

Anglo-Chinese School (Independent)



PRELIMINARY EXAMINATION 2025 IB DIPLOMA PROGRAMME YEAR 6 (IBDP 2)

Geography Higher Level Paper 1

Tuesday 2 September 2025

2 hours 15 minutes

Instructions to candidates

- Write your class and candidate number on this cover page.
- Do not open this examination paper until instructed to do so.
- Answer the questions in three options.
- The accompanying **geography resource booklet** is required for this examination paper.
- Use examples, maps and/or diagrams where relevant.
- The maximum mark for this examination paper is **[60 marks]**.
- Please attach this cover sheet to the answer script.

Class:

Candidate number

0	0	2	3	2	9				
---	---	---	---	---	---	--	--	--	--

	Marks
Option D – Geophysical hazards	/20
Option E – Leisure, tourism and sport	/20
Option G – Urban environments	/20
Total	/60



This question paper consists of 4 printed pages.

Answer the questions in **three** options.

When relevant, answers should refer to case studies or examples, and where appropriate include well-drawn maps or diagrams.

Option D – Geophysical Hazards

Answer the following question.

1. Refer to the map on page 2 of the accompanying resource booklet.

The map shows the lahar hazard zones of Kanloan Volcano in the Philippines.

	(a)	Describe the direction and range of the lahar hazard.	[2]
		The Lahar Hazard Map of Kanlaon Volcano shows that lahar hazards extend radially from the volcano along river valleys and drainage pathways. [1m] [Award 1m for any of the following] West & Southwest (La Carlota City, La Castellana): • High to moderate hazard zones extend up to 16 km, affecting multiple barangays and settlements. South & Southeast (Moises Padilla): • Lahars can reach 10–14 km, with high hazard zones concentrated within ~8 km of the summit. Northeast & East (San Carlos City, Vallehermoso, Canlaon City): • Hazards extend 10–12 km, but generally in narrower pathways following rivers. Northwest (Murcia, Bago City): • Hazard zones stretch up to 12–16 km, with moderate to low hazard levels dominating the outer areas.	
	(b)	Outline one reason why some places may be at greater risk of lahars.	[2]
		[1m for the reason, 1m for the explanation] • Proximity to the volcano: Settlements closer to Kanlaon's slopes face higher hazard levels because lahars are more concentrated and faster-moving near the source. • Location along river valleys: Lahars follow drainage channels, so communities, farms, and infrastructure built along rivers are directly in their path. • Population density and land use: Densely populated towns, built-up areas, and agricultural land in low-lying floodplains are more vulnerable to lahar damage compared to sparsely settled areas.	

	(c)	Explain how volcanic hazard risk could be a product of geographic factors.	[3]
		[1m for the geographic factor, 2m for the explanation] - Relief and topography: Steep volcanic slopes and deep river valleys channel hazards such as lahars, pyroclastic flows, and landslides, increasing risk for settlements in these pathways. - Climate and rainfall: In tropical regions with heavy rainfall (like the Philippines), rain can easily mobilize volcanic ash and debris into destructive lahars, raising the hazard risk. - Population distribution and land use: Towns, farms, and infrastructure located on fertile volcanic soils around the volcano face greater exposure, making the risk higher compared to sparsely inhabited or elevated areas.	
	(d)	Suggest what governments can do to better manage volcanic hazards.	[3]
		[1m for the factor, 2m for the explanation] - Monitoring and early warning systems: Invest in seismographs, gas sensors, and satellite monitoring to detect volcanic activity early and issue timely evacuation alerts. - Land-use planning and zoning: Restrict settlements and farming in high-hazard zones (e.g., river valleys prone to lahars) and develop safer resettlement areas. - Public education and preparedness: Conduct regular community drills, hazard awareness campaigns, and school-based programs so people know evacuation routes and safety measures.	

Answer **either** part (a) **or** part (b).

	Either		
2.	(a)	Examine the relationship between plate boundary type and the characteristics of associated tectonic hazards.	[10]
		<u>Core Ideas / Main Points</u> <u>Constructive (Divergent) Boundaries:</u> - Hazards: Mainly effusive volcanic eruptions (basaltic lava, shield volcanoes), shallow earthquakes. - Characteristics: Generally less explosive, lower magnitude earthquakes, hazards often localized but can affect ocean ridges/islands (e.g., Iceland). <u>Destructive (Convergent) Boundaries:</u> - Hazards: Explosive volcanic eruptions (andesitic/rhyolitic magma, composite volcanoes), powerful earthquakes, tsunamis.	

