UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS International General Certificate of Secondary Education

DEVELOPMENT STUDIES

0453/01

Paper 1

SPECIMEN MARK SCHEME

For Examination from 2008

Maximum mark: 80		

This document consists of 9 printed pages.



1	(a)	(i)	Loss/cutting down of trees/woodland/forests	[1]
		(ii)	2 200 000 km ²	[1]
		(iii)	450 000 km ²	[1]
		(iv)	Nigeria.	[1]
		(v)	Three of following reasons for why land is being cleared for farming: Shortage of land/population pressure/population growth Grow more cash crops/ more food/ to earn more from land Get land for grazing Commercial farming Loss of soil fertility (on existing land) Opening up land virgin land Building of homes for farming population Building of dams.	[3]
		(vi)	Two of following reasons for use of wood for fuel: It is cheap/ free/ other fuels are expensive No alternatives/it is available It gives a lot of heat/ a good fuel.	[2]
	(b)	(i)	Two of following causes: Emissions of pollutants from factories Emissions of pollutants from cars Emissions from volcanic eruptions.	[2]

(ii) Either description of effects on human health:

Increases in gaseous pollutants/sulphur dioxide and nitrogen oxide which interact with moisture and sunlight to create smog leading to increased incidence of bronchitis, asthma, and lung cancer and other diseases.

Or description of effects on lakes and rivers:

Increased acidification and damage to river, lakes and forests causing trees to wither and die and killing fish, causing a decline in fish populations and damaging other wildlife and food chains. [3]

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(c) Explanation of benefits of conserving the world's natural environment:

Levels marking:

Level 1 (1 or 2 marks)

Simple statements, with basic points made

e.g. global warming will be slowed down, it will prevent the loss of valuable plant and animal species, soil erosion on mountain slopes will be prevented/ slowed.

Level 2 (3 or 4 marks)

A sound attempt to explain with points being developed or exemplified e.g. global warming will be slowed because the trees and forests absorb carbon dioxide, it will prevent the loss of valuable plant and animal species which may be of value in the future for medicines and biodiversity will be maintained.

soil erosion on mountain slopes will be prevented/slowed and this will help to prevent rivers being silted and flooding.

Level 3 (5 or 6 marks)

A comprehensive attempt to explain with points being developed and exemplified e.g. global warming will be slowed because the trees and forests absorb carbon dioxide and this will help to lower the level of CO² in the atmosphere.

it will prevent the loss of valuable plant and animal species which may be of value in the future for medicines, biodiversity will be maintained and valuable ecosystems/habitats will be saved. Soil erosion on mountain slopes will be prevented/ slowed and this will help to prevent rivers being silted and the flooding of rivers valleys and loss of life and good agricultural land.

[6]

[Total 20 marks]

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2	(a)	(i) C	One basic need <i>either</i> shelter <i>or</i> clean water.	[1]
		(ii)	Two: Food Health care Education NOT "human rights"	[2]
	(b)	(i)	Democracy	[1]
		(ii)	One example:	
			Ethnic groups or e.g. Elderly/ third age/ old people/ pensioners Religious groups or e.g. Prisoners Children Disabled people Immigrants/ non-citizens/ refugees/ foreigners Slaves Homosexuals/ lesbians Low castes/ low class/ illiterates/ignorant people/ farm workers/ contract workers Allow 1 mark for relevant nationalities e.g. Chinese/ Cubans etc NOT "rural people" in general NOT unemployed	[1]
		(iii)	Description making two points: It is important so that people: are equal/ have same rights/ have equal fulfilment/ to be fair are not imprisoned without trial/ receive a fair trial have equal political power and have the right to vote/ elect leaders can say what like / write/ criticise/ have freedom of speech are treated equally whatever sex/ race/ etc can live without fear/ in safety have right to education are free to meet together/ form unions/ freedom or association	[2]
		(iv)	Description making some of following economic points: a country needs to conserve its resources so that they do not run out, so that they are not wasted on activities that do not increase wealth resources need to be used to build up the countries economy, so that all its citizens can share in an increased standard of living resources should be used just to benefit everyone and not just those who are already rich.	[3]
	(c)	(i)	One mark: Give women control over their own lives or give women equality in all aspects of life with men.	[1]
		(ii)	Three ways: Quotas for women parliamentary candidates. Appoint a Minister for women's affairs. Encourage the setting up of women's groups in local affairs. Creches for MPs' children in parliament. End discrimination/ change cultural attitudes/ educate more women etc.	[3]
		(iii)	Explanation of how social and economic factors work together to hold back gender	

