

GCE GEOGRAPHY SPECIFICATION B UNIT 6475/01

RESEARCHING GLOBAL FUTURES
(CHALLENGES FOR THE PHYSICAL ENVIRONMENT)

Supplementary materials

Fig 1 An example of a **tally grid** for 'Living with hazardous environments'

Fig 2 25 Top Tips

Fig 3 One model of how to improve preparation once the pre release generalisation is given out

Fig 4 Planning the essay in the exam

Fig 5 An example of **terminology** research for hazards

Fig 1 An example of a **tally grid** for 'Living with hazardous environments'
 Each case study (ie row) could have its own A3 sized page!

Natural Hazard case studies Names, locations, dates	Classification ie type	Gen 1 Physical processes & problems caused	Gen 2 Impacts Spatial variation	Gen 3 Response management of impacts	Gen 4 Prediction, reduction	Diagram/sketch map.....

Fig 2 25 Top Tips

How one centre helps candidates practice using their case studies, during the research phase, with the mark scheme - specific interpretation needed by teachers.

25 top Tips for 6475/01 (1.20mins) Essay Checklist for Global Futures

- NB All essays should be hand written to practise for the exam.
- Use in conjunction with the mark scheme (categories: D.R.U.C.Q.)

Plan - 5 minutes can make all the difference to your end result. Spider diagram, lists..... Quality of written communication = 10 marks: logical order.....	Tick
1. Chose your title carefully - if it asks for examples, make sure you can quote more than one	
2. Dissect title, check command words	
3. Brain storm ideas and case studies- write them down	
4. Order the points, case studies to be used to support the title- you may need to reject some	
5. Sort out which diagram/sketch, model/s you can use best for the title	
Introduction - 5-10 minutes ½- ¾ side writing? 10 marks	
6. A gripping start? Define terms in the title by discussing it - to show the examiner you understand what is needed. Do not simple repeat the title - or give a pat definition of eg a pollution event or a hazard; try to extend terms & ideas - Many titles ask you to assess or whether you agree about a statement - Geography is complex so do not be simplistic - think before you agree	
7. Refer to relevant theories, models - no need to go into depth but justify them if used	
8. Carefully justify the case studies to be used - eg because of contrasting range, scale, location, type, historical time line.....Have you a topical example? Have you shown a clear framework for the rest of the essay? Use introductions such as 'The following case study' NEVER use 'I am going to....'	
9. If relevant, have you covered Brandt Line and GNI?- MEDCs/LEDCs/NICs/LDCs....?	
10. Refer to the type of data source & reliability	
Main Body of essay c. 50 minutes 2-8 sides of writing Research 15 marks & Understanding 15 marks	
11. Use one case study/ topic per paragraph. No single sentence paragraphs or whole pages with no paragraphs	
12. Use as many specialist vocabulary/technical terms as possible	
13. Quote sources eg of models, definitions..... & Make sure you refer to diagrams/maps in text	
14. Never make a point without evidence - facts, figures...	
15. Argue points in a logical sequence	
16. Link the case studies: 'In contrast....However.....The following....The previous.....'	
17. Ongoing evaluation is achieved by mini sub conclusions & reference to the title as you progress through the essay: 'therefore it can be seen that....this shows that....'	
18. Have you shown different values/ attitudes?	
19. Do the case studies relate directly back to the title - or challenge it obviously?	
20. Is your writing just descriptive or does it explain? Do not leave it up to the reader to make the links between the case study & the title	
Conclusion - 10 minutes - ¾- 1 side of writing? Do not run out of time for the conclusion, if in dire need abandon the essay & put some points down for the conclusion - or you jettison most of 10 marks	
21. Sum up main points from main body - make it meaningful & directly related back to named case studies in the main body.	
22. Compare reality with what theories/models predict	
23. Evaluate how far the title is true - show 'complexity' - geography after all is a dynamic, complex, inter related subject	
24. Look towards the future - trends? The syllabus = Global Futures	
Checking time 5 minutes	
25. Quality of written communication: 10 marks: SPAG - Link any figures not done so into text.	

