

Production, Location and Change

9 (a) Fig. 5 gives information on rice yields and irrigated paddy for selected countries in Asia during the Green Revolution in 1966, 1971 and 1974.

(i) Between 1966 and 1974 which two countries experienced the greatest percentage increases in total paddy area irrigated?

Philippines 1 China 1

(ii) Supporting your answer with information from Fig. 5, describe the relationship shown between rice yields and the percentage total paddy area irrigated.

One possible approach is,

- broadly positive as indicated by the black line 1 *example 1*
- but countries with similar % irrigated area have different rice yields 1 eg Pakistan and China or India and W Malaysia 1
- and yields do increase without an increase in irrigated area 1 eg countries with a vertical plot such as Cambodia or Japan 1

*max. 5*

(iii) Suggest what other information is needed to get a better understanding of the productivity of wet-rice cultivation in these countries.

Credit 1 three points:

any combination of other inputs, eg HYVs, fertilisers, labour, climate and the context eg agricultural policy, war/peace, availability of finance.

[10]

(b) Discuss the reasons for, and the problems caused by, the extension of the cultivated area in some less economically developed countries (LEDCs).

The extension of the cultivated area in LEDCs is in response to factors such as,

- increasing food demand as population grows
- resettlement in new areas
- government schemes
- profit motive
- introduction of machinery and labour saving devices allowing larger areas to be cultivated in the same time
- diminishing returns from and declining fertility in existing plots
- *other*

The problems caused occur in the dimensions, environmental, social, economic and political. Although it is likely that environmental problems will dominate the response some awareness of other problems is needed for better marks.

**Candidates will probably:**

- L3** Provide a realistic and perceptive account which recognises a variety of reasons for the extension of the cultivated area in at least two different environments and which discusses problems effectively in at least two dimensions, maybe recognising different outcomes for different groups of people. [12-15]
- L2** Show a sound knowledge of the extension of the cultivated area in LEDCs but without the detailed exemplification or the breadth of perspective above. Discussion of problems is solid although may be dominated by one dimension of factors, probably environmental. [7-11]
- L1** Describe reasons for the extension of the cultivated area rather than discuss them and maybe make only general observations of problems such as soil erosion. The answer may be superficial or only address one element of the question. [0-6]  
*For answers on intensification - Level 1 only.*

Total: 25

10 (a) Fig. 6 shows the global distribution of export processing zones (EPZs) in 1999.

- (i) Explain the term
- export processing zone*
- .

a designated, planned or government-established area 1  
 where foreign companies 1  
 import raw materials, manufacture and export finished products 1  
 without paying tax 1

- (ii) Describe the main features of the global distribution shown.

predominantly LEDC locations 1  
 largely in a tropical or central belt 1  
 notably coastal, at continental fringes and on islands 1  
 any other valid observation  
 eg mainly single sites, concentrated in ... 1

*Mark negatives on merit eg few in Africa.*

- (iii) Suggest two factors which may help to explain the distribution of EPZs in North, Central and South America and the Caribbean.

Credit 1 each of two explanatory factors, such as,

geographical propinquity/locational advantage eg near US  
 positive government role  
 success leading to further sites etc

[10]

- (b) **With reference to one country you have studied, identify the issues restricting the growth of its manufacturing sector and assess the success of the attempted solutions.**

Whilst the answer content depends on chosen country, all should identify more than one of the issues restricting the growth of ... manufacturing and use that as the foundation for an assessment of the success of the attempted solutions.

Accept material relating to the factors of production eg labour skills deficits and lack of venture capital as well as to wider issues such as poor transport provision, problems of electricity supply and marketing challenges.

**Candidates will probably:**

- L3** Show good knowledge and understanding of the manufacturing sector of the country chosen and use specific examples to identify clearly issues which restrict its growth and attempts at solving them, making a realistic and quite balanced assessment of what has and has not been achieved. [12-15]
- L2** Develop a satisfactory answer which may be good in parts and which deals with a number of issues and attempted solutions, making an assessment which goes some way towards showing their achievements and the remaining difficulties. A response dealing with one issue only max.8. [7-11]
- L1** Produce an answer which remains descriptive and which offers no assessment of the solutions mentioned. Limited and fragmentary responses remain within this level as do those which are so general as to make no country distinguishable. [0-6]

**Total: 25**

**Environmental Management**

- 11 (a) (i) **Explain the meaning of the terms *renewable* and *non-renewable* in relation to the production of energy.**

renewable means it can be used repeatedly/over again/is replenished constantly 1  
 non-renewable means it is finite/will run out/can be exhausted 1  
 and an energy example of both eg solar, HEP, wind and oil, coal, gas etc 1

