

Catholic Junior College JC2 Preliminary Examinations Higher 2

GEOGRAPHY

Paper 2

9751/02

2 September 2019

3 hours

Additional Materials: Answer Paper 1 Insert

READ THESE INSTRUCTIONS FIRST

Write your class and name on all the work you hand in. Write in dark blue or black pen on both sides of the paper. You may use an HB pencil for any diagrams, graphs or rough working. Do not use staples, paper clips, highlighters, glue or correction fluid.

Candidates answer **all** questions.

The Insert contains all the Resources referred to in the questions. You should make reference to appropriate examples studied in the field or the classroom, even where such examples are not specifically requested by the question. Diagram and sketch maps should be drawn whenever they serve to illustrate an answer. The world outline map may be annotated and handed in with relevant answers. You are reminded of the need for good English and clear presentation in your answers.

At the end of the examination, you are to hand in **each question separately.** The number of marks is given in brackets [] at the end of each question or part question.

Start each question on a fresh sheet of paper. You will hand in each question separately.

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Section A

Theme 4: Geographical Investigations

Flood Risk Investigation in Hong Kong

1 A group of Geography students carried out geographical investigation along a river in the New Territories, Hong Kong, in February. They wanted to ascertain the flood risk of the region. They divided themselves into 4 teams of 8 members each to measure the cross-sectional area and river velocity of 4 selected sites along the river. The discharge of each of the 4 sections was calculated by multiplying the cross-sectional area of the river by the river velocity.

The teams were given the following equipment:

- 1 x Table Tennis ball
- 2 x Tape measures
- 2 x Stop watch
- 1 x Meter ruler
- 4 x Range poles

To measure river velocity, the time taken for the table tennis ball to cover a pre-determined distance defined by two range poles at the side of the river was recorded for each site. At the field study site C, the team collecting the data noticed that the table tennis ball was stuck in fallen trees or debris in the river. The data collected was then recorded using a data collection sheet.

To calculate the cross-sectional area, the width and depth of the river at each site had to be measured. The students laid an unweighted tape measure along the river bed to determine the width of the river. Depth measurements were taken at equal distances across the river using the meter ruler. This data was used to plot the river's wetted perimeter and then the cross sectional areas of the two rivers were calculated.

Resource 1 shows a sketch map of the river showing sites A to D where the students were assigned to. Resource 2 shows a photograph of Site C. Resource 3 shows the data of the river recorded at different sites.

- (a) With reference to the preamble and Resource 1, state a suitable hypothesis [3] for the fieldwork investigation and explain its suitability.
- (b) With reference to Resource 2, suggest what safety precautions the teams [3] should take at Site C.
- (c) Explain whether the river velocity data collected in Resource 3 is reliable, and [5] suggest how the data collection could be improved to increase its reliability.
- (d) Suggest two limitations of the data representation method shown in Resource [5]
 3 and sketch an appropriate diagram to represent velocity at the 4 sites.
- (e) To what extent has the fieldwork exercise been useful in ascertaining the flood [9] risk along the river in New Territories?

Section B

Theme 1: Tropical Environments

Tropical Deforestation in South America

- 2 Resource 4 shows tropical deforestation by region from 1990 to 2000 and from 2000 to 2005 (thousands of hectares per year). Resource 5a shows the proportion of deforestation causes and 5b shows proportion of degradation causes from 2000 to 2010. Resource 6 shows a satellite imagery of an area near Rio Jaciparana (a river) and Buritis Village, Brazil, in 2002 and 2012.
- (a) With reference to Resource 4, describe the trends in tropical [2] deforestation in the period 1990 to 2000 and in the period 2000 to 2005.
- (b) Using Resource 5a and your own knowledge, suggest reasons for the [4] trends described in (a).
- (c) With reference to Resource 6, explain how and why a storm hydrograph [6] at Rio Jaciparana for 2002 and 2012 might differ.
- (d) With reference to some of the resources, suggest possible effects of [4] tropical deforestation.
- (e) Using Resources 5 6 and your own knowledge, recommend whether [9] South America should focus on slowing the growth of urban areas to reduce deforestation and degradation. Justify your decision making.

Theme 2: Development, Economy and Environment

United States of America's Apparel Industry

- **3** Resource 7 shows the global sources of the United States of America (USA) imports of apparel. Resource 8 shows the monthly average wages (US\$) for the apparel industry for select economies in 2017. Resource 9 shows a campaign poster by United Students Against Sweatshops (USAS), which was published in an American news website.
- (a) With reference to Resource 7, describe the sources of USA's imports of [4] apparel.
- (b) Using Resource 8 and your own knowledge, suggest reasons for the [4] patterns described in (a).
- (c) Suggest how Resources 8 and 9 reflect elements of the Dependency [5] Theory.
- (d) With reference to Resources 8 and 9, and your own knowledge, explain [6] the roles of non-state actors in influencing the global garment industry.
- (e) Using some resources and your own knowledge, suggest how the global [6] shift of manufacturing may impact the USA's economic development.

Theme 3 – Sustainable Development

Urban waste management in the Less Developed World

- 4 Resource 10 shows the source of plastic waste from different regions of the world. Resource 11 shows global mismanaged plastic by region. Resource 12 shows the change in urbanisation level and change in Gross Domestic Product (GDP) per capita in the developing regions of East Asia and Sub-Saharan Africa.
- (a) With reference to Resource 10, describe the trends in sources of plastic [3] in the oceans.
- (b) With reference to Resources 10, 11 and 12, suggest reasons for the [6] trends described in (a).
- (c) Describe the patterns of change in urbanisation level and GDP per capita [4] in Sub-Saharan Africa in Resource 12.
- (d) Suggest potential urban problems arising from the trends in (c). [4]
- (e) With reference to some resources and your own knowledge, explain why [8] environmental indicators such as plastic waste are insufficient indicators of sustainable urban development in less developed countries.

**** END OF PAPER ****