

Mark Scheme (Results)

January 2012

**ELBS Environmental & Land Based
Studies (ES205) Paper 01**
PLANTS & ANIMALS-ROLE

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications come from Pearson, the world's leading learning company. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information, please call our GCE line on 0844 576 0025, our GCSE team on 0844 576 0027, or visit our qualifications website at www.edexcel.com. For information about our BTEC qualifications, please call 0844 576 0026, or visit our website at www.btec.co.uk.

If you have any subject specific questions about this specification that require the help of a subject specialist, you may find our Ask The Expert email service helpful.

Ask The Expert can be accessed online at the following link:

<http://www.edexcel.com/Aboutus/contact-us/>

Pearson: helping people progress, everywhere

Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

January 2012

Publications Code DP030449

All the material in this publication is copyright

© Pearson Education Ltd 2012

Question number	Answer	Mark
1	1 mark each. Line 1: 'have no seeds' Line 2: 'Flowering' Line 3: 'Conifers'	(3)

Question number	Answer	Mark
2(a)	Flowers grown in nursery 1 mark	(1)

Question number	Answer	Mark
2(b)	3 simple reasons – 1 mark each. Nursery=plants worth a lot of money; protected= high costs less profit; G'h flowers grown all year/produce more cf to f. flowers; g'h can grow exotic/valuable flowers cf to hardy f. flowers; g'h can control inputs (fertiliser, water, temp) field is open to chance. OR 2 simple reasons + development/detail e.g. names of species – daffodils/ orchids; details of protected cultivation –heating, hydroponics, etc; details of field cultivation - seasonal, manual, high labour costs, more risk OR overall statement identifying pattern – Difference between input costs/revenue; changes in buying patterns e.g. wealthier/technology e.g. central heating, gm/selling venues e.g. supermarkets, service stations	(3)

Question number	Answer	Mark
3(a)	1 mark per simple description , max 2 marks. E.g. intensive – large no's held in small area/pens, fed on fodder brought in; extensive – cattle are free over a wide area, feed on natural pasture Development and/or detail, up to 2 marks. E.g. intensive – cattle fed with energy/protein rich maize with supplements to encourage fast growth; extensive – out all or most of year, very large farms, 500 acres/200ha, few cattle per ha, examples – ranches, Australian outback, pampas UK examples of extensive could be cited, eg Upland herds, grass fed beef and extensive lowland suckler herds.	(4)

Question number	Answer	Mark
3(b)	1 mark per simple advantage up to max 2 marks e.g. if a list. e.g. select/produce required attribute – lean meat, full cream milk. Extra marks for development/specifics e.g. Aberdeen Angus small legs/large bodies= more meat, Friesians very large milk producers	(4)

Question number	Answer	Mark
4(a)	<p>More likely to be FRUIT or VEG but could be any if answer well argued.</p> <p>1 mark per simple reason e.g. fruit expensive/delicate/perishable, aesthetics important (customers won't buy bruised fruit. Delicate easily damaged so quality is important Used/eaten in small quantities therefore expensive, quality important Rapidly perishable so quality is important/ Quality important to retailers - severe competition need to keep satisfied customers (quality)). Up to 2 marks max Further 2 marks for development/detail/specifics/clear reasoning/linking of several factors</p>	(4)

Question number	Answer	Mark
4(b)	<p>More likely to be CEREALS but could be any if answer well argued.</p> <p>1 mark per simple reason Used/eaten in bulk, quality is not so important. Not delicate, aesthetics not important, long life span therefore cheap, low intrinsic value – important to sell in quantity. Quantity important to retailers - severe competition to produce cheap food (quantity). Up to 2 marks max Further 2 marks for development/detail/specifics/clear reasoning/linking of several factors</p>	(4)