		- Characteristics: High magnitude, wide-reaching impacts, often most destructive (e.g., Japan 2011 earthquake & tsunami, Mount Pinatubo eruption). <u>Conservative (Transform) Boundaries:</u> - Hazards: Frequent, shallow-focus earthquakes; no volcanoes. - Characteristics: Earthquakes can be very destructive if near population centers (e.g., San Andreas Fault, Turkey earthquakes). <u>Intra-plate Hazards (Hotspots & Rifts):</u> - Hazards: Volcanism away from plate boundaries (e.g., Hawaii, Yellowstone). - Characteristics: Can produce either effusive (Hawaii) or explosive (Yellowstone) hazards, showing exceptions to plate boundary patterns. <u>Overall Relationship:</u> - Type of boundary influences magma type, earthquake depth, and hazard magnitude/frequency. - Human vulnerability and preparedness also determine the impact, so plate boundary type explains the hazard characteristics but not the full risk.	
	Or		
2.	(b)	Examine the effectiveness of different hazard-mitigation strategies in reducing loss of life and property damage from mass movements.	[10]
		<u>Core Ideas / Main Points</u> - Engineering and Structural Strategies - Examples: Retaining walls, rock bolts, check dams, slope terracing, drainage systems. - Effectiveness: Can significantly reduce slope failure and protect infrastructure in high-risk areas (e.g., Hong Kong slope management). - Limitations: High cost, requires maintenance, may fail in extreme events. - Land-Use Planning and Zoning - Examples: Restricting settlements on steep slopes, creating exclusion zones, reforestation. - Effectiveness: Prevents people and property from being exposed to hazards, long-term sustainable solution. - Limitations: Enforcement may be weak, relocation of communities can be politically and socially difficult.	

		3. Monitoring and Early Warning Systems - o Examples: Rainfall thresholds, ground movement sensors, satellite imagery, hazard mapping. - o Effectiveness: Provides time for evacuation, especially in rainfall-induced landslides and lahars (e.g., Philippines lahar warning systems after Pinatubo). - o Limitations: False alarms may reduce trust, not all events can be predicted. 4. Community Preparedness and Education - o Examples: Evacuation drills, public awareness campaigns, training in hazard response. - o Effectiveness: Reduces loss of life by ensuring rapid, organized responses when hazards occur. - o Limitations: Less effective at protecting property, relies on consistent funding and participation. 5. Overall Evaluation - o Structural strategies are most effective at reducing property damage. - o Non-structural strategies (education, planning, early warning) are often more effective at reducing loss of life. - o Best outcomes come from integrated approaches, combining engineering, planning, and preparedness.	
--	--	---	--

End of Option D

Option E – Leisure, tourism and sport

Answer the following question.

3.	Refer to the graph on page 3 of the accompanying resource booklet. The graph shows an analysis of the projected global rural tourism market for 2025 to 2032.	
----	--	--

	(a)	Describe the factors driving the growth of the rural tourism market.	[2]
		[Both factors must be discussed] Search for Authentic Experience: • Tourists are increasingly seeking genuine, cultural, and immersive experiences that rural destinations can provide. This factor has a high impact on driving rural tourism. Connection to Nature: • Growing interest in outdoor activities, eco-tourism, and relaxation in natural environments motivates travelers to visit rural areas. This factor also has a high impact on market growth.	
	(b)	Outline one reason why some places may face challenges developing their rural tourism market.	[2]
		[1m for the reason, 1m for the explanation] • Poor Accessibility and Infrastructure – Remote rural areas may lack good roads, public transport, or accommodation facilities, making it difficult for tourists to reach and stay comfortably. • Limited Awareness and Promotion – Some rural destinations may not be well-known or effectively marketed, so potential tourists are unaware of the attractions or experiences available. • Environmental and Cultural Sensitivities – Certain rural areas may have fragile ecosystems or cultural practices that restrict large-scale tourism development to prevent damage or disruption.	
	(c)	Explain one way in which the sphere of influence can vary between tourist attractions.	[3]
		[1m for one way, 2m for the explanation] • Size and Popularity of the Attraction – Large, famous attractions (e.g., Disneyland) attract visitors from across the world, giving them a wider sphere of influence, while small local attractions may only draw nearby residents or regional visitors. • Accessibility and Transport Links – Attractions that are easy to reach via highways, airports, or public transport can influence a larger area, whereas remote attractions with poor transport links have a smaller sphere of influence.	