(ii) **Why are renewable resources increasingly regarded as an appropriate source of energy?**

There are a number of reasons that may be offered here, of which the first are the most important and carry a reserve,

- the depletion of reserves of non-renewables/fossil fuels and their limited remaining lifespan 2
- concerns about environmental degradation and the choice of cleaner, less pollutive sources of energy 2

Then the consideration of other issues, such as,

- the potential of solar and wind power and HEP globally
- costs of imported energy
- energy dependency issues
- public protest and pressure and the green lobby
- world agreements on energy futures

Credit single ideas 1 and developed points 2 up to the overall maximum of 7. A full answer consists of the two reserved points and at least two others.

[10]

(b) **For one country you have studied, how true is it that, whilst environmental concerns matter, it is economic factors which govern its energy policy?**

Whilst it is likely that most candidates will be in agreement with this and will show how that **environmental concerns** are growing in significance whilst **economic factors** remain the controlling ones, there may be some countries chosen where **environmental concerns** do not yet matter much or at all and this, if supported by material, is clearly creditable. It is also possible that a candidate may argue for uneconomic decisions on the basis of **environmental concerns**.

**Candidates will probably:**

- L3** Have detailed knowledge and good understanding of the energy policy of the chosen country and use this information effectively in assessing the relative significance of environmental concerns and economic factors in a balanced and perceptive manner. [12-15]
- L2** Develop a sound answer which, whilst dealing with both environmental concerns and economic factors, lacks the country detail and/or overall perspective to be completely convincing about its energy policy. [7-11]
- L1** Make some basic observations about the chosen country's energy supplies in a limited answer which makes little or no attempt to weigh the relative contribution of environmental concerns and economic factors. [0-6]

**Total: 25**

12

**Table 1 gives information about the causes of desertification of land in Northern China in 1998.**

**Table 1**

<i>causes of desertification</i>	<i>total area (%)</i>
overcultivation	25.4
overgrazing	28.3
construction, mining and communications	0.7
water conservation	8.3
deforestation	31.8
sand dune advance	5.5

**Desertification is the degradation of the environment by the spread of desert conditions into neighbouring semi-arid grassland, savanna or woodland areas.**

**(a) (i) What were the main causes of desertification in Northern China in 1998?**

deforestation, overgrazing and overcultivation: (three, but in any order) 1

**(ii) Suggest reasons why each cause you identified in (i) occurred.**

Reserve 2 for population growth or population pressure or the need to increase food/energy supply to feed the growing population

Credit up to 3 two or more other ideas, for the causes together or separately,

eg lack of knowledge of environmental consequences of traditional practices  
 lack of modern sustainable management  
 pressure from landowners  
 reduction in soil quality and diminishing returns  
 profit motivation  
 lack of alternative fuels

**(iii) Choose any one of the causes of desertification you identified and suggest how its impact could be reduced or stopped.**

deforestation tree planting, legislation, education, community projects, introduction of alternative fuels or building materials etc

overgrazing reducing stock numbers, improving stock quality, paddocking, supplementary feeding, stall feeding, educating farmers etc

overcultivation education in improved practices, improving soil fertility and humus content with organic and inorganic fertilisers, increasing fallow periods, planting legumes, crop rotation, soil conservation procedures, food distribution and marketing etc

Credit single ideas 1 and developed points 2 to a maximum of 4

**[10]**

- (b) **For one degraded environment you have studied, explain why it is so difficult to improve environmental quality. Evaluate the solution(s) that have been attempted.**

The syllabus allows for the special study of a degraded environment, either rural or urban, so a variety of locations will be seen. Despite this variety it is likely that to **explain why it is so difficult to improve environmental quality successfully** candidates are likely to appeal to similar factors, such as, the scale of the problem; complexity of processes; vested interests; lack of finance; costs of alternatives; individual or group attitudes; need for education; relieving symptoms rather than dealing with causes; irreversibility; timescale etc.

To **evaluate the solution(s)** that have been attempted candidates need to describe and/or explain what the solutions are. In the case of a single **solution** it may be a comprehensive scheme but comprise several elements.

