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1 (a) (i) South America Europe Asia [1]

(ii) USA
31 110 [2]

(iii) Ideas such as:
- lack of qualifications/skills/education/no experience;
- some cannot speak the language;
- some are doing low paid jobs;
- some are unable to obtain employment/not enough jobs;
- difficulty affording housing/have to live in squatter settlements/cannot find a place to live;
- some may have to live away from their families;
- discrimination may occur;
- exploitation by employers/long hours;
- hard to fit in with culture/differences in culture/laws (or example – food, etc.)
- religious persecution/nowhere to worship;
- lack of documentation, etc. (3 × 1 mark) [3]

(iv) Ideas such as:
- enlarges labour force/helps to exploit resources;
- provides cheap labour;
- people will do jobs locals will not do/dirty jobs;
- skilled labour (or example – doctors/engineers);
- cultural exchange/multi-cultural society;
- specific services set up (or example – restaurant, etc.);
- raises more tax revenue;
- larger market for businesses/more sales;
- helps country to develop/improves economy;
- employment/revenue for country created by new businesses, etc. (4 × 1 mark) [4]

(b) (i) Emigration from USA to Mexico increases after 1995 to 2000 but emigration from Mexico to USA decreases by 2005–2010;

1995–2000 more emigration from Mexico to USA than immigration from USA to Mexico; 2005–2010 more emigration from USA to Mexico than immigration from Mexico to USA/roughly the same amounts of immigration and emigration between Mexico and USA;

3rd mark for supporting stats:
1995–2000 to USA 2.9 million, to Mexico 0.68 million
OR
2005–2010 to USA 1.3 million to Mexico 1.4 million (3 × 1 mark) [3]
(ii) Ideas such as:
- employment;
- high wages;
- good quality/sufficient education/schools/universities/children’s literacy improved/better qualifications, etc.;
- good quality health care/doctors/medicines;
- good quality housing;
- with amenities such as electricity/piped water;
- bright lights/entertainments;
- adequate supplies of food;
- good water supply/sanitation;
- family/friends live there;
- no wars/peace/political stability, etc.  (5 × 1 mark for development) [5]

(c) Levels marking

Level 1  (1–3 marks)
Statements including limited detail which describe and/or explain the problems caused by under-population.

Level 2  (4–6 marks)
Uses named example.
More developed statements which describe and/or explain the problems caused by under-population.

NB Max 5 if no named or inappropriate example

Level 3  (7 marks)
Uses named example.
Comprehensive and accurate statements including some place specific reference.

Content Guide:
Answers are likely to refer to:
- shortage of workers
- low level of production
- resources under-used
- high taxes
- lack of government income
- small market for goods and services
- low value of exports, etc.

Place specific reference is likely to consist of:
Named parts of the chosen country/locational detail, population data, etc.  [7]

[Total: 25]
2 (a) (i) Coastal location/sheltered water/on an estuary/near the sea, etc. [1]

(ii) • Q is located where deep water is available/P near shallow water;
• P has large areas of mud (at low water)/Q does not have mud;
• It is difficult for ships to reach P/it is easy for ships to reach Q/P is a long way from open sea;
• ships are now much larger, etc. (2 × 1 mark) [2]

(iii) Ideas such as:
• S has a large beach(or spit)/R does not have a large beach;
• S is accessible by rail/R is not on the railway line;
• A main road serves S/only a minor road goes to R/S is more accessible/easier to get to;
• S has more amounts of flat land/R has steep land, etc.

NB: Assume the answers relates to S unless otherwise stated. (3 × 1 mark) [3]

(iv) Ideas such as:
• imports/exports/close to port;
• railway line/roads/easy distribution of products/access raw materials;
• can process fish caught locally;
• flat land for building factories;
• water supply for industry, etc.

