

CONFIDENTIAL



GENERAL CERTIFICATE OF EDUCATION
TYSTYSGRIF ADDYSG GYFFREDINOL

GEOGRAPHY – G2 CHANGING HUMAN ENVIRONMENTS

MARK SCHEME

JANUARY 2009

G2

January 2009

- Q.1 (a) Describe the distribution of the Indian population within Greater London shown in Figure 1. [5]**

Suggestions:

- The highest concentration of Indians, 20.1 -50%, is found in the NW Boroughs of Harrow, Brent and Ealing.
- Surrounding this concentration, at 10.1-20%, are the Western outer suburbs of Hillingdon, Hounslow and Barnet.
- The Southern outer suburb of Croydon and Northern outer suburb of Redbridge also have 10.1-20%.
- The inner suburbs contain the least percentage of ethnic Indians, mostly below 2.5%; Newham having the largest percentage at just 10.1-20%.
- The concentration is also less than 2.5% in the Northern outer Borough of Enfield, and the NE Boroughs of Havering and Barking and Dagenham and in the SE in the large Borough of Bromley where Indians represent less than 2.5% of the population.
- Overall the highest concentration appears to be the outer suburbs in the North West whilst the least concentration is in central London and the SE and NE outer suburbs. But the distribution is a difficult one for any generalisations.
- Accept reference to clusters, wedges and scale.

Answers should contain two from: named Boroughs; compass directions; inner / outer comments and percentage values in order for full marks to be awarded.

1 mark for each valid point, or a point can generate 2 marks if very well described.

- (b) Explain some of the causes of changes in the gender structure of countries. [10]**

Demographic change through time described by the varying shapes of population pyramids can explain changes in gender structures as follows:

- **Stages 1/2:** progressive, expansive, concave shape. More boy children than girls. Adults have equal males and females as childhood diseases and infant mortality and lifestyle cause more boys to die. Old age (30s-40s) perhaps more males as females die through childbirth and heavy family responsibilities. e.g. Burkina Faso.
- **Stage 3:** population is larger as medicine has improved and infant mortality has fallen. Still more boy babies are born who die at more regular intervals than girls. Also, female foeticide in some countries such as India and China will exacerbate the predominance of male babies. In adulthood the gender ratio should be equal unless the government has manipulated the natural order with population policies (e.g. China). Out migration of males could create an imbalance with more females. In old age the females usually outnumber the males. Emancipation of women is in its infancy, and due to work-related stress and lifestyle diseases caused by unbalanced diets, smoking, alcohol and being involved in more hazardous occupations (armed forces) men die off at an earlier age. e.g. Zimbabwe.

- **Stages 4/5:** contractive, regressive, convex shape. Population begins to stabilise and then fall. Still more boy babies, but birth rate is now low. Boys continue to die at a faster rate than girls, as they are more prone to disease (e.g. AIDS), become involved in more hazardous occupations (e.g. construction) and choose unhealthy life style choices. (E.g. the consumption of too much alcohol and junk food). In adulthood the gender ratio is balanced unless out migration of males occurs such as in several Eastern European countries. Thus females normally greatly outnumber males in old age. E.g. Italy, Hungary.

Answers outside the framework of the DTM are equally valid and may explain specific causes of gender imbalance to include:

- Population policies allied to cultural preferences for boys as in China and India.
- War generating a surfeit of females, e.g. Iraq
- Diseases can be gender specific, e.g. Aids in Botswana.
- Internationally migrations can severely imbalance gender structures. e.g. male Polish workers to the UK.

Names of specific countries with statistics would be expected for level three.

Level 3: 8-10 marks	Wide ranging explanations based on good descriptions with reference to real example(s) using, perhaps , statistics and illustrations of population pyramids and/or the DTM.
Level 2: 4-7marks	Explanations are adequate, but fairly descriptive with limited reality inclusions.
Level 1: 0-3marks	Describes changes in general terms with little explanatory depth or illustration.

(c) Outline the issues created by an ageing society. [10]

A description of the issues.

- Not enough young workers to pay taxes to look after the old.
- The economy will stagnate with not enough vigorous, innovative, willing young workers.
- Industries catering for the youth market will decline. (iPods!)
- Immigration of different ethnic groups may cause social tension.

Candidates may consider that attempting to address such issues is an issue in its own right and may outline some attempted solutions to the initial issues.

- Government incentives to encourage births (e.g. Child Trust Fund).
- Encourage immigration.
- Increase industrial productivity.
- Raise the retirement age.
- Increase taxes to pay for pensions and health care of the old.

Equally valid are some positive issues which candidates may identify such as less crime, less road deaths, smaller class sizes and spending the money saved on education on health care services. Less pressure on the environment to cope with a rising population, so fewer houses need to be built.

Level 3: 8-10 marks	Demonstrates a good awareness of issues and uses good detailed examples.
Level 2: 4-7marks	Suggestions are not as detailed. Several issues covered, but with sketchy reference to examples.
Level 1: 0-3marks	Generalised with a vague list of simple issues.

Q1	AO1	AO2	AO3	
a	1	1	3	5
b	7	3	0	10
c	7	3	0	10
Total	15	7	3	25

Q.2 (a) Use Figures 2a and 2b to suggest why perceptions of rural life are powerful pull factors in counter-urbanisation. [5]

- A row of quaint cottages with slate roofs and colourful gardens surrounded by traditional stone walls.
- Lots of trees making for a pleasant (rural) outlook.
- Individually styled cottage type housing.
- Perhaps a village shop and/ or pub to the far right, perhaps indicative of a community spirit.
- Light traffic, perhaps indicating little traffic noise and fume pollution.

