

HIHS Secondary 'O' Level Humanities (Geography) 2272/02 Answering Techniques Manual

Name: _____ () Class: _____ Date: _____

Overview of skills

- 1. Describe relationships
- 2. Describe trends
- 3. Describe distributions
- 4. Compare and contrast
- 5. Diagram drawing
- 6. Annotated and Well-labelled diagrams
- 7. Open-ended questions

(1) Describe relationships

Steps:

- State the relationship. Suggested structures are: As variable X <u>increases/decreases</u>, variable Y <u>increases/decreases</u> (direct relationship) OR The <u>greater/higher</u> variable X, the <u>greater/higher/smaller/lower</u> variable Y (inverse relationship).
- 2. Provide two sets of relevant data to reflect the described relationship. (data can be selected from the highest or lowest value to show contrast)
- 3. State anomalies, if any.

Sample question

Refer to Pitstop 3 in 'Variable weather and changing climate'. Fig. 2.17. Question: With reference to Fig. 2.17, describe the relationship between temperature and the capacity of air to hold water vapour. [2]

Answer:

[1] The <u>higher</u> the air temperature, the <u>greater</u> the capacity of air to hold water.
 [1] As seen in Fig. 2.17, when air temperature <u>increases</u> from 10°C to 50°C, the amount of water vapour contained in the air <u>increases</u> from 10g/kg of air to 94g/kg of air.

(2) Describe trends

(Single line/bar graphs)

Steps:

- 1. Give the overall trend (starting year + value, ending year + value, increase/decrease/constant)
- 2. Pick out significant changes.
 - greatest/sharpest/most drastic change (in the same direction as the overall trend)

- least/smallest/slowest change (in the same direction as the overall trend)

3. State anomalies, if any.

- greatest change (in the opposite direction as the overall trend)

What makes an ideal description?

- ✓ A verb is used to show the type of change or lack of increase, decrease or remains constant.
- An adjective or adverb is used to show the extent of change slight(ly), gradually, slowly, small, moderate, large, sharp, drastic(ally).
- ✓ Interpretation is supported by data from the graph.
- ✓ State starting year and value, ending year and value, with the correct units.

Sample question 1

Refer to Fig. 2.26 in 'Food resources', TB pg 108.

Question: With reference to Fig. 2.26, describe the trend of beef consumption in the EU between 1980 to 2010. [3]

Answer:

[1] There is an overall <u>decrease</u> in beef consumption in the EU from <u>8.2 million tonnes in 1980</u> to <u>6.4 million tonnes in 2010.</u>

[1] The sharpest decrease occurs in 1999, from 7.5 million to 7 million in 2000.

[1] From <u>2000</u> onwards, it <u>increased</u> at a decreasing rate from <u>6 million tonnes</u> to <u>6.4 million</u> <u>tonnes in 2010.</u>

Sample question 2

Refer to Fig. 1.55a) in 'Global Tourism'. TB pg 49.

Question: With reference to Fig. 1.55a), describe the trend in Egypt's annual international tourist arrivals from 2006 to 2011. [3]

Answer:

- [1] There is an overall <u>increase</u> in Egypt's annual international tourist arrivals from <u>9.1 million in 2006</u> to <u>11.5</u> <u>million in 2012</u>.
- [1] The greatest increase is observed to be from <u>12.5 million in 2009</u> to <u>14 7 million in 2010</u>.

[1] From 2010 to 2011, there is a decrease from 14.7 million to 9.8 million.

(Comparative line/bar graphs)

- Compare = give both similarities and differences
- Contrast = give only differences

Steps:

1. For compare, first identify the similarity/similarities. The overall trend is a good place to start. Suggested structure for phrasing similarities: Both (A and B) are _____.

2. Next, identify difference(s). Compare the same criterion/aspect/factor at any one time. Suggested structure for phrasing differences: A is _____ but B is _____.

3. Avoid writing everything about A, then everything about B (i.e. more than one criterion).

What makes an ideal description?

- ✓ All that apply to single graphs
- ✓ Use comparative adjectives e.g. higher/smaller than.

Sample question

Refer to Fig. 3.47 in Physical Geog TB 'Geographical Skills and Investigations' on comparative bar graphs. Question: Compare the number of tectonic-related hazards in selected countries over the three ten-year periods. [3]

Compare = similarities and differences

[1] Similarity - In all the countries shown, the greatest number of tectonic-related hazards occurred between 2000 to 2009 (which also means an increase in overall trend), of about 49 in Indonesia, 48 in China, 23 in Iran and 18 in Japan.