Fig 3

One model of how to improve preparation once the pre release generalisation is given out: based on students studying pollution: this is then customised for each option & exam series

June 2005 Generalisation 1 Preparation

- Past Questions to date:

EXAM 2 JUNE 2002	1 Economic Development	To what extent can pollution be linked to levels of economic development?
		"Some human activities lead to more pollution than others" How far is this true for both MEDCs & LEDCs?

- Possible titles - brainstorm some! Prepare for your mock exam on.....

1.	Why are some	If not researched so far- useful Refs – BBC news toxic hot spots map, World Bank & Kuznet, MDGs (Goal 7: Ensure environmental sustainability Target 9: Include the principles of sustainable development in policies and reverse the loss of environmental resources.), DEFRA & EA on agriculture/ pollution controls, pressure groups for Bhopal, Chernobyl anniversary , Greenpeace & FoE, outcome of election & nuclear power debate, G8 summit & climate change/poverty links to pollution.....
2.	Examine the link....	
3.	Why does	
4.	Does the scale of	
5.	Examine the view	
6.	Assess the view	
7.	What evidence	
8.	How far do you agree with this statement	
9.	Is pollution	
10.	Evaluate.....	

- A reminder of the syllabus(quoted directly below)

Key Question	Guidance for Students	Generalisations
Foundation for study What is pollution? How can pollution types be classified? What is its extent?	<ul style="list-style-type: none"> o Defining & classifying pollution types (of the atmosphere, biosphere, hydrosphere, land) o Investigating how pollution can be measured & monitored to show changes over time, & to trace sources, pathways, sinks o Investigating how pollution may vary in time & space eg: <ul style="list-style-type: none"> o -at a point, or small/regional scale over the short term(river pollution incident, Ruhr industrial pollution) o - at a national/international scale(atmospheric pollution over Nrn Europe) 	Definitions & classifications Pollution can be defined, measured & classified. It varies according to its source & over time, & can be linked to different human activities at different scales
1. Why does pollution vary spatially & over time?	<ul style="list-style-type: none"> o Identifying degrees & scales of pollution, from small to global scales o Investigating links between pollution & economic development eg extraction &/or use of mineral & energy resources, industrial processing & manufacture o Identifying activities which lead to increases in pollution eg traffic , excessive nitrates in agriculture, waste production & dumping 	1. Pollution & economic development Pollution is linked to economic development, & may result from primary, secondary or tertiary activities. Some human activities are more likely to lead to pollution than others

- Key terminology - try to use as many terms as possible!!!

Recycling	Alternative Technologies	Radiation	Carcinogen
Source & sink	Ambient Standards & Performance standards	Polluter Pays Principle Precautionary Principle Proximity Principle	Eutrophication
Toxic waste	Cost Benefit Analysis	Biodegradable/Non biodegradable or persistent	Toxic
Pollution & Natural Pollution	Natural Pollutant	Acid Rain & CFCs & Greenhouse gases	Enhanced Greenhouse effect
Global futures	Particulate	Development Pathway LDC/LEDC/NIC/RIC/FPE/MEDC	Millennium Development Goals
Degradation	Pathways	Biological Oxygen Demand BOD	Buffering capacity
Point & Diffuse	Prevention	EA,(Pollution prevention) DEFRA (Environmental Stewardship Schemes) & UN	Landfill
Fixed Point	Primary & Secondary Pollutants	Bioaccumulation & bio magnification	PCBs, DDT, Dioxins
Pollution incident	Random Point	Brandt line & Kuznet curve	Heavy metals
Contamination	sustainability Sustainable development	Ozone Depletion	Smog
Pollution salience	Threshold Limits	Silent spring, Tragedy of the Commons	Best Available techniques

Planning the essay in the exam:

Spider diagrams, mind maps, lists - any form will help create a coherent essay

Fig 4

The following plan showed the candidate noted down pre-learnt concepts/words as soon as the exam started (left column). Then a column for case studies was created which shows an eventual order- with even one rejected! The reference to 'summary' was to carry out ongoing evaluations.

