Diploma Programme
Programme du diplôme
Programa del Diploma

Markscheme

November 2016

Environmental systems and societies

Standard level

Paper 2

19 pages

1. Follow the markscheme provided, award only whole marks and mark only in **RED**.

2. Make sure that the question you are about to mark is highlighted in the mark panel on the right-hand side of the screen.

3. Where a mark is awarded, a tick/check (✓) **must** be placed in the text at the **precise point** where it becomes clear that the candidate deserves the mark. **One tick to be shown for each mark awarded.**

4. Sometimes, careful consideration is required to decide whether or not to award a mark. In these cases use RM™ Assessor annotations to support your decision. You are encouraged to write comments where it helps clarity, especially for re-marking purposes. Use a text box for these additional comments. It should be remembered that the script may be returned to the candidate.

5. Personal codes/notations are unacceptable.

6. Where an answer to a part question is worth no marks but the candidate has attempted the part question, enter a zero in the mark panel on the right-hand side of the screen. Where an answer to a part question is worth no marks because the candidate has not attempted the part question, enter an "NR" in the mark panel on the right-hand side of the screen.

7. If a candidate has attempted more than the required number of questions within a paper or section of a paper, mark all the answers. RM™ Assessor will only award the highest mark or marks in line with the rubric.

8. Ensure that you have viewed **every** page including any additional sheets. Please ensure that you stamp "seen" on any page that contains no other annotation.

9. Mark positively. Give candidates credit for what they have achieved and for what they have got correct, rather than penalizing them for what they have got wrong. However, a mark should not be awarded where there is contradiction within an answer. Make a comment to this effect using a text box or the "CON" stamp.

Subject details: Environmental systems and societies SLP2 Markscheme

Mark allocation

Candidates are required to answer **ALL** questions in Section A **[25]** and **TWO** questions in Section B **[40]**. Maximum total = **[65]**.

1. A markscheme often has more marking points than the total allows. This is intentional.

2. Each marking point has a separate line and the end is shown by means of a semicolon (;).

3. An alternative answer or wording is indicated in the markscheme by a slash (/). Either wording can be accepted.

4. Words in brackets ( ) in the markscheme are not necessary to gain the mark.

5. Words that are underlined are essential for the mark.

6. The order of marking points does not have to be as in the markscheme, unless stated otherwise.

7. If the candidate's answer has the same "meaning" or can be clearly interpreted as being of equivalent significance, detail and validity as that in the markscheme then award the mark. Where this point is considered to be particularly relevant in a question it is emphasized by **WTTE** (or words to that effect).

8. Remember that many candidates are writing in a second language. Effective communication is more important than grammatical accuracy.

9. Occasionally, a part of a question may require an answer that is required for subsequent marking points. If an error is made in the first marking point then it should be penalized. However, if the incorrect answer is used correctly in subsequent marking points then **follow through** marks should be awarded. When marking, indicate this by adding **ECF** (error carried forward) on the script.

10. Do **not** penalize candidates for errors in units or significant figures, **unless** it is specifically referred to in the markscheme.

Section A

1. (a) desert/savanna; **[1]**

(b) Swakop river/river runoff/linear oasis;
groundwater/aquifers;
rainfall/precipitation;
condensation/dew/coastal fogs;
ocean; **[2 max]**

*3 correct award **[2]**.*
*2 correct award **[1]**.*
*1 correct award **[0]**.*

(c) range of habitats/passes though different ecosystems;
water supply/linear oasis/corridor of water through the desert/lifeline for animals/buffer against drought;
contains endemic species/higher biodiversity/unusual plants *e.g.* Welwitschia;
mouth important habitat/feeding ground for birdlife;
interesting study site / place to study invasive species; **[2 max]**

(d) r strategist because produces many offspring/many seeds/spreads quickly/grows rapidly; **[1]**

*Award **[1]** for r strategist plus valid reason*.