One mark for simple reason (e.g. it is near a port)
Second mark for explaining the reason (e.g. it is near a port so raw materials can be imported) (4 marks 2 + 2 Dev) [4]

(b) (i) • Both are a similar size/small/both approx. 40 000 sq metres (35 000 to 45 000);
• Ghajn Tuffieha is longer/linear but Fomm ir-Rih is nucleated;
• Ghajn Tuffieha is 400 metres long/from west to east and Fomm ir-Rih is 200 metres long/from west to east, etc. (3 × 1 mark) [3]

(ii) Ideas such as:
• relief/flat, low land – is better for construction;
• a site close to a wet point/water source/stream/spring/river – provided fresh water;
• fertile land was required – for producing food;
• valley sites – were sheltered from the elements;
• hill tops – were sometimes chosen as defensive sites;
• bridging points/fords – enabled rivers to be crossed;
• dry point – avoided flooding;
• near woodland – for hunting/building materials;
• near roads – for access;
• aspect/south facing (in N hemisphere) – to get more sunshine;
• avoid marshes – so buildings are stable, etc. (5 × 1 mark for development) [5]
(c) Levels marking

**Level 1** (1–3 marks)
Statements including limited detail which describe and/or explain the service provision.

**Level 2** (4–6 marks)
Uses named example.

More developed statements which describe and/or explain the service provision.

**NB** MAX 5 if no named or inappropriate example

**Level 3** (7 marks)
Uses named example.
Comprehensive and accurate statements including both description and explanation, with some place specific reference.

**Content Guide:**
- Answers are likely to refer to;
- Types of services,
- Order of services,
- Size of settlement/population,
- Sphere of influence,
- Threshold population,
- Accessibility,
- Function of settlement, etc.

**Place specific reference is likely to consist of:**
- Locational details,
- Population statistics,
- Details of transport/communication network,
- Named shops and services, etc.

**NB** The example can be a named settlement of any size. 

[Total: 25]
3 (a) (i) The magnitude of an earthquake [1]

(ii) On Fig. 5 [2]

(iii) Ideas such as:
- uneven distribution;
- clustered/in groups;
- in western part of the country;
- on/close to boundaries (with Russia/China/Kazakhstan);
- mainly between 87 and 105 degrees East (anywhere within range), etc.  
  (3 × 1 mark) [3]

(iv) Ideas such as:
- location is close to a (destructive) plate boundary/subduction zone;
- plates move or slide towards each other/one goes under the other;
- friction/plates get locked together/plates stick;
- build-up of pressure or tension or energy;
- pressure or tension released/sudden jolt;
- creates seismic waves/vibrations, etc.  
  (4 × 1 mark) [4]

(b) (i) Focus= where the earthquake occurred/started/rocks fractured the origin of the earthquake
Epicentre = the point on the surface directly above the focus/where the earthquake occurs.
Seismic waves= a wave/vibration which travels within the earth/through the rocks  
  (3 × 1 mark) [3]

(ii) Ideas such as:
- death/injury;
- destruction/damage to homes;
- damage to possessions/cars;
- damage to roads/railways/bridges;
- loss of electricity/gas/telephone lines/communications;
- loss/contamination of water supplies;
- fires;
- disruption to businesses/workplaces;
- economic collapse;
- loss of jobs;
- food shortages/death of livestock;
- government buildings destroyed;
- damage to specific other buildings – e.g. churches/school/hospital/shops/historical buildings/monuments;  
  (5 × 1 mark for development) [5]
(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail which describe opportunities provided by volcanoes.

Level 2 (4–6 marks)
Uses named example.

More developed statements which describe opportunities provided by volcanoes.

NB Max 5 if no named or inappropriate example

Level 3 (7 marks)
Uses named example.
Comprehensive and accurate statements including some place specific reference.

Content Guide:
- Answers are likely to refer to:
  - Tourism/scenic beauty,
  - mining/mineral exploitation,
  - building materials,
  - fertile soils/agriculture,
  - geothermal power
  - cultural/religious significance, etc.

Place specific reference is likely to consist of:
- Locational details,
- Details of named parts of the area,
- Named examples of power stations/tourist resort, etc.