[1] Difference – For all countries except Japan, there were more or same number of tectonic-related hazards from 1990 to 1999 as compared to 1980 to 1989. For Indonesia, it remained at 30, while in China, it increased from 19 to 34 and in Iran, it increased from 19 to 20. For Japan, it decreased from 11 to 10.

[1] Difference – There are significantly more tectonic-related hazards occurring in Indonesia and China as compared to Iran and Japan. The total number of tectonic-related hazards over the 30 years amounted to 109 in Indonesia, 101 in China, 62 in Iran and 39 in Japan.

(3) Describe distributions

Steps:

- 1. Describe locations of high concentration.
- 2. Describe locations of low concentration.
- 3. State anomalies (exceptions), if any.
- 4. Use the number of marks as a guide as to how many points to include.

For each description:

- 1. Use descriptive words to outline the general patterns e.g.
 - a. largest/highest/most concentrated
 - b. smallest/lowest/least
 - c. occurs in a thin belt
 - d. clustered/concentrated vs dispersed/scattered
 - e. inland vs along the coast/coastal areas
- 2. Specify names of continents, landmarks and/or countries.
- 3. Use compass directions (north, south, east, west) for precision. Central is also acceptable.
- 4. For choropleth maps where values are also given, categorise the entire range of values into what you would consider 'high', 'moderate' and 'low'. Specify them in your answer. (see sample question 2)

Sample question 1:

Pitstop 1 in 'Living with Tectonic Hazards' Question 2(a): With reference to Fig. 1.5, describe the distribution of earthquakes and volcanoes. [4]

Answer:

[1] Highest concentration - Most volcanoes and earthquakes are generally located along the Pacific Ocean.
[1] Specific names - This area stretches from the Andes in South America to California in North America, and up north along the western coast to Alaska (entire western coast of North and South America). The area also stretches along the east Asian countries of Korea, Japan, and China, as well as Southeast Asia.
[1] Anomaly - There is an area stretching from Atlantic Ocean (mid-Atlantic Ridge) to southern Australia in the Indian Ocean (around the Australian plate) where earthquakes occur but no volcanoes are present.
[1] Anomaly - Earthquakes occur across central Asia and the Middle East. However, there are generally no volcanoes in these areas.

Sample question 2:

Refer to Fig. 2.71 in 'Food resources'. TB pg 141.

Question: Describe the projected changes in agricultural productivity in 2080 due to climate change, as shown in Fig. 2.71. [3]

Answer:

[1] Areas that are projected to experience growth in their agricultural productivity (positive change up to 35%) are located in the majority of mainland Asia, Europe and central North America.

[1] Areas that are projected to experience great negative growth in their agricultural productivity (between -15 to -50%) are Mexico, India sub-continent, many African countries and northwestern Australia.

[1] The projected change in South America is very varied across the continent, with most of the continent experiencing negative change except the southern part which is expected to grow by 15%.

Sample question 3:

Refer to Fig. 2.52 in 'Variable weather and changing climate', TB pg 104.

Question: With reference to Fig. 2.52, describe the global distribution of deforestation between 2005 and 2010. [3]

Answer:

[1] The greatest forest loss (more than 500 000ha per year) occurs in Australia, Brazil and Southeast Asia e.g. Kalimantan forest.

[1] Moderate forest loss of between 250 000ha to 500 000ha per year occurs in northern and central South America, central Africa and Myanmar.

[1] Forest loss of less than 250 000 ha per year occurs in central Africa, Mexico, large parts of South America and Mongolia.

(4) Compare and contrast

Compare = give both similarities and differences

Contrast = give only differences

Steps:

1. Select common criteria/factors for comparison.

2. Describe both X and Y based on <u>one</u> criterion/factor at one time.

Suggested structure:

- Similarity: Both X and Y are ...
- Difference: X is ____ but Y is _____

Avoid:

- X is _____ but Y is not. (If Y is not, then what is it?)
- Writing everything about X, then everything about Y (i.e. more than one criterion)..

Sample question 1

Compare heritage tourism and dark tourism. [3]

Answer:

[1] (Similarity - heritage) In both types of tourism, people get to know more about the history of the place.
[1] (Difference – motivation/purpose) In heritage tourism, people travel to locations to experience <u>different</u> <u>cultures</u> while in dark tourism, people travel to sites associated with <u>death and tragedy</u>.

