority of candidates defined motivation and described the main theories. Where definitions are included they must be referenced and interpreted in the candidates own words. To access MB2 and above candidates need to focus more on supporting the theories with relevant examples of the implications for sport and exercise.

#### LO3 – Know how aggression can affect sports performance

The majority of 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 – Understand the impact of arousal and anxiety on sports performance

The majority of candidates explained the relationship between arousal and sport performance. They made reference to the theories of arousal/anxiety in relation to performance and supported the theories with a range of examples. Many candidates had completed two anxiety tests and interpreted the results. The two completed anxiety tests must be included as part of the evidence. There should be evidence of the candidates completing two different anxiety tests not one test on two separate clients.

# LO5 – Be able to apply sport psychology strategies to enhance sports performance

The majority of candidates initially provided generic descriptions of psychological strategies. Some candidates mentioned a range of psychology strategies in relation to enhancing performance and applied them to a selected performer. It is recommended that the candidates refer to their performer, where appropriate, within the strategies when they are initially described. For MB2 and MB3 candidates need to produce a more detailed/comprehensive assessment of the impact on performance using relevant evaluation.

It would be beneficial if candidates used sporting examples relating to the last four to five years when linking LO's 1 to 4 to relevant supporting evidence.

## R045 General overview

All centres included a unit recording sheet with the candidate's work that was to be moderated. Centres need to ensure that all centre and candidate details are entered into the appropriate sections at the top of the unit recording sheet. Centres are also reminded that the final piece of work should not be presented in plastic wallets/folders or as loose sheets of paper, but treasury tagged with the URS as the front sheet.

This qualification requires centres to use one of the two model assignments provided by OCR. All 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.

When submitting candidates work for moderation the work should have the unit recording sheet at the front followed by the evidence for each Learning Outcome in Learning Outcome order.

No witness statements are required as evidence for this unit. Where the power point notes are included centres should ensure that the type size enables reading with ease.

Centres are reminded that the evidence produced must be produced solely by the individual candidate there is no group work in this qualification.

Centres should ensure that they have a robust internal standardisation process and that all deliverers are assessing to the same standard and that the same level of detailed evidence is produced both in terms of candidate work and witness statements. The work submitting should also be in chronological order and annotated according to LO's

#### LO1 - Know about the nutrients needed for a healthy, balanced diet

The majority of candidates were able to describe most of the characteristics of a balanced diet, as well as describing in detail what nutrients are and their role within a healthy balanced diet giving a range of examples. The focus for this LO should be on generic information on what constitutes a balanced diet and then, where appropriate, applied to a sporting context. In order to access MB3 it is important that candidates include detailed information on all nutrients and their role in a healthy balanced diet together with food sources.

#### LO2 – Understand the importance of nutrition in sport

The majority of candidates were able to briefly describe the importance of nutrition before, during and after exercise, as well as identifying a range of different activity types and describe dietary requirements for these. It is recommended that there are two separate sections to this part of the LO as there needs to be a distinction between the generic description of the importance of nutrition before, during and after exercise and the evidence provided for a range of sports. An endurance sporting activity an anaerobic sporting activity and a strength based activity were the focal points of the second section of this LO. Often candidates included a generic description of the nutritional requirements of the sport and some included the nutritional requirements before, during and after participating in these activities. The majority of candidates briefly describe the use of dietary supplements with limited awareness to why they are used in sport. In order to access the top of MB2 and MB3 for the supplement section of this LO, there needs to be reference to the sports they are associated with and understanding of the issues associated with their use with reference to a performer's health.

# LO3 – Know about the effects of a poor diet on sports performance and participation

The majority of candidates were able to define malnutrition. Where definitions are included they must be referenced and interpreted in the candidates own words. The majority of candidates explained what over-eating and under-eating were often describing being obese and becoming anorexic. The focus of this LO is the effects of over-eating, under-eating and dehydration on sports performance and participation often there was limited reference to this. The focus needs to be on sports performance and participation rather than on descriptions of medical issues associated with over-eating and under-eating.

#### LO4 – Be able to develop diet plans for performers

The majority of candidates were able to develop a diet plan, which incorporated many of the specific needs and requirements identified in the aims, as well as provide an evaluation, which reflected on many aspects of the design and completion of the diet plan. It is recommended that in order to access the top of MB2 and MB3 candidates produce a two-week diet plan – which they might repeat for a further two weeks - in order to ensure that the diet plan is of a suitable length to achieve the goals set. In order to access MB3 candidates should include portion sizes and amounts of liquid to be consumed. Centres are reminded that the candidate must be able to interview 'face to face' the person who they are developing the diet plan for. Therefore, candidates cannot base their diet plan on professional athletes as they will not have been able to personally interview them.

## R046 General overview

All centres included a unit recording sheet with the candidates' work that was to be moderated. Centres need to ensure that all centre and candidate details are entered into the appropriate sections at the top of the unit recording sheet. Centres are also reminded that the final piece of work should not be presented in plastic wallets/folders or as loose sheets of paper, but treasury tagged with the URS as the front sheet.

This qualification requires centres to use one of the two model assignments provided by OCR. All 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.

When submitting candidates work for moderation the work should have the unit recording sheet at the front followed by the evidence for each Learning Outcome in Learning Outcome order.

No witness statements are required as evidence for this unit. Where the power point notes are included centres should ensure that the type size enables reading with ease.

Centres are reminded that the evidence produced must be produced solely by the individual candidate there is no group work in this qualification.

Centres should ensure that they have a robust internal standardisation process and that all deliverers are assessing to the same standard and that the same level of detailed evidence is produced both in terms of candidate work and witness statements. The work submitting should also be in chronological order and annotated according to LO's

### LO1 – Know how technology is used in sport

The majority of candidates described the use of technology to enhance performance, game play and spectatorship in sport giving a limited range of examples. Those candidates who accessed MB3 included each of the three sub-headings in the specification:- how technology is used to enhance performance; how technology is used to enhance game play and how technology is used to enhance spectatorship and their associated sub-headings as the focus of their descriptions. It is recommended that where it is feasible the majority of sporting examples are taken from the UK.

#### LO2 – Understand the positive effects of sports technology

The majority of candidates were able to identify possible positive effects of sports technology. Those candidates who accessed MB3 included each of the three sub-headings in the specification:- in performance; in game play; in spectatorship and other positive effects and their associated sub-headings as the focus of their descriptions. It is recommended that where it is feasible the majority of sporting examples are taken from the UK.

#### LO3 – Understand the negative effects of sports technology

The majority of candidates were able to identify possible negative effects of sports technology. Those candidates who accessed MB3 included each of the three sub-headings in the specification:- in performance; in game play; in spectatorship and other negative effects and their associated sub-headings as the focus of their descriptions. It is recommended that where it is feasible the majority of sporting examples are taken from the UK.

### LO4 – Be able to evaluate the impact of technology in sport

The majority of candidates were able to evaluate the impact of technology. The focus of this LO is to look at one aspect of technology and how it is applied in either one sporting activity or a range of sports. The majority of candidates evaluated the aspect of technology. In order to access MB3 there needs to be a more detailed and justified overall judgement on the impact the technology has had and how it has been applied and adapted.

## Supporting you

For further details of this qualification please visit the subject webpage.

### **Review of results**

If any of your students' results are not as expected, you may wish to consider one of our review of results services. For full information about the options available visit the <u>OCR website</u>. If university places are at stake you may wish to consider priority service 2 reviews of marking which have an earlier deadline to ensure your reviews are processed in time for university applications.

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