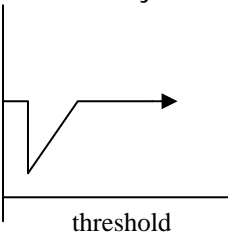
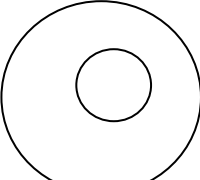
<p>Fig 4 Plan for Q 8 (wilderness) copied as seen from script</p> <p><u>Concepts/models</u> Definitions x3 Wilderness continuum model Trudgill model + Carrying capacity Sustainability in conclusion</p>  <p>Pressures Fragility Threats Core buffer model →  diag + Amazonia</p>	<p><u>Case Studies</u> (<i>numbers refer to order in essay or rejection of case study</i>)</p> <p>Kakadu (protected/conserved well) 2 summary</p> <p>Yellowstone X summary</p> <p>Alaska 3 summary</p> <p>Antarctica (Treaty) 5 summary</p> <p>Nepal 4 summary</p> <p>Amazonia (Mato Grosso many threats... 1 summary</p>
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Fig 5 An example of terminology research for hazards

EARTHQUAKES	VOLCANOES	TSUNAMI	FLOODS	DROUGHTS
Tectonic	Eruption, Extinct, Dormant, Active, Caldera	Tidal wave	Atmospheric-oceanic processes	ITCZ
Mantle Lithosphere Asthenosphere & Continental & Oceanic crust	Lava, magma, Viscosity, Acidic, basic & intermediate Silica content Aa lava Pahoehoe lava	drawback	El Nino-La Nina	Sub tropical HP
Convection cells	Fissures & Central vents , Volcanic plug	Terminal height/run up	Magnitude, Frequency	Jet stream
Seafloor spreading Palaeomagnetism	fumarole	International Tsunami Warning System (ITWS).	Storm hydrograph	Slow onset
Plate (95% e' quake activity)and intra- plate(5%) locations	Strato ,Conical, Shield volcano	Displacement	Flashy regime, Lagtime	El Nino
Focus/hypocentre Epicentre	Ash deposits	Wave length & amplitude	Infiltration Throughflow Impermeability	Mid latitude depression tracks
Primary wave, Secondary wave Rayleigh wave , Love wave	Lahars	HURRICANES	Storm runoff	desertification
Deep & Shallow earthquakes	Dissolved gases	Troposphere	Peak discharge	famine
Fault zone , Benioff zone	Harmonic tremor	Cyclones / typhoons	Drainage basin characteristics	Xerophytes
Seismograph seismogram	Pyroclastic flow	Low pressure systems	Channel capacity	subsidence
Ocean trench	Volcanic plume	ITCZ	Landuse	Mass movement
Destructive (convergent) boundary	Hawaiian eruption	Low-level convergence	Hydraulic radius	Avalanches-slab, snow....
Destructive (convergent) Collision boundary boundary: continent/ continent	Plinian, Peleean erupions	High humidity, Latent heat, Condensation, Unstable air Vertical up currents	Jokulhlaup	Fohn
Destructive(convergent) Subduction zone continent /oceanic	Nuee ardente	Convection	Snowmelt	Landslide
Constructive (divergent) boundary	Tephra	Coriolis force	Tsunamis	Shear strength

Conservative boundary Transform fault	Hot spots Island arcs	Cumulonimbus cloud	Storm surges	Internal cohesion
Fold mountain range Rift valley	GIS, Satellite surveillance	Cyclone paths	Sea level rise (eustatic)	Critical slope angle
Liquefaction	Radon gas meter & Magnetometer	Saffir-Simpson scale	Computer modelling	Pore water pressure
Aftershocks Secondary hazards	PHIVOLCS - local involvement	Storm surges	Environment Agency warning system Automatic Voice Messaging	porosity
Richter & Mercalli scales				
GIS , Tiltmeter , Creep meter & Strain meter	Super volcano	National Hurricane Centre		rockfall
Aseismic	Landslides(secondary)	Geostationary satellites	QUASI NATURAL	slides