**Candidates will probably:**

- L3** Make good use of a detailed case study of a degraded environment, explaining the difficulty of improving environmental quality with reference to factors operating at different scales and affecting different groups of people. Evaluate the attempted solutions in a realistic and balanced manner, with clear appraisal of what has and what has not been achieved there. [12-15]
- L2** Provide a sound but not fully developed explanation of the difficulty of improving the environmental quality of the chosen example, knowledge of which is solid but not very detailed. Has reasonable knowledge of the attempted solutions but the evaluation remains partial or imbalanced and lacks an overall perspective. [7-11]
- L1** Write a response which lacks case-specific detail and offers only general explanation of the difficulty involved in improving environmental quality, remaining descriptive of the attempted solutions, rather than evaluative. [0-6]

**Total: 25**

**Global Interdependence**

13 (a) For one country you have studied,

(i) outline its main imports and exports,

Suggest imports 2 and exports 2. A list is acceptable.

(ii) identify the main factors which influence its involvement in international trade.

A number of internal and external factors may be given here, either positive or negative such as, quality of manufactures; competitiveness; political stability; economic conditions; trading blocs; market controls; locational advantage etc.

Credit single ideas 1 and developed points 2 or 3, up to 6, so that a full answer consists of at least two well developed points, allowing a candidate to take either a broader shallower, or a more specific and detailed, approach.

[10]

(b) To what extent are political factors the key to the explanation of inequalities in global trading patterns?

Here inequalities in global trading patterns are a syllabus topic.

For the purposes of the question political factors embrace both the internal politics and political situation of countries and their international relationships, allowing for historical colonial ties and contemporary trading blocs and agreements.

Candidates may argue that whilst political factors matter so do factors in other dimensions, notably the economic in terms of the dominance of trade flows between North America and Europe/the MEDCs, but also environmental (resource endowment and locational advantage).

Candidates will probably:

L3 Demonstrate detailed knowledge and good understanding of global inequalities in trade flows and an impressive ability to assess the factors which explain them in the political, and at least one other, dimension. A mature response which sees 'the big picture'. [12-15]

L2 Show sound knowledge of global inequalities in trade patterns and some understanding of how they are to be explained, either making a largely one-dimensional explanation or opening up a wider picture without the skills in assessment, or the detailed exemplification, to carry it off fully. [7-11]

L1 Have only basic knowledge of global trade flows and offer a few ideas only as to how they can be explained. The answer may remain descriptive and not address the question directly in terms of political factors. [0-6]

Total: 25

- 14 (a) (i) Explain the meaning of the term *carrying capacity* in relation to mass tourism and to eco-tourism.

carrying capacity is the largest population/maximum number of people 1  
 that the resources of a given environment can support 1  
 mass tourism has a high carrying capacity 1  
 evidence eg package tours, high rise hotels, jumbo jets, multiple services 1  
 eco-tourism has a low carrying capacity 1  
 so as not to damage environments and/or indigenous peoples  
 or as evidenced by lack of/small scale of facilities etc 1

- (ii) Read the newspaper cutting in Fig. 7A about tourism in the Spanish islands, the locations of which are shown in Fig. 7B. According to the newspaper cutting,

A why is the government levying a green tax on tourists,

to help pay for environmental damage caused by tourists 1

B what other evidence is given of the impacts of tourism on these islands?

negatives 2 political opposition to further tourism developments

(any two) drunken package tourists

foreign land ownership and control (Majorca 1/5)

positive 1 personal affluence (Majorcans Spain's richest people)

[10]

- (b) With reference to one tourist area or resort you have studied, assess the extent to which tourism benefits the local society and economy.

Whilst a balanced answer is needed, here the **benefits to local society and economy** are specifically required. No credit for national economic + or - unless a clear link is made to the local area. Environments are not asked for but may have legitimate links to society eg via water supply or economy eg via pollution.

Candidates are likely to make some middle ground assessment that there are major benefits (more economic than social?) but that there are also significant negatives (more social than economic?) A simple grid may help with marking.

**Candidates will probably:**

- L3 Develop a broadly-based assessment of tourism's beneficial effects on the local society and economy of the chosen area or resort, demonstrating some detailed place knowledge and a sense of judgment, maybe differentiating the positive and negative impacts on different groups of people there. [12-15]
- L2 Make a sound assessment of tourism's benefits to local society and economy but lack the place detail and/or an appreciation of the costs involved to both to provide a more complete and balanced account. For a wholly positive account, if detailed, max.9. [7-11]
- L1 Give an answer which is essentially descriptive rather than analytical and which is basic, fragmentary or superficial, maybe naming the area but remaining general, or being unrealistic about its tourism. [0-6]



**Economic transition**

15

**Fig. 8 shows a classification of the services industry (tertiary sector).**

- (a) Using examples, describe the varied nature of employment in the services industry in terms of,**

Given the resource stimulus, we can hope for some detail in what is credited. The key is **varied nature** so look for diversity in each. Credit low 1 high 1 and development 1, each reserve 2 and max 3.