[Total: 25]
4 (a) (i) Amazon (Basin)/Congo Basin//Kalimantan, etc. [1]

(ii) On/close to Equator; up to 7/8 degrees north and south; in Africa, South America and South East Asia (at least 2 needed), etc. (2 × 1 mark) [2]

(iii) Describe Hot and wet/high rainfall and temperature; high temperature through the year/no seasons; average around 30 °C; 2000 mm of rain or more; High rainfall all year/each day hot followed by heavy rainfall; High humidity/humid, etc. (3 × 1 mark) [3]

Explain Overhead sun/high angle of sun/direct sunlight/sun’s rays are concentrated; Low atmospheric pressure; Rising air; Large amount of evaporation; Large amount of transpiration; Large amounts of condensation; Build-up of cumulus clouds; Saturation/convectional rainfall (4 × 1 mark) [4]

(b) (i) Impacts such as:
- leaf litter destroyed as trees are burnt;
- micro-organisms are destroyed so less plants grow;
- less evapotranspiration so there is less rainfall;
- soil is eroded/leached so plants do not grow well/soils become infertile;
- plants do not grow when there is less rain;
- loss of shade so leaching and erosion occurs, etc.

NB No marks for a straight copy of labels without linking ideas together. (3 × 1 mark) [3]

(ii) Ideas such as:
- release of carbon dioxide (as a result of burning);
- trees are no longer available to convert carbon dioxide to oxygen/less oxygen is produced;
- carbon dioxide traps heats;
- increases global temperatures/greenhouse effect/global warming;
- melting of ice caps/glaciers;
- rising sea level;
- flooding of coastal areas;
- loss of habitat;
- extinction of species;
- impact on food chains;
- drought;
- damage to coral reefs;
- increasing number/severity of tropical storms, etc. (5 × 1 mark for development) [5]
(c) Levels marking

**Level 1** (1–3 marks)
Statements including limited detail which explain why the desert climate is hot and/or dry.

**Level 2** (4–6 marks)
Uses named example.

More developed statements which explain why the desert climate is hot and/or dry.

**NB** Max 5 if no named or inappropriate example

**Level 3** (7 marks)
Uses named example.
Comprehensive and accurate statements, which explain why the desert climate is hot and dry, including some place specific reference.

**Content Guide:**
- Answers are likely to refer to:
  - Air pressure,
  - Descending air,
  - Hadley Cell,
  - Wind direction,
  - Angle of sun,
  - Rain shadow effect,
  - Cold ocean currents, etc.

**Place specific reference is likely to consist of:**
- Locational details;
- Details of amounts of precipitation/temperatures,
- Named winds,
- Names of locations within the desert, etc. [7]

[Total: 25]
5 (a) (i) El Salvador [1]

(ii) Countries with higher GNP per capita have a higher percentage with access to clean water/positive relation; comparative statistics for two countries to illustrate relationship. (2 × 1 mark) [2]

(iii) Methods such as:
- Wells/water pumps;
- Rivers/streams/lakes;
- piped water;
- dams/reservoirs;
- collecting rainwater in storage tanks/from roofs;
- purchase of water from tankers/bottled water, etc. (3 × 1 mark) [3]

(iv) Ideas such as:
- reduction of water borne disease/diarrhoea;
- such as typhoid/cholera, etc.;
- less dehydration/water is needed for life/without water people die;
- water required for cooking of food;
- so less malnutrition;
- less need to carry water for large distances;
- less time wasted so people can grow more crops;
- better sanitation/hygiene;
- irrigation of crops/water for livestock, etc. (4 × 1 mark) [4]

(b) (i) Ideas such as:
- Large/long/wide/big;
- very high;
- built of concrete/stone/rock;
- large reservoir behind it;
- road along dam;
- power station at base of dam/electricity produced there;
- in a rural/mountainous area, etc. (3 × 1 mark) [3]

(ii) Ideas such as:
- the project will create employment (during the construction phase);
- water supply for industry;
- which will create multiplier effect;
- generation of HEP/electricity;
- will encourage economic growth/development/increase GDP;
- tourists will be attracted to the dam/reservoir;
- water will be available for local farmers;
- increased yields of crops;
- commercial production of crops/exports will increase;
- reduce costs of/damage caused by floods;
- sustainable supply of water;
- can sell water internationally, etc. (5 × 1 mark for development) [5]
(c) Levels marking

Level 1  (1–3 marks)
Statements including limited detail which explain how the threats to the natural environment are being managed.