		Type of Tourism Offered – Attractions offering unique or specialized experiences (e.g., cultural festivals or eco-tourism) may draw niche audiences from further away, whereas general attractions (e.g., local parks) mainly appeal to nearby populations.	
	(d)	Suggest how tourist destinations in low-income countries (LICs) can better manage the impact of large tourist numbers.	[3]
		[1m for method, 2m for explanation] - Implement Visitor Limits and Zoning – Restrict the number of tourists in sensitive areas and create designated zones to protect natural and cultural sites from overcrowding and environmental damage. - Promote Sustainable Tourism Practices – Encourage eco-friendly behaviors such as waste reduction, responsible wildlife interactions, and use of local products to reduce environmental and social impacts. - Invest in Infrastructure and Local Capacity – Improve sanitation, transport, and accommodation facilities, and train local communities to manage tourism sustainably, ensuring both residents and tourists benefit.	

Answer **either** part (a) **or** part (b).

	Either		
4.	(a)	Examine the costs and benefits of TNCs' involvement in expanding international tourism destinations.	[10]
		<u>Benefits of TNCs in expanding international tourism destinations:</u> Economic Growth – TNCs bring in foreign investment, create jobs, and generate income for local economies. Infrastructure Development – They often build hotels, resorts, transport networks, and other facilities that improve access for tourists. Global Marketing and Promotion – TNCs can promote destinations internationally, attracting more visitors and boosting tourism revenue. Transfer of Skills and Technology – Local workers gain training in hospitality, management, and service standards. <u>Costs of TNCs in expanding international tourism destinations:</u> Profit Leakage – Much of the profit may go back to the TNC's home country rather than staying in the local economy. Cultural and Environmental Impact – Overdevelopment can damage local culture, heritage, and natural environments. Economic Dependence – Local economies may become overly reliant on TNCs and vulnerable to global market changes.	

		4. Competition with Local Businesses – Small local businesses may be unable to compete with large TNCs, reducing local entrepreneurship.	
	Or		
4.	(b)	Examine the factors affecting the hosting of international sporting events.	[10]
		<u>Factors affecting the hosting of international sporting events:</u> 1. Economic Factors - o Availability of funding and investment for infrastructure, stadiums, and facilities. - o Potential for tourism revenue and long-term economic benefits versus high hosting costs. 2. Political Factors - o Government support and stability, including policies to attract international events. - o International reputation and diplomatic relations can influence the chances of being selected. 3. Infrastructure and Facilities - o Quality and capacity of transport systems, airports, accommodation, and sporting venues. - o Ability to handle large numbers of athletes, officials, and spectators. 4. Social and Cultural Factors - o Local interest and participation in sports can affect volunteer support and engagement. - o Cultural readiness to host international visitors, including language, hospitality, and safety. 5. Environmental Factors - o Impact on local ecosystems and climate considerations (e.g., extreme weather). - o Sustainability measures to reduce carbon footprint and waste during the event. 6. Security and Safety Factors - o Ensuring the safety of athletes, spectators, and infrastructure against threats or disasters. - o Emergency planning and healthcare facilities.	

End of Option E

Turn over

Option G – Urban environments

Answer the following question.

5. Refer to the map on page 4 of the accompanying resource booklet.

The map shows a 3D pricing map of New York City, price per square foot (/sq.ft.) by neighborhood.

