Applied Science

OCR GCE Unit G633 Ecology and Managing the Environment

Unit Recording Sheet

Please read the instructions printed at the end of this form. **One** of these sheets, suitably completed, should be attached to the assessed work of **each** candidate.

Unit Title	**Ecology and Managing the Environment**	**Unit Code**	**G633**	**Session**	Jan / June	**Year**	**2**	**0**		
Centre Name					**Centre Number**					
Candidate Name					**Candidate Number**					

Evidence: The candidate needs to produce evidence of their investigation on ecology and managing ecosystems.

Criteria			Teacher Comment	Mark	Page No.
AO1(a).1: Candidate will demonstrate a basic knowledge and understanding of the relationship between the organisms, their physical environment and each other in ecological succession; **[0 1]**	AO1(a).2: candidate will demonstrate a sound knowledge and understanding of the relationship between the organisms, their physical environment and each other in ecological succession; candidate will use appropriate scientific terms and conventions accurately; **[2 3]**	AO1(a).3: candidate will demonstrate a thorough knowledge and understanding of the relationship between the organisms, their physical environment and each other in ecological succession; candidate will use appropriate scientific terms and conventions accurately. **[4 5]**			
AO1(b).1: Candidate will research the effect of agricultural practice, human habitation and greenhouse gas production on ecosystems and biodiversity, selecting information and presenting it clearly, using correct spelling, punctuation and grammar; **[0 1]**	AO1(b).2: candidate will research the effect of agricultural practice, human habitation and greenhouse gas production on ecosystems and biodiversity, selecting a wide range of information, giving reasons for their choice of resources, and presenting it clearly and logically, generally using correct spelling, punctuation and grammar; **[2 3]**	AO1(b).3: candidate will research the effect of agricultural practice, human habitation and greenhouse gas production on ecosystems and biodiversity, selecting a wide range of relevant information and presenting it clearly and logically, using correct spelling, punctuation and grammar throughout; candidate will evaluate the information available and justify the choice that they have included. **[4 5]**			
AO2(a).1: Candidate will identify some of the scientific, moral and ethical reasons for preserving ecosystems and species diversity; **[0 1]**	AO2(a).2: candidate will identify and explain the scientific, moral and ethical reasons for preserving ecosystems and species diversity; **[2 3]**	AO2(a).3: candidate will organise information to evaluate the scientific, moral and ethical reasons for preserving ecosystems and species diversity. **[4]**			

Criteria			Teacher Comment	Mark	Page No.
AO2(b).1: Candidate will describe some of the methods used to manage ecosystems and preserve species diversity; candidate will give a limited interpretation of information relating to the success of a project managing one ecosystem; **[0 1]**	AO2(b).2: candidate will describe methods used to manage ecosystems and preserve species diversity; candidate will describe and interpret data relating to the success of a project managing one ecosystem; **[2 3]**	AO2(b).3: candidate will describe a range of methods used to manage ecosystems and preserve species diversity; candidate will interpret, explain and evaluate a range of data relating to the success of a project managing one ecosystem. **[4 5]**			
AO2(c).1: Candidate will carry out straightforward calculations on ecological data (e.g. mean, standard deviation) and will sometimes obtain the correct solutions; **[0 1]**	AO2(c).2: candidate will carry out complex calculations on ecological data, involving some use of statistics (e.g. diversity indices) and obtaining the correct solutions; **[2 3]**	AO2(c).3: candidate will carry out complex calculations on ecological data involving the statistical analysis of the data obtained (e.g. chi-squared or t test); candidate will obtain the correct solutions to an appropriate degree of accuracy and demonstrate an understanding of the significance of the outcomes. **[4 5]**			
AO3(a).1: Candidate will produce risk assessments; candidate will carry out measurements of some factors affecting the ecosystem that the candidate studied, using a range of techniques and equipment; **[0 1 2 3 4]**	AO3(a).2: candidate will produce risk assessments, consistent with COSHH guidelines; candidate will carry out measurements of factors affecting the ecosystem that the candidate studied, using a range of techniques and equipment; candidate will have repeated measurements, working with an appropriate degree of accuracy; **[5 6]**	AO3(c).3: candidate will produce their own detailed risk assessments, consistent with COSHH guidelines; candidate will carry out measurements of a wide range of factors affecting the ecosystem that the candidate studied and explain why they used a range of techniques and equipment; candidate will explain the need to have repeated measurements, and work with an appropriate degree of accuracy. **[7 8]**			
AO3(b).1: Candidate will make and record relevant observations and measurements in the ecosystem; **[0 1 2]**	AO3(b).2: candidate will make and record relevant observations and measurements in the ecosystem, using precision in their measurements; **[3 4]**	AO3(b).3: candidate will make and record a detailed set of relevant observations and measurements in the ecosystem, using the appropriate precision in their measurements. **[5 6]**			

Criteria			Teacher Comments	Mark	Page No.
AO3(c).1: Candidate will display the ecological data obtained using tables, with help; **[0 1]**	AO3(c).2: candidate will display the ecological data accurately in a range of ways; **[2 3]**	AO3(c).3: candidate will process and display accurately ecological data in a range of ways chosen to best illustrate the trends in the data **[4]**			
AO3(d).1: Candidate will give some interpretation of the results and relate these to the occurrence and distribution of species within the ecosystem studied; **[0 1 2 3 4]**	AO3(d).2: candidate will interpret the results, and draw basic conclusions, relating their results to the occurrence and distribution of species within the ecosystem studied; **[5 6]**	AO3(d).3: candidate will interpret the results in detail, and draw conclusions relating their results to the occurrence and distribution of species within the ecosystem studied. **[7 8]**			
			Total/50		

If this work is a re-sit, please tick		Session and Year of previous submission	Jan / June	**2**	**0**			Please tick to indicate this work has been standardised internally	

Please note: This form may be updated on an annual basis. The current version of this form will be available on the OCR website (www.ocr.org.uk).
A completed Centre Authentication form CCS160 **must** accompany the MS1 when it is sent to the moderator.

Guidance on Completion of this Form

1 **One** sheet should be used for each candidate.
2 Please ensure that the appropriate boxes at the top of the form are completed.
3 Please enter *specific* page numbers where evidence can be found in the portfolio, and where possible, indicate to which part of the text in the mark band the evidence relates.
4 Circle the mark awarded for each strand of the marking criteria in the appropriate box and also enter the circled mark in the final column.
5 Add the marks for the strands together to give a total out of 50. Enter this total in the relevant box.