(e) *Conclusion (Conc):* some species increase whereas others decrease with density of mesquite;
Development (Dev): e.g. Oryx is more common in low mesquite areas but Baboons are less common;

Conc: number of species/species richness is same in high and low mesquite areas;
Dev: *i.e.* both areas have same number/12 species present;

Conc: species diversity is greater in low mesquite area;
Dev: the diversity index is about 5 in low and about 4 in high mesquite area;

Conc: some species are more common/more commonly photographed than others;
Dev: *e.g.* most were Steenboks (193 times) and least were Badgers (5 times);

Conc: some species seem quite unaffected by mesquite;
Dev: *e.g.* steenboks/jackals have very similar numbers in both areas;

Conc: total no of organisms/activity appears to be higher in mesquite area;
Dev: ...because there are a total of 309 camera shots in high mesquite and only 267 in low / mesquite area may provide better habitat quality/more food/better shelter;

Conc: some species *e.g*. baboon/kudu/wildcat/klipspringer/porcupine do better in high mesquite;
Dev: perhaps because they feed on mesquite / their competitors are more negatively affected by mesquite;

Conc: some species *e.g.* Oryx/duiker/rodent do less well in high mesquite;
Dev: perhaps because mesquite replaces important source of food/shelter; **[4 max]**

*If development is given with no explicit conclusion, award 1 max for that example. Credit any reasonable conclusions from the data for **[1]**, with some development or exemplification for the second mark.*

Accept other reasonable responses.

(f) *Candidates can argue either way:*
for example: yes, it should be cleared because:
its negative effect on farms / outcompetes their crops;
it is invasive/spreads rapidly/is non-native displacing local species;
has changed the habitat significantly/research shows negative impact on vegetation, wildlife & birds;
due to aesthetic reasons;
it has a negative effect on water resources in an arid area;

For example: *no it should not be cleared because:*
it provides a renewable resource for humans;
e.g. firewood/food for humans;
local communities can earn an income from it;
Namibia is a poor country and so helps to address poverty / less than 1 % of the potential income from Mesquite pods is currently being generated;
Some animals may have adapted to it/feed on it and would be negatively affected (*e.g.* baboon); **[3 max]**

Accept other reasonable responses.
This is not a "discuss" question, so candidates should opt for one response only,

and justifications should be credited for <u>either</u> clearing the mesquite <u>or</u> not clearing the mesquite.

(g)

Resource	***Type of natural capital***
ground water	replenishable;
uranium	non-renewable;
mesquite seed pods	renewable;

[1 max]

(h) prices decreased gradually from 1980 to 1985/1989;
remained fairly stable between 1985/1989 to 2005;
there was a spike in prices between 2006 and 2008;
prices dropped between 2008–2010;
but have remained higher than pre-2005; **[2 max]**

WTTE / other figures if appropriate are acceptable.

(i) value of resources change over time due to changing needs/shifting cultural values/technological development/accessibility;
as technology made it possible to use uranium for nuclear energy, demand (and price) of Uranium increases;
as countries seek alternatives to fossil fuels / more nuclear power stations opened so uranium increases in value;
adoption of ecocentric values e.g. Sweden, reduces demand for uranium so price falls;
concern over nuclear accidents like Fukushima reduces demand for uranium so price falls;
more mines opened/new deposits found so increase in supply reduces price;
drop in global uranium extraction (due to political decision) may cause increase in price; **[2 max]**

Accept other reasonable responses.
Credit responses referring to dynamic nature of resources, even if they use other resources as example.

(j) uranium mines use huge amounts of water so deplete supplies/lead to over abstraction;
uranium mines contribute to pollution of water resources with radio-nuclides/wastes from mining;
waste rock dumps can lead to diversion of water courses; **[2 max]**

(k) 10 <u>million cubic metres</u> [per year]; **[1]**

(l) Husab will negatively affect endemic species *e.g.* Welwitschia;
Husab will disturb natural processes *e.g.* pollute Swakop river/groundwater from radioactivity/waste rock dump;
impacts of Husab will infringe biorights/degrade intrinsic value of species/ecosystems;
instead of supplying more uranium we should be looking at more renewable energy alternatives;
community involvement is important and this is unlikely with a large scale privately owned mine;
uranium is not a sustainable solution to energy needs as there is a finite amount of uranium;
we should be reducing our use of resources (such as uranium and water) not increasing them;
only 1.8 % of the population is employed in mining anyway so local communities are not benefiting much from the industry;
the tourist value of the area is of greater significance in terms of employment than uranium mining; **[4 max]**

General Essay Markscheme

Each essay is marked out of **[20]** of which **[2]** are for clarity of expression, structure and development of ideas.

[0] Quality of expression, structure and development is poor.
[1] Quality of expression, structure and development is limited.
[2] Quality of expression is clear, structure is good and ideas are well developed.