These observations represent a perception of the **rural idyll** where the countryside is peaceful with little crime and where neighbours are friendly with an active village social life. Education in the local schools is better than in the urban area. The environment is less polluted with industrial fumes and noise. Land is cheaper so bigger properties can be afforded.

Max 2 marks for specific photo reference (1 point from each photo) and then up to 3 marks for at least two perceptions well stated.

(b) Describe recent changes in the urban rural fringe. [10]

Environmental changes: The built environment: housing, retail parks, warehouse and distribution centres and manufacturing industry have been built on the edge of urban areas. These developments often pay no regard to the traditional architectural quality of the existing rural environment.

Communication Changes: Motorway junctions and outer ring roads have encouraged more vehicles to travel in the fringe creating exhaust gas and noise pollution.

Economic: Traditional shops and services in many villages have had to close as they cannot compete with the encroaching out-of-town facilities and the increasing car ownership of the new inhabitants. Other village services such as the school find it difficult to cope with the increase in new residents' children.

Socio-political: Urbanites now form the majority of fringe dwellers and will demonstrate different values and attitudes from the traditional rural inhabitants. Urbanites may bring many urban anti-social habits with them, increasing crime and graffiti, as well as dominating local politics on Parish Councils. Here decisions could be made favouring the urbanites views which may cause consternation to long-established rural dwellers: e.g. conflicts over noises from animals and farm machinery as the reality of country life takes over from the perception!

Level 3: 8-10 marks	Demonstrates a good awareness of the changes and their consequences and the answer is well located in reality.
Level 2: 4-7marks	Changes are not as detailed and reality information is undeveloped.
Level 1: 0-3marks	Generalised with un-located, vague and sketchy changes. Inappropriate example.

(c) Evaluate the success of an inner city regeneration scheme. [10]

Renovation, gentrification, re-generation, renewal schemes.

Success could be the personal opinion of the candidate or differing views and attitudes of interested parties such as the original local residents, the local council, an environmental group, pensioners and the government.

Success may be perceived to be entirely positive or negative or a mixture, but the changes are unlikely to be welcomed by all interested parties.

Candidates that use examples which are **not** inner city or are a projected scheme can reach the top of Level 2.

Level 3: 8-10 marks	Broad and balanced discussion which may include both positive and negative aspects of policies of an established scheme. Well balanced between descriptive information of a case study and reasons for success with a good range of views.
Level 2: 4-7marks	Demonstrates a range of points which are well structured, but description dominates with limited evaluation or case study input.
Level 1: 0-3marks	Demonstrates some aspects in general terms with little depth nor illustration.

Q2	AO1	AO2	AO3	
a	1	1	3	5
b	7	3	0	10
c	7	3	0	10
Total	15	7	3	25

Q.3 Litter management helps to maintain a vibrant retailing experience within the Central Business District (CBD). Figure 3 shows the location and results of a survey of discarded chewing gum along four shopping streets in a Central Business District.

(a) Describe the relationships between the number of pieces of chewing gum recorded and the distance from the centre of the CBD. [7]

Street A has a strong negative correlation meaning that as distance from the CBD increases the number of pieces of chewing-gum decreases. It is not a perfect correlation as at point 3 and 4 the identical value of 7 occurs.

Street B has a negative correlation as there is a strong correspondence between increasing distance and decreasing gum.

Street C has a weaker negative correlation: one reason being an anomaly of value 12 at point 3. This value represents an increase in gum which is against the general trend.

Street D shows a moderate negative correlation as another anomaly is present. This time it is point 4 with 12 pieces of gum.

Level 3: 6-7 marks	Recognises correlations and anomalies and systematically applies the answer to all four streets using appropriate terminology.
Level 2: 3-5marks	May recognise correlations and/or anomalies, but may not have full coverage of all four streets.
Level 1: 0-2marks	Sketchy and/or confused suggestions. Limited ability to recognise correlations or anomalies.

(b) Suggest and justify two other methods of obtaining information for a fuller investigation of litter within this CBD. [8]

Suggestions.

- Alternative methods of sampling.
- Questionnaires for shoppers in the CBD to establish their views on the issue with piloting and sampling information. Perhaps with examples of questions.
- Interviews with shopkeepers to discover their views.
- Photographs to visually demonstrate the distribution.
- A litter bin survey to discover the convenience of environmentally friendly disposal.
- Structured interview with the city centre manager. Perhaps to discover any plans to tackle the issue
- Email to chewing-gum manufacturer regarding developments to help in the litter issue.
- Local council website investigation

Any two suggestions well justified in aiding the investigation.

Level 3: 7-8 marks	Full appreciation of the study and fully comprehensive accounts of two additional methods to extend the study.
Level 2: 4-6marks	Two methods given and justified, but without a complete appreciation of how these methods might aid the study.
Level 1: 0-3marks	Sketchy response. Perhaps only one method with limited justification.

- (c) **Outline the planning stages of an investigation that you have undertaken into a changing human environment.** [10]

Marking will depend on the quality of response and must be adjusted to suit individual studies presented.

An expectation would be a discussion of the need to devise a question, a hypothesis (positive or negative) or investigate an issue.

Discussion of where, when and how might include the construction of recording sheets and a discussion on sampling. The discussion should be about planning, not describing what actually happened.

A risk assessment may involve identifying specific risks, judging the outcome if the risk factor actually materialised and assessing the probability of the risk factor occurring.

Level 3: 8-10 marks	Fully appreciates the need to plan and discusses the issue of question setting, as well as a detailed review of locational planning and/or risk assessment for a specific study.
Level 2: 4-7marks	A good account, but incomplete elaborative detail.
Level 1: 0-3marks	Sketchy and perhaps confused, maybe only addressing one element of the question.

Q3	AO1	AO2	AO3	
a	1	1	5	7
b	2	1	5	8
c	3	2	5	10
Total	6	4	15	25