	(a)	(i) State the most affordable neighborhood to live in New York City.	[1]
		Most affordable neighborhood: St. George in Staten Island (\$162/sq.ft.)	
		(ii) Identify the neighborhood in which the central business district (CBD) can be found.	[1]
		Central Business District (CBD): Manhattan, particularly areas like Midtown and Lower Manhattan, which are represented with the tallest 3D bars on the map.	
	(b)	Explain one way in which land value can be affected by proximity to the CBD.	[2]
		[1m for the way, 1m for the explanation] • Accessibility and Convenience – Land near the CBD offers easy access to workplaces, shops, entertainment, and services. This convenience increases demand, raising land values. • Commercial Potential – Businesses often prefer locations near the CBD to attract more customers and reduce transport costs. High commercial demand pushes up land prices. • Competition for Limited Space – The CBD has limited land available. As more people and businesses compete for this scarce space, land values increase due to scarcity.	
	(c)	Explain one political impact and one social impact of urban deprivation.	[3+3]
		<u>Political Impact of Urban Deprivation:</u> <i>Urban deprivation can lead to political unrest or disengagement.</i> <u>Reasons:</u> 1. Low Voter Turnout – Residents may feel neglected by government policies and lose trust, leading to lower participation in elections. 2. Protests and Riots – Poor living conditions and inequality can trigger demonstrations or civil unrest. 3. Pressure on Local Government – Authorities may face criticism and demands to improve housing, services, and infrastructure. <u>Social Impact of Urban Deprivation:</u> <i>Urban deprivation affects community well-being and social cohesion.</i> <u>Reasons:</u> 1. Poor Health and Education – Limited access to healthcare and schools can worsen living conditions.	

		2. Crime and Anti-Social Behaviour – Poverty and lack of opportunities can increase crime rates and social tension. 3. Social Exclusion – Residents may feel marginalized, leading to isolation and weakened community networks.	
--	--	--	--

Answer **either** part (a) **or** part (b).

	Either		
6.	(a)	Examine the various impacts of urban population movements.	[10]
		1. Economic Impacts: • Labor supply: In-migration increases the workforce, supporting industries and services. • Unemployment pressure: Rapid influx can exceed job availability, leading to higher unemployment. • Business growth: More people create demand for goods and services, boosting local economy. • Housing demand and prices: Increased population can raise demand for housing, driving up prices or causing informal settlements. 2. Social Impacts: • Diversity and cultural exchange: In-migration can enhance multiculturalism and social vibrancy. • Strain on services: Health, education, and transport systems may become overcrowded. • Urban deprivation: Rapid population growth can worsen slums, poverty, and inequality. • Crime and social tension: Competition for jobs and resources may increase crime or social unrest. 3. Environmental Impacts: • Urban sprawl: Expansion of cities can lead to loss of green spaces and agricultural land. • Pollution: More people increase waste, air pollution, and traffic congestion. • Pressure on infrastructure: Water supply, sewage, and energy systems can be overstretched. 4. Political and Planning Impacts: • Governance challenges: Rapid growth can strain local government capacity. • Policy responses: Authorities may need to invest in housing, transport, and social services. • Electoral changes: Population shifts can influence voting patterns and resource allocation.	
	Or		

6.	(b)	Examine the challenges of designing a resilient city.	[10]
		1. Environmental Challenges: • Climate change impacts: Cities must withstand floods, heatwaves, storms, and rising sea levels. • Limited green spaces: Balancing development with parks and urban forests to absorb carbon and reduce heat. • Pollution management: Controlling air, water, and noise pollution while maintaining urban growth. 2. Social Challenges: • Population growth: Rapid urbanization increases demand for housing, services, and infrastructure. • Social inequality: Ensuring equitable access to resources for all socioeconomic groups. • Community engagement: Getting residents involved in planning for resilience can be difficult. 3. Economic Challenges: • Funding constraints: Implementing resilient infrastructure can be expensive. • Balancing growth and sustainability: Promoting economic development without compromising resilience. • Job distribution: Ensuring economic opportunities are accessible across the city to prevent slums. 4. Political and Governance Challenges: • Coordination across agencies: Multiple authorities must work together efficiently. • Long-term planning vs short-term interests: Political cycles may discourage investments in resilience. • Policy enforcement: Ensuring building codes, zoning, and disaster management regulations are followed. 5. Technological and Infrastructure Challenges: • Aging infrastructure: Upgrading old transport, water, and energy systems to be resilient. • Smart city integration: Incorporating technology for monitoring and response, while ensuring cybersecurity. • Resource management: Efficiently managing water, energy, and waste under stress conditions.	

End of Option G