



ASSESSMENT and  
QUALIFICATIONS  
ALLIANCE

# Mark scheme

# June 2003

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## GCE

## Archaeology

### Unit ACH2

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**ACH2****Post-Excavation, Dating and Interpretation****Question 1**

Study Figure 1 and use your own knowledge.

Outline the process by which archaeologists arrived at the dates in the right hand column. (8 marks)

- L1: Responses which recognise Radiocarbon dating or those which just describe how C14 is formed or decays. **1**
- L2: Generic radiocarbon responses. Some aspects of RC analysis without reference to the table **or** responses which just translate the abbreviations used without discussing process. **2-4**
- L3: Responses which explain 2 specific elements of the table (e.g. error margin and calibration) or 1 element plus generic account. **5**
- L4: Accurate account of the stages in the process with close reference to the table. **6-8**

e.g. Lab analysis of organic sample (see reference number) to establish ratio C12:C14

- Calculation based of known decay rates to obtain Before Present date.
- Conversion to raw (uncalibrated date BC).
- Calibration against tables derived from dendrochronology.
- New Cal BC date.
- Explanation of standard deviation and 68% degree of confidence/accuracy.

Credit (within bands) awareness that the RC date could date the context. Also credit (but do not expect) relevant details related to sampling and the relative value of antler/charcoal as sources of samples.

**Question 2**

Study Figure 2.

Snail samples were taken from the Site IV enclosure, which is located near the centre of the site plan.

What do the snail samples reveal about the environment around the site? (8 marks)

- L1: Incomplete or muddled responses which show some understanding. Generic information about value of snails (specialised/do not move far). **1**
- L2: Demonstrates some ability to ‘read’ the table. Broad trends described. Simply identifying wood-grass without elaboration = 2. Typical responses will comment on rate of change or relate to date or sample. **2-4**
- L3: L2 plus the value of snails. **5**

- L4: Responses able to analyse the table in detail. This may entail ‘reading’ off relative percentages or cross-referencing changes in the molluscan evidence to episodes in the soils column. Candidates may see greater complexity to the sequence e.g. the persistence of ‘intermediate species’, possible tree regeneration or the reduction in mollusc variety. **6-8**

Credit relevant understanding of limitations or other relevant specialist knowledge at top of relevant band.

### Question 3

Study Figure 3 and use your own knowledge.

Data from Mount Pleasant has contributed to our understanding of environmental change across a wide area of the south of England.

Apart from snails, how might archaeologists have used other sources to construct Figure 3? (10 marks)

- L1: Brief lists including some relevant sources or accounts of how a range of relevant methods are used. Or responses which only focus on the period column. **1-2**
- L2: Relevant (to this environment) lists but without development or the value of 1-2 methods/sources in constructing this table. **3-5**
- L3: Broad range of relevant methods/sources outlined but what they can tell us is only discussed in a generic way. **6-7**
- L4: Good range of relevant methods/sources clearly related to this table. This may be period-by-period or method-by-method. **8-10**

Credit at top of bands 2-4 responses which also address sequences or periods.

Do not expect a complete range of methods to be mentioned for maximum marks. Do not reward material on sites unless directly relevant. Pollen, beetles, faunal data, site catchment analysis, tree rings, other plant remains, soils, historical records, phosphate analysis (if explained) etc. Also credit (but do not expect) non-specification examples e.g. Varves, sea cores. Credit artefacts within bands but do not use to move between them.

### Question 4

Study Figure 4 and use your own knowledge.

The bronze axe was 91% copper and 8.62% tin with minute amounts of iron, silver, nickel, cobalt, cadmium and arsenic. The archaeologists classified it as a probable Irish Axe from the Early Bronze Age.

How were they able to reach these conclusions? (9 marks)

There are 3 related parts to the answer: composition, source and period.

- L1: Plausible but wrong. **1**
- L2: Brief or generalised consideration of a narrow range of relevant lines of enquiry or scattergun responses including lists which contain some relevant methods. Expect an awareness of the possibility of using characterisation to help identify source for 3. **2-3**
- L3: Particularly good responses which only address typology or 1 part of the question. **4**
- L4: Sound but unbalanced responses or those which are basically correct on at least 2 aspects but which lack technical accuracy. **5-7**
- L5: Good, relevant responses on at least characterisation and typology. **8-9**

Where period (or all 3 aspects) is also explained, push up within bands.

For characterisation expect at least an implicit understanding of the concept of chemical fingerprinting through identification of trace elements by a relevant method (e.g. Lead Isotope Analysis, NAA, XRF, AAS, Spectrometry). If destructive methods are advocated they should be justified for highest marks. Beware of responses which just list petrology or which just state the need for ‘chemical analysis’, these get 0. Microwear analysis is unlikely to be relevant although seriation can be argued. For dating, credit contextual finds without the band.

### Question 5

Study Figures 5(a) and 5(b).

What can these tables tell us about diet in the Bronze Age? (7 marks)

- L1: Face value responses based on the relevant row from first table, e.g. more pigs eaten (5a) or cattle more important (5b) or descriptive responses which add nothing. **1-2**
- L2: More sophisticated but partial responses. These are likely to either link the second table to discuss relative size and use of particular animals or combine L1 with an identification of potential problems e.g. small sample size or generic problems with NISP/MNI. **3-5**
- L3: Able to interpret several elements of each table and place them in a wider perspective, e.g. good answers on patterns and problems such as foods not recorded (plants etc) and possible problems in recovering remains of smaller fauna. **6-7**

Max of 4 marks for taking the tables completely at face value. They must recognise potential limitations for more.

### Question 6

Study Figures 6(a) and 6(b).

The posts of the palisade were set in a 2.5 to 3 metres deep trench. Charcoal suggested that the uprights had been posts made of oak.

What are the strengths and weaknesses of the reconstruction shown in Figure 6(a)? (8 marks)

There are 3 main elements to this answer. Dimensions and alignment in relation to the plan, height, above ground design.

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L1:	Outlines the generic 3:1 theory or just considers 'realistic look' in detail.	<b>1</b>
L2:	Combines strengths/weaknesses of 1 element or weak response on 2.	<b>2-4</b>
L3:	Considers strengths/weaknesses of 2 elements or variable response on 3.	<b>5-7</b>
L4:	Considers strengths/weaknesses of 3 elements.	<b>8</b>

If partial (e.g. strengths, not weaknesses), go low in relevant band. Responses which just consider whether it looks 'realistic' or whether it would work as a defence = 0 marks. Do not credit either assertions that Bronze Age people could not have made something that big or responses which just draw on knowledge of timber enclosures without reference to the source. Credit (but do not expect) discussion of possible analogs in relation to design. Also credit (but do not expect) knowledge of particular types of timber and their characteristics in terms of shape and use in structures.