- (i) qualifications and training,**

eg from little or no (deliveries) to highly qualified after long training and with an ongoing training component (doctors)

- (ii) numbers employed,**

eg from one or a few (self-employed accountant) to thousands (global accountants)

- (iii) pay,**

from low hourly paid jobs (cleaners) to highly remunerative pay/benefits packages eg company car, pensions, medical cover (business) and bonus schemes (sales).

- (iv) working conditions.**

outside or at home, travelling; dangerous environments eg construction services and transportation, some clean indoor work (offices)

[10]

- (b) To what extent does the growth in personal wealth in many countries explain the growth in the services industry in their economies?**

The widespread growth of the service sector and the tertiarisation of some economies is an important feature of the contemporary scene. Growth in services needs to be set in the context of economic development and of deindustrialisation in some MEDCs.

Whilst **personal wealth** is part of the explanation, there are other considerations that need to be made. Traditional economics suggests that as income rises so does the demand for services eg restaurants, entertainment, tourism, leisure and perhaps private health care, domestic staff, education etc

Other factors, which may be mentioned, include,

- significant disparities exist in personal affluence within society, so the affluent end up indirectly 'employing' the least affluent in services eg catering.
- as income rises many people spend money on manufactured goods which could reduce their need for services eg car ownership rather than public transport; washing machines rather than laundries or domestic help.
- it is not just individuals who require services (consumer services) but business and industry (producer services) and it is growth in their demand for services which is more significant overall in the economy
- TNCs are diversifying from manufacture into services eg insurance, property
- innovation eg new financial products, computer technology and the internet help account for the mushrooming of services in MEDCs but also globally

**Candidates will probably:**

- L3** Develop an effective answer, both explaining the link between personal affluence and the growth of services and explaining at least one other significant factor in a context which shows good knowledge of a country or countries, and an appreciation of economic development. Have good skills in argument and assessment. **[12-15]**
- L2** Show a sound knowledge of the growth of the service sector and explain well how personal affluence is linked to it, maybe making passing reference to another factor, or factors, without discussing the role in detail. Have a solid context of economic development. **[7-11]**
- L1** Have some difficulty in framing an effective answer, lacking understanding of the growth of services and knowledge of specific countries. May make some simple remarks about how personal affluence is linked by demand to the growth of services but not within the desired framework of assessment. **[0-6]**

**Total: 25**

- 16 (a) (i) Explain briefly the meaning of the term *regional disparities*.**

inequalities, contrasts or differences 1  
 occurring between regions within a country 1  
 in (both) social and economic development/wellbeing/standards 1

**(ii) How can regional disparities be measured?**

In many ways. Credit two single criterion measures in each dimension,

social 2 eg fertility rate, literacy rate, % households with piped water,  
average daily calorific consumption etc  
(max 1 for population measures eg BR, DR, FR, LE)

economic 2 eg unemployment rate, average income, indebtedness

and credit one or more multiple criteria measure 2

HDI Human Development Index (GDP per capita, education, life expectancy)

PQLI Physical Quality of Life Index (infant mortality rate, literacy, life expectancy)

one other observation 1 eg by the government or UN,  
using multiple measures is better  
with difficulty as some statistics are hard to obtain

[10]

**(b) For one country you have studied, evaluate government attempts to spread development more evenly across the different regions.**

The syllabus requires the study of a country's policy for social and economic development at either the national or the regional scale. Clearly the 'spreading' of development is basic to either. The command word **evaluate** combines assessment of the success of the government's attempts with an indication of the values central to the policy eg health for all, the welfare of women, ethnic minorities, work skills etc.

**Candidates will probably:**

- L3** Make full and effective use of their knowledge of the chosen country, showing an understanding of both its regional disparities and of government social and economic development policy and produce an answer with a strong evaluative thread which considers both outcomes and values. [12-15]
- L2** Develop a sound answer which shows reasonable knowledge of the country chosen and some government attempts to spread development within it, although either the social or the economic dimension may dominate. Some evaluation is offered but observations on outcomes and/or values may be limited. [7-11]
- L1** Have a narrow basis of knowledge and understanding and produce an answer which is descriptive of the chosen country making little or no evaluative comment. May be a fragmentary or superficial response. [0-6]

**Total: 25**