Level 2  (4–6 marks)
Uses named example.

More developed statements which explain how the threats to the natural environment are being managed.

NB Max 5 if no named or inappropriate example

Level 3  (7 marks)
Uses named example.
Comprehensive and accurate statements, which explain how the risks to the natural environment are being managed, including some place specific reference.

Content Guide:
- Answers could refer to any economic activity but are likely to refer to;
- Manufacturing industry
- Tourism,
- Mining or quarrying,
- Agriculture,
- Generation of electricity,
- transport, etc.

Management strategies will depend on the activity being considered but may include:
- Legislation,
- Planning controls,
- National Park status, etc.

Place specific reference is likely to consist of:
- Locational details;
- Specific details of economic activity or management strategies,
- Named settlements, etc.

[Total: 25]
6 (a) (i) Jobs/things which are done on a farm to convert inputs to outputs; turning inputs on a farm into outputs; actions needed to get an output from a farm

(ii) Arable – wheat/sugar beet  
Pastoral – meat/milk/wool

NB Crops and animal products = 1  (2 × 1 mark) [2]

(iii) Ideas such as:
- variety of items to sell/different types of products to sell;
- if one product does not do well the farmer has others to fall back on;
- easier to adapt to market changes;
- manure from animals can be used to fertilise crops;
- crop waste can be used to feed animals;
- the farmer has work throughout the year, etc.  (3 × 1 mark) [3]

(iv) Ideas such as:
- crops are usually grown on flat/low land;
- as it is easier to mechanise;
- soilds are likely to be more fertile;
- steep slopes are used for grazing sheep/pastoral farming;
- thin soils/rough grassland on steep slopes would result in poor yields from crops;
- sheep are hardy and can withstand cold temperature on mountains;
- south facing slopes (in northern hemisphere…vice versa in southern) receive more sunshine;
- and are useful for growing vines;
- sloping land more be better drained than flat land;
- so may be used for crops/livestock which will not tolerate waterlogging, etc.  (4 × 1 mark) [4]

(b) (i) Ideas such as:
- More scrub and desert to the west;
- More rice growing to the east;
- More wheat grown to the east;
- All cotton to the east none to west;
- More crops grown to east (only allow if no marks given for specific crops)
- More forest to the east;
- There is scrub to the west but wheat is grown to the east (or similar comparison to MAX 1)

NB The answer needs to be comparative  (3 × 1 mark) [3]

(ii) Ideas such factors such as:
- amount of land owned;
- amount/surplus which can be produced
- availability of local markets/demand/profitability;
- accessibility/access to distant markets/export market;
- wealth of farmers/availability of capital for inputs;
- availability of labour supplies;
- tradition/culture;
- level of education of farmers, etc.  (5 × 1 mark for development) [5]
(c) Levels marking

**Level 1**  (1–3 marks)
Statements including limited detail which describe the effects of food shortages on the people who live there.

**Level 2**  (4–6 marks)
Uses named example.

More developed statements which describe the effects of food shortages on the people who live there.

**NB** Max 5 if no named or inappropriate example

**Level 3**  (7 marks)
Uses named example.
Comprehensive and accurate statements, including some place specific reference.

**Content Guide:**
- Answers are likely to refer to:
  - malnutrition/starvation,
  - migration,
  - weakness/inability to work,
  - reduction of future output,
  - cycle of poverty,
  - dependence on aid supplies, etc.

**Place specific reference is likely to consist of:**
- Locational details;
- Specific details of settlements/areas affected,
- Named groups/tribes living in the area, etc.  [7]

[Total: 25]