Do not penalize candidates for writing in bullet pointed lists – if this technique is used appropriately ie to summarize or outline a list of points within an essay at an appropriate point. However, a candidate who has not shown **any** evidence of being able to write a paragraph with a developed, logical line of reasoning would not be able to achieve maximum marks.

Section B

2. (a) *Climatic:*
amount of precipitation / insolation / (mean) temperature;
limit primary productivity/rate of photosynthesis that will determine the available biomass/food base/on which climax community will depend;

Edaphic:
soil depth / mineral content/amount of N/P/K / soil compaction/aeration / soil particle size / balance between clay, silt and sand / percolation rate / soil pH;
determine the particular vegetation types/plant species adapted to those conditions that support the climax community; **[4 max]**

*Award up to **[2 max]** for climatic factor and up to **[2 max]** for edaphic factor.*

(b) *Named farming system: e.g.* intensive corn (*Zea mais*) farming in Mid-West of USA;

Degradation (Deg) + *Strategy (Strat):* soil compaction managed by addition of organic matter/manure / reduced tillage;

Deg: compaction leads to reduced drainage/oxygen levels in soil which reduces ability of roots/crop to grow (and support crop);
Strat: organic matter enhances the soil ecosystem which helps aerate soil / reduced tillage allows soil ecosystem to recover and aerate soil;

Deg + *Strat:* toxification of soil managed by reduced use of inorganic fertilisers/pesticides / bioremediation;

Deg: excess use of liquid ammonia/fertilisers / pesticides can reduce range of soil microorganisms able to live;
Strat: reduced use of chemical additives allows soil ecosystem to recover and provide ecosystem service of nitrogen fixation;

Deg + *Strat:* acidification of soil managed by addition of lime;

Deg: acid precipitation in areas with soils that are naturally acidic, can quickly acidify the soil beyond normal levels;
Strat: lime neutralises the acid pH of the soil;

Deg + *Strat:* waterlogging of soil managed by addition of organic matter/sand/drainage systems;

Deg: reduced organic content through over-harvesting / elevated water table through over-irrigation / lack of use of organic fertilisers;
Strat: improve soil drainage through addition of organic matter/drainage ditches/sub-surface pipes;

Deg + *Strat:* soil runoff/erosion managed by maintained plant cover all year / reduced grazing / wind breaks/stone walls / contour terracing/ploughing;

Deg: caused by soil compaction / overgrazing / leaving land bare means soil may blow away in wind or wash away with rain;
Strat: plant cover/reduced grazing/windbreaks/contour ploughing reduces ability of wind/rain to erode soil; **[6 max]**

*For each of two examples award **[1 max]** for named degradation and appropriately linked strategy; 1 mark for development of degradation i.e. its cause/effect; and 1 mark for development of management strategy i.e. how it works:*

*Award **[5 max]** if no named farming system*.
*Award **[3 max]** if no explanations*.

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(c) *Increasing Ecological Footprint (EF):*
equation I = PAT (Impact = Population × Affluence × Technology) predicts that increasing economic development (affluence) will increase a population's impact on the environment/ecological footprint;
economic development (ED) may increase the use of resources/desire for material goods and thus increase the EF of a population;
as demand for power from electricity, if electricity generation is from fossil fuels or nuclear power, EF will increase (due to area needed for waste assimilation);
as population becomes richer meat consumption usually increases, (increasing the area of land needed agriculture), increasing EF;
waste generation increases with increased consumption, increasing EF;

Decreasing EF:
ED may mean a move to renewable energy production (decarbonised society) (reducing need for land to assimilate waste);
ED may increase use of technology to reduce waste production / increase energy efficiency, decreasing EF;
ED may increase education level of population about environmental problems leading to a reduced EF;
ED may slow or decrease population growth and thus reduce impact of population on EF;
ED normally associated with increasing urbanisation which leads to greater efficiency of the population, thus reducing EF;
Countries with strong cultural/religious/ecocentric values may be more likely to regulate their ED to reducing/restricting EF;

Conclusion should be a clear statement of effect of ED on EF that is supported by evidence given in response. **[1 max]**

e.g. generally ED leads to an increase in EF but this can be dependent on geographical location/cultural/religious background e.g. simple lifestyles / predominantly vegetarian diets;
ED has often lead to increasing EF in the short term, but as EVS are shifting / alternative technologies are available there may well be a longer term reduction in EF; **[8 max]**

Conclusion should be a clear statement of effect of ED on EF with supporting statements.