[1] (Difference – personal connection) in dark tourism, the visitors may also be survivors, relatives and friends of those affected, while in heritage tourism, the visitors may or may not have a personal connection to the place.

Sample question 2

Refer to Fig. 2.40 in 'Food resources' Checkpoint. TB pg 118.

Question: Compare the total average household expenditure and food expenditure between DCs and LDCs. [2]

Answer:

[1] (Average total household expenditures) DCs have a much higher average total household expenditure than LDCs. For example, USA spends US\$32 000 annually compared to Kenya which spends less than US\$1000 annually.

[1] (Food expenditure) LDCs spend a much greater percentage of their household expenditure on food than DCs. For example, Kenya spends 47% on food while USA and UK spend less than 10% on food.

Sample question 3

Refer to Pitstop 2 in 'Variable weather and changing climate'.

Question: With reference to Fig. 2.59, compare the change in forest areas among the various Asia-Pacific regions shown. [3]

Answer:

[1] In both East Asia and South Asia, forest cover increased from 1990 to 2010. In East Asia, it grew from 2,090,000 km² to 2,540,000 km² while in South Asia, it grew from 780,000 km² to 800,000 km².
[1] In both Southeast Asia and Oceania however, forest cover reduced from 1990 to 2010. It decreased from 2,470,000 km² to 2,140,000 km² and in Oceania, it dropped from 2,000,000 km² to 1,910,000 km².

[1] It is also observed that the forest cover remained constant in South Asia and Oceania from 1990 to 2000.

(5) Diagram and graph drawing

Diagram drawing/sketching

Annotated diagram	Well-labelled diagram
 <u>Applies to both types of diagrams:</u> Size: 1/3 to 1/2 page Draw with a pencil, write with a pen Draw a frame/box around your diagram Title (<i>Annotated/well-labelled diagram of</i>) cision
All descriptions/answers to be within the frame	 Brief descriptions within the frame Separate written explanation below the diagram. Start with "with reference to the diagram,"

Graph drawing

- 1. Include a title.
- For bar and line graphs, label the axes with items represented and units.
 TIP: Independent variable on the x-axis, dependent variable on the y-axis.

- 3. For pie charts, label each sector or use a legend box.
- 4. Draw with a pencil, write with a pen.

(6) Annotated and Well-labelled diagrams

How are they different?

Labels are a few words to identify certain features in the diagram. Annotations are a short description of the features in the diagram.

Labels

Field sketch of Pu	unggol Waterway
	Bridge
- Route &	W NO MA FT
aquatia planta	drain
floating turbidity barrier	
	oxygen
- ALANA	pump
WINV2S AND	

Annotations



(7) Open-ended questions

What makes an ideal evaluative essay?

- 1. Sound content knowledge
- 2. Balanced argument that addresses both sides of the issue/both pros and cons of two management strategies
- 3. Each body paragraph is developed using the PEEL framework
 - **P**oint State main point or pro/con clearly
 - Elaboration/explanation Give details in geographical terms
 - Example See 'Examples' below
 - Link Link the point back to the question (So? So what?)
- 4. Examples must be in-depth and include the following:
 - country / city name / state / project name
 - explanation of how the example illustrates the Point
 - relevant statistics or data
- 5. Coherent answer clear expression and good flow with use of linking devices
- 6. Thoughtful conclusion that raises factors of consideration such as cost of strategy, possible negative effects, how fast it takes for the benefits to set in, short-term/long-term effect feasibility and ease of solution. [CONCEPTS OF PLACE, SPACE, SCALE AND TIME]

Rubric

Level 1	Generalised answers with no or minimal support
(0 - 3 marks)	Weak reasoning with unclear expression
	Basic answer with little development
	Lacks examples
Level 2	Disagreement or agreement only, supported by appropriate detail OR
(4 - 6 marks)	Both disagreement and agreement are considered, but support is patchy.
	Good reasoning and logic in parts of answer, with some good expression.
	 Use of effective examples in at least <u>one</u> place in the answer.
Level 3	 Both disagreement and agreement are considered and well-supported.
(7 - 8 marks)	Comprehensive answers with sound knowledge.
	Clear reasoning and logic, with good expression.
	Extensive use of effective examples.
	Evaluation in concluding paragraph to answer the question.