



EUNOIA JUNIOR COLLEGE
JC2 Preliminary Examination 2024
General Certificate of Education Advanced Level
Higher 2

H2 GEOGRAPHY

Paper 1

9173/01

11 September 2024

3 Hours

Additional Materials: Insert

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.
Write your Centre number, index number and name on 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 or graphs.
Do not use staples, paper clips, glue or correction fluid.

Answer both questions in **Section A**.
Answer two questions in **Section B**, one from each cluster.

At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [] at the end of each question or part question.

Section A

Answer **both** questions.

Cluster 1: Development, Economy and Environment

- 1 Resource 1 is a map depicting the Nile River Basin, its riparian states and the location of the Grand Ethiopian Renaissance Dam (GERD) along the Blue Nile. Resource 2 shows the estimated changes in annual water flow from the Blue Nile and Nile River before and after the construction of the GERD. Resource 3 shows two satellite photographs of the GERD and its immediate vicinity in 2020, when the GERD was undergoing construction, and 2023, when the GERD was in operation. Resources 4A and 4B show the power and water needs of Ethiopia and Egypt respectively. Resource 5 shows the changes in solar installations in India from 2009 to 2019.
- (a) Describe the estimated changes in the annual water flow from the Blue Nile and Nile River before and after the construction of the Grand Ethiopian Renaissance Dam (GERD) as shown in Resource 2. [4]
 - (b) Use Resource 3 to explain the environmental impacts of the Grand Ethiopian Renaissance Dam (GERD) when it is in operation. [4]
 - (c) With reference to Resources 1, 2, 3, 4A and 4B, suggest reasons for potential conflicts across the riparian states in the Nile River Basin. [6]
 - (d) Suggest **two** ways in which potential conflicts over transboundary water resources such as the Nile River could be managed. [4]
 - (e) Cite data from Resource 5 to describe the changes in annual and cumulative solar installations in India from 2009 to 2019. [6]
 - (f) Explain **three** limitations of solar power in providing energy security in countries at lower levels of development such as India. [6]

Cluster 2: Tropical Environments

- 2** Resources 6A and 6B show the climographs of the two cities of Mumbai, India and Cairo, Egypt respectively. Resource 7 shows the regional wind system over India in June and January. Resource 8 shows a hydrograph of a drainage basin. Resource 9 shows a fluvial landform along the Brahmaputra River in India.
- (a) With reference to Resources 6A and 6B, compare the temperature and rainfall characteristics of Mumbai and Cairo. [5]
- (b) Using Resource 7, account for the rainfall patterns in Mumbai as shown in Resource 6A. [6]
- (c) Contrast between percolation and overland flow in a drainage basin system. [4]
- (d) With reference to Resource 8, explain how parts A and B of the hydrograph will change when rainfall intensity increases. [5]
- (e) Describe the characteristics of the fluvial landform shown in Resource 9. [4]
- (f) Explain the fluvial processes leading to the formation of the fluvial landform shown in Resource 9. [6]

Section B

Answer **either** Question 3 **or** Question 4 and answer **either** Question 5 **or** Question 6.

Cluster 1: Development, Economy and Environment

- 3** 'There are adequate provisioning services to support population growth.'
- [20]
- Evaluate this statement.
- 4** Evaluate the extent to which economic actors have reduced variations in levels of development across space.
- [20]

Cluster 2: Tropical Environments

- 5** 'Tropical cyclones are not the most influential factor influencing distribution of rainfall in the tropics.'
- [20]
- Evaluate this statement.
- 6** Evaluate the extent to which geology is the most significant factor in influencing karst landforms in the tropics.
- [20]