*Award **[7 max]** if no clear conclusion regarding relative strengths or weaknesses.*
*Award **[5 max]** if only strengths or limitations discussed.*
*Award **[3 max]** if EF is not explicitly discussed.*

Expression of ideas **[2 max]**

3. (a) Al Gore produced film, “Inconvenient Truth”;
this raised international awareness about global warming;

Rachel Carson published book, “Silent Spring”;
this raised awareness about impact of pesticides/DDT on ecosystems / encouraged establishment of EPA in US;

Industrial revolution led to high levels of atmospheric pollution;
the impact of this on human health/living standards promoted great public concern/interest in pollution;

John Snow made connection between water quality and spread of cholera/water borne disease;
this led to public concern to manage water quality standards/introduce water treatment;

Passenger pigeon in US became extinct through overhunting;
this unexpected extinction led to first conservation efforts in US / Woodrow Wilson setting up first National Parks;

Wackernagel & Rees introduced concept of ecological footprint;
this model has gained widespread recognition as a means of evaluating environmental impacts of societies/populations; **[4 max]**

*For each of the TWO examples, award **[1 mark]** for naming and stating influential action and **[1 mark]** for describing/developing their influence on environmental movement*

(b) *Evaluating species' abundance:*
identifying sample points through random coordinates/along transect to cover area of development;
employ sampling method appropriate for given species *e.g*. quadrats/traps/sweep nets;
calculate total abundance from sample nos *e.g.* through extrapolation of sample size/Lincoln index/mark-release-recapture;

Evaluating ecological significance/diversity:
survey area obtaining comprehensive species list/no of species/species richness;
identify any species of special interest/Red List Status/local breeding/feeding grounds;
use abundance data to calculate diversity index/Simpsons Index;
quantify current status of ecosystems using a biotic Index;

Evaluating abiotic variables:
identify those abiotic variables most relevant/likely to be impacted by the development *e.g.* pollutant levels/water temperature/soil qualities;
design a sampling regime to cover relevant area/seasonal variations/diurnal variations/max-min ranges;
select appropriate instrumentation for recording abiotic factors *e.g.* temperature probes/pH meters/atmospheric particle collectors;

Evaluating social factors
distribute questionnaires to local population to identify responses/opinions regarding development;
set up community meetings of different constituencies *e.g.* developers/commercial/residential/environmentalists;
carry out surveys/research to establish current economic/employment/land ownership/land use issues associated with proposed area; **[6 max]**

(c) *Reasons to not convert tropical rainforest (TRF) into agricultural use:*
TRF contain high levels of biodiversity/ are significant hotspots;
when TRF is the home of indigenous people, we can't suppress their rights (to have a decent living);
TRF provide important ecosystem services of global value / have high intrinsic value;
e.g. carbon storage / involvement in water cycles / oxygen production;
TRF normally have nutrient poor soil due to fast cycling of nutrients in tropical climate;
soils in tropics vulnerable due to high levels of rainfall;
…which can contribute to loss of top soil / loss of productivity / landslides;

Reasons to convert tropical rainforest (TRF) into agricultural use:
may lead to employment opportunities for local populations;
economic development may lead to investment in local medical and education facilities;
produce a greater income for country leading to development;
high population/growth rate may entail that this conversion is the only means to feed local community;
exploitation of limited areas may provide income to support conservation/reduce exploitation of larger areas; **[1 max]**

Conclusion should be a clear statement of whether the conversion should go ahead and be justified by evidence given in the response.

e.g. conversion should not go ahead because despite short term gains, in the longer term it is not sustainable;
conversion should go ahead where it is necessary for the subsistence of local populations but should be limited to more eco-friendly agriculture *e.g.* coffee and spice plantations/polyculture/integrated agriculture which reduce the ecological value of the forest less than large scale monoculture; **[8 max]**

Conclusion should be a clear statement of whether the conversion should go ahead with supporting statements.