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equality

Levels marking:

Level 1 (1 or 2 marks)

Simple statements, with basic points made

e.g. US\$1 is not enough to live on

if you are poor you cannot afford education or health care

if women do not hold parliamentary seats there will be no one to speak for them

if you are not educated you cannot get a good job

with poor medical care many women will die in childbirth

Level 2 (3 or 4 marks)

A sound attempt to explain with points being developed or exemplified

e.g. US\$1 is not enough to live on, and many women will not have enough money to buy good food.

if you are poor you cannot afford education or health care, so many women will suffer from ill health and not be able to have a regular job

if women do not hold parliamentary seats there will be no one to speak for them, so women's issues will not be discussed in parliament.

if you are not educated you cannot get a good job so women will be forced to stay in menial poorly paid jobs.

with poor medical care many women will die in childbirth, there will be poor baby care and this will lead to poor health in the general population, especially women and girls.

Level 3 (5 or 6 marks)

A comprehensive attempt to explain with points being developed and exemplified e.g. US\$1 is not enough to live on, and many women will not have enough money to buy good food, which will lead to malnutrition especially among children and women.

if you are poor you cannot afford education or health care, so many women will suffer from ill health and not be able to have a regular job so that they can earn enough to get them out of the trap of the vicious cycle of poverty.

if women do not hold parliamentary seats there will be no one to speak for them, so women's issues will not be discussed in parliament, laws will not be passed to give women equal rights and improvements will not be made to give women equal opportunities to education, medical care and jobs.

if you are not educated you cannot get a good job so women will be forced to stay in menial poorly paid jobs, working mainly in agriculture, or the informal sector.

with poor medical care many women will die in childbirth, there will be poor baby care and this will lead to poor health in the general population especially women and girls, this will have a long term effect on the health of the whole nation etc.

[6]

[Total 20 marks]

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6 [1] 3 (a) (i) Newly Industrialised Country. (ii) 3 marks for description. 1 mark – general statement about rise in exports of manufactured goods. 2nd mark – for description of rapid rise between 1965 and 1975 and thereafter a steady level around 90%+ 3rd mark – for description including accurate quoting of data from graph. [3] (b) (i) One point: to protect the home produced goods/ local industries to save foreign currency to prevent a balance of payments problem to encourage savings. [1] (ii) Two reasons: To prevent strikes and restrict industrial disputes. To save money and keep profits high. To allow industry to pay workers low wages/ to employ people for long hours. To enable industry to employ foreign workers with low wages and poor working conditions. [2]

(iii) Three advantages:

To prevent MNCs taking too much profit out of country

To protect local industry from competition

To prevent employment of ex-patriots and encourage employment of local people in senior jobs.

Not to be reliant on decisions made outside the country.

(iv) Outsourcing - Advantages:

Saving costs of having specialised staff such as outsourcing high-tech / computer expertise

Saving administrative costs by using specialised companies to clean offices, run canteens, run call centres, run payrolls, pension schemes, legal services etc.

- Disadvantages:

Lack of complete control of outsourced services.

People working for service which is outsourced to do not have same loyalty to the business as those directly employed.

Customers may have difficulties dealing with complaints etc.

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[4]

[3]

(c) Explanation of how government investment in infrastructure helps to promote industrial growth.

Levels marking

Level 1 (1 or 2 marks)

Simple statements, with basic points made

e.g Industries need road and transport facilities to bring in raw materials and transport the finished products.

Industries cannot work without power and water supplies.

Industries need telecommunications to contact their suppliers and customers.

Modern industries need an educated workforce.