Question Number	Indicative Content	
5	Morality, purchasing power, monitoring, the law, publicity, exposure, funding/donations, education/public awareness	
Level	Mark	Descriptor
	0	No rewardable material
1	1-2	Up to 1mark for simple one way influence e.g. supermarket can influence ARGs through funding/donations
2	3-4	Up to 3 marks total for simple one way influences for each of groups OR 1 influence developed e.g. purchasing power of religious group could influence a supermarket to promote a range of associated products or give prominence to that religion within its store
3	5-6	Up to 6 marks total. Must have at least 2 groups developed, 2 or 3 way influences e.g. RSPCA checks supermarket suppliers with the threat of legal action/exposure, but the supermarket is happy because their customers are happier to buy RSPCA sanctioned meat, in return the supermarket sponsors the RSPCA (funding, events raising profile, sale of charity Christmas cards)

Question number	Answer	Mark
6(a)(i)	1 mark for any of Forestry Com/Horse riders; Forestry Com/Walkers; Horse riders/Walkers	(1)

Question Number	Indicative Content	
6(a)(ii)	Noise, danger, damage to property, frighten the horses, damage to the environment	
Level	Mark	Descriptor
	0	No rewardable material
1	1-2	1 mark per simple reason e.g. tree felling is dangerous to riders
2	3-4	Development/ detail added e.g. heavy machinery, chain saws dangerous to riders both within vicinity due to unregulated movement, and at a distance due to noise 'spooking' the horses. Up to 3 marks
3	5-6	Both High and Low level conflict reasons covered. Credit sophisticated understanding e.g. can be both high and low level conflict between same 2 groups; may vary over time/conditions; suggest results may be anomalous

Question Number		Indicative Content
6(b)		Disturb wildlife, change ecosystem, negative effects (soil erosion, less evapotranspiration, more run-off, less groundwater reserves), positive effects(sunlight, lower level plant growth, habitat diversity)
Level	Mark	Descriptor
	0	No rewardable material
1	1-2	1 mark per simple description of effects on FOREST – provides starting point for invasion by pest plant/animal species WATER SUPPLY – less ground water, dirtier water supplies VILLAGE – more exposed to wind, less bird life PATHS – more erosion, gulying 1 mark max.
2	3-4	Development/ detail added FOREST – penetration of sunlight encourages weeds and brambles which can invade adjoining forest WATER SUPPLY – less interception, less absorption, more runoff, less groundwater VILLAGE – loss of wind break, damage to fabric of buildings through water penetration and weathering PATHS - less interception, less absorption, more runoff, more erosion Up to 3 marks max
3	5-6	Technical/scientific detail e.g. Up to max 6 marks Understanding of positive and negative effects e.g. FOREST – health of trees may benefit from a more diverse habitat, reduce possible spread of disease, fire WATER SUPPLY – conifers tend to produce lateritic layers so a more varied planting will produce better drained soils and better quality water VILLAGE – a more varied wildlife and landscape will be more aesthetically pleasing PATHS – bridle paths under a conifer canopy become impassable in winter, clearing will allow them to dry out and allow them to be used more.

Question number	Answer	Mark
6(c)	Name/simple description of technique up to 2 marks. For further 2 marks add detail/make clear relevance of technique to required data.	(4)

Question number	Answer	Mark
6(d)	1 mark per recommendation e.g. leaflets, public meeting, display in town hall/library. Up to 2 marks OR 1 or 2 recommendations with detail/development/argument/justification. Up to 2 marks for the development/detail/etc., depending on quality e.g. public meeting would allow residents to have their say, town hall location would appear to give backing of council/experts. OR inappropriateness of method e.g. leaflets tend to be binned – up to 2 marks depending on quality	(4)

Further copies of this publication are available from
Edexcel Publications, Adamsway, Mansfield, Notts, NG18 4FN

Telephone 01623 467467

Fax 01623 450481

Email publication.orders@edexcel.com

Order Code DP030449 January 2012

For more information on Edexcel qualifications, please visit
www.edexcel.com/quals

Pearson Education Limited. Registered company number 872828
with its registered office at Edinburgh Gate, Harlow, Essex CM20 2JE

Ofqual
.....



Llywodraeth Cynulliad Cymru
Welsh Assembly Government