*Award **[7 max]** if no clear conclusion regarding relative strengths or weaknesses.*
*Award **[5 max]** if only strengths or limitations discussed.*

Expression of ideas **[2 max]**

4. (a) organisms lower down food chain/plants absorb small/non-lethal amounts of toxin (into their fatty tissue/biomass);
as the toxin is non-biodegradable it stays in the organism's body/is not broken down/is persistent, it accumulates over time (bioaccumulation);
toxin is then passed on to further trophic levels through feeding;
because non-toxic biomass is lost (through respiration/metabolism) along food chain but the mass of toxin is not, its concentration increases (biomagnification);
so concentration of toxins increases as it passes up the food chain / concentration increases by an average of 10 times per level (assuming an ecological efficiency of 10%);
...so impact on health of top carnivores is more severe/lethal than lower trophic levels; **[4 max]**

Do not credit the response that "higher trophic levels eat more than lower trophic levels".

(b) *Factor (F):* global warming;
Explanation (E): leads to higher ocean temperatures to which many marine species are sensitive;
Explanation (E): some species cannot adapt/evolve/migrate quickly enough / compete successfully, leading to loss in biodiversity/extinction;
Explanation (E): changing temperatures may reduce productivity by phytoplankton leading to loss of diversity throughout the food chains;
Explanation (E): higher temperatures may lead to coral death/bleaching affecting whole food webs/ecosystem;

Factor (F): ocean acidification;
Explanation (E): leads to coral bleaching (especially at higher ocean temperatures);
Explanation (E): most marine organisms have a very narrow band of tolerance for pH (shells won't develop) leading to possible extinction and loss of biodiversity;

Factor (F): pollution from plastic;
Explanation (E): tiny pieces of plastic ingested by organisms may carry associated persistent organic pollutants(POPs)/toxins that can be absorbed and passed along food chains;
Explanation (E): marine organisms become entangled in plastic and unable to feed/suffocate;
Explanation (E): marine organism/scavenging birds ingest plastic causing suffocation/starvation;

Factor (F): pollution from oil spills;
Explanation (E): oil spills will take long time to degrade, having a long term negative impact on ecosystems and biodiversity;
Explanation (E): oil leading to animals losing their protection to cope with cold/waterlogging/drowning;

Factor (F): overfishing/unsustainable fishing methods/hunting of keystone species;
Explanation (E): some fishing methods (*e.g.* bottom trawling, electrocution/poison/explosives) are indiscriminate and take all organisms leading to the loss of all organisms from an area;
Explanation (E): some fishing methods destroy the habitats (*e.g.* scallop dredgers or bottom trawlers) leading to local loss of diversity;
Explanation (E): if fish populations are harvested at rates greater than replacement then loss of numbers will lead to possible (functional) extinction;
Explanation (E): nets and fishing lines can entangle seabirds (especially Cormorants) and marine mammals (*e.g.* fur seals in Sub-Antarctic);
Explanation (E): Hunting top carnivores *e.g.* shark can disturb food webs leading to loss of diversity; **[6 max]**

*Award **[4 max]** if only one factor explained*.
Do not give credit for more than 2 factors. Only credit "eutrophication" as a factor if it is specifically identified in the context of estuarine/shallow water/coastal waters (it is not relevant to oceans/marine systems at large).

(c) *Answers may include: recycling, incineration, landfill, composting, altering behaviour*
e.g. Recycling:

Strengths:
in general recycling reduces the amount of energy and resources required for a product;
e.g. the amount of energy saved when recycling aluminium is 95 %
e.g. plastic is usually made from oil which is a non-renewable resource and thus recycling saves a valuable resource;
recycling reduces air pollution and carbon emissions in comparison to a pollution management strategy (PMS) such as incineration;
recycling can be managed in many ways, such as a doorstep mixed collection, household sorting, drop-off at recycling points, and in less developed countries, by individuals picking through discarded rubbish/trash;

Limitations:
at the moment recycling is often not economical as it is cheaper to produce items from new raw materials;
recycling may not encourage a change in behaviour towards reducing rubbish/trash/garbage;
recycling is challenging for plastics as there are many grades of plastic and you can't "upcycle" poorer grade plastics;
people may not want to sort their trash when recycling is only available through separation by households;
it is not possible to recycle all products due to poor packaging design;

Conclusion should be a clear evaluative statement of the named pollution management strategy that is justified by evidence given in the response. **[1 max]**

e.g. recycling is a particularly effective management strategy because, unlike landfill/incineration/composting, it not only reduces waste but also reduces demand on natural resources;
e.g. recycling is a very effective way of reducing the impact of waste on the environment, but since it depends on altering human activity it will only become really successful with a shift to more ecocentric value systems; **[8 max]**