Level 2 (3 or 4 marks)

A sound attempt to explain with points being developed or exemplified e.g. Industries need good road and transport facilities to bring in raw materials and transport the finished products, so that there are no hold ups in production. Industries cannot work without reliable power and water supplies, to run the machinery and offices and supply water for processing etc.

Industries need telecommunications to contact their suppliers and customers, so that orders can be made for raw materials and to inform customers.

Modern industries need an educated work force and this is best supplied by the government encouraging secondary and university education.

Level 3 (5 or 6 marks)

A comprehensive attempt to explain with points being developed and exemplified: e.g. Industries need good road and transport facilities to bring in raw materials and transport the finished products, so that there are no hold ups in production. Good transport will mean that goods will not be damaged, and will arrive in time and customers will be satisfied.

Industries cannot work without reliable power and water supplies, to run the machinery and offices and supply water for processing etc. Interruptions in power will result in production delays, damage to machinery and products and loss of business. Industries need telecommunications to contact their suppliers and customers, so that orders can be made for raw materials and to inform customers. Poor telephone or computer problems may result in loss of production and orders.

Modern industries need an educated work force and this is best supplied by the government encouraging secondary and university education to supply engineers, accountants, computer experts etc. to run them.

[6]

[Total 20 marks]

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4 (a) (i) Two types of farm:

modern/ industrial/ commercial traditional/ peasant/ poor

[2]

(ii) Three ways, must show comparison:

Larger scale

More highly mechanised

Labour is paid/ not family

More modern farming methods

Sells all/most of its products

[3]

(iii) Three points co-operatives help by:

supplying fertilisers good seeds bulk-buying lending machinery advisory services

[3]

[1]

- (b) (i) Genetically modified crops, crops in which the genetic material has been deliberately altered.
 - (ii) Organic farming is a type of agricultural production which relies on naturally occurring organisms (biodiversity) to control pests and diseases without the use of chemical pesticides and fertilisers. [1]
 - (iii) Two aspects explained: Two marks for each explanation.

Chemical fertilisers - the application of chemical fertilisers – supply plants with the essential chemicals required for their healthy growth and this results in increased yields.

Pesticides – the application of pesticides to plants and crops kills pests and diseases which would otherwise weaken the plants, this results in increased yields.

GM crops – Genetically modified crops have their genetic material altered to give them different characteristics, so that they are resistant to disease or pests, or grow larger, keep longer etc. resulting in increased yields.

Hydroponics – Hydroponic methods grow plants without soil. Water and nutrients are delivered directly to the plant roots so that the plants do not have to expand in an effort to seek out nutrients; therefore, more plants can be grown in a smaller space. Plants no longer compete for root space or nutrients and grow faster and produce more fruit or flowers.

Organic farming – organic farming maintains good yields by maintaining biodiversity so that the land and water supplies are not contaminated by chemicals, and the long-term health of the land is ensured.

[4]

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(c) Description of environmental problems resulting from using modern farming methods:

Levels marking

Level 1 (1 or 2 marks)

Simple statements, with basic points made:

e.g. there will be monoculture and land may lose its fertility

Irrigation may lead to the application of too much water and water logging.

Too much use of pesticides may lead to the land becoming poisoned by chemicals. etc

Level 2 (3 or 4 marks)

A sound attempt to explain with points being developed or exemplified e.g. there will be monoculture and land may lose its fertility, as a result of growing the same crop year after year.

Irrigation may lead to the application of too much water and water logging and the land may become saline

Too much use of pesticides may lead to the land becoming poisoned by chemicals which runoff into river and causes pollution.

Level 3 (5 or 6 marks)

A comprehensive attempt to explain with points being developed and exemplified: e.g. there will be monoculture and land may lose its fertility, as a result of growing the same crop year after year, this can lead to loss of soil structure and the land being exposed to wind erosion.

Irrigation may lead to the application of too much water and water logging and the land may become saline, plants will be killed by the increased salt content. New expensive land drains will have to be put in to remove the excess water otherwise the land will become useless for growing crops

Too much use of pesticides may lead to the land becoming poisoned by chemicals which runoff into river and causes pollution, this will kill fish and animals living in the rivers and decrease biodiversity.

etc [6]

[Total 20 marks]

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