*Award **[7 max]** if no clear conclusion regarding relative strengths or weaknesses.*
*Award **[5 max]** if only strengths or limitations discussed.*

Expression of ideas **[2 max]**

5. (a) *Gases involved:*
for GW are CO2/CH4/CFCs (whereas) for OD are halogen containing gases/CFCs/NOx;

Human activities responsible:
for GW are human causes are very diverse (whereas) for OD more limited;
for GW include burning fossil fuels for transportation/agriculture/heating / rice culture / deforestation (whereas) for OD include refrigeration / spraying / cleaning electronics;

Mechanism;
for GW involves GHGs trapping more infra-red/heat (whereas) OD involves chemical breakdown of ozone molecules;
for GW involves increase in mean global temperature (whereas) OD involves more UV passing through atmosphere;

Distribution:
GW occurs globally (whereas) OD is concentrated around the poles;
OD is caused largely by MEDC activities (whereas) LEDCs make significant contribution to GW through deforestation/rice culture**;** **[4 max]**

(b) *Global Warming:*
is affecting coastal ecosystem globally;
as coastal waters become warmer leads to an increase in productivity from phytoplankton;
but in some areas, waters may become too warm for locally adapted phytoplankton reducing productivity;
warmer waters hold less dissolved oxygen and may become less able to sustain larger organisms;
increase/decrease in productivity of phytoplankton will have the same impact on the entire ecosystem;
coastal ecosystems may contain coral reefs which are prone to bleaching in warmer temperature;
changing temperatures changes ecosystem characteristics and may allow invasive species to colonise an area;
sea level rise may cause coastal erosion;
change in ocean currents/El Nino patterns may bring in more nutrients increasing productivity / or the exact opposite: may deprive coastal areas from nutrient inflow thus decreasing productivity;

Ozone depletion:
may be more important in southern oceans or northern oceans around coastlines as ozone hole is greater near the poles;
Increases mutation rates in phytoplankton changing ecosystem dynamics;
ozone depletion differential reduces productivity of phytoplankton (some more than others);
reduced primary productivity has knock-on effects for entire ecosystems and may reduce population sizes of consumers and secondary productivity of ecosystem;
increased UV may cause health effects/reduce viability of marine animals *e.g.* young fish/shrimp larva/sea urchins living in coastal waters; **[6 max]**

*Award **[4 max]** if only global warming or ozone depletion considered.*

(c) *Ecocentric approaches:*
promote education about global warming as a way to change human behaviour causing the problem;
promote energy efficient strategies in order to reduce production of greenhouse gases (GHG);
promote greater use of public transport / reduced flights / car sharing in order to reduce GHG production;
promote changes in diet to reduce meat consumption and thus reduce meat industry's contribution to GHGs;
small communities, self-sufficiency / reduction of food miles, reduced consumerism - so less production GHG;

Anthropocentric approaches:
financial incentives to change behaviour such as tax credits for using renewable energy/increasing household energy efficiency;
market based solutions such as carbon trading will incentivise companies to reduce carbon emissions;
legislation in the form of taxation on high carbon emissions;
legislation by government to reduce carbon emissions / *e.g.* international negotiated treaties/government targets/regional targets for carbon emissions;
community based initiatives such as meat free Mondays to reduce meat consumption and therefore community carbon footprint;

Technocentric approaches:
promote adaptation to new conditions that result from global warming;
increase research and development for new fuels/renewable/nuclear energy / carbon capture technology;
invest in geoengineering solutions to reduce effect of greenhouse gases;
promote development of new technologies to reduce carbon emissions such as more fuel efficient cars/electric cars/hybrid cars; **[8 max]**

*Award **[4 max]** if only one EVS is discussed.*
*Award **[2 max]** for a personal conclusion regarding which EVS is most effective in managing global warming that is justified by evidence given in the response e.g.*
although I would personally favour an ecocentric approach because I think this addresses the root cause of environmental degradation...;
...the technocentric approach goes a long way to conserving the environment while allowing for the continuing economic development that seems so inevitable;
*Award **[7 max]** for responses with no personal conclusion.*

Expression of ideas **[2 max]**