

GENERAL CERTIFICATE OF EDUCATION (GCE) BOARD

General Certificate of Education Examination

Geology 2

0755



JUNE 2021

ADVANCED LEVEL

Subject Title	Geology
Paper No.	Paper 2
Subject Code No.	0755



THREE HOURS

Answer any FOUR questions.

All QUESTIONS CARRY EQUAL MARKS.

You are reminded of the value of clear sketches, even when not specifically demanded by the wording of the question, and of the necessity for good English and orderly presentation in your answers.

Turn Over

JUNE 2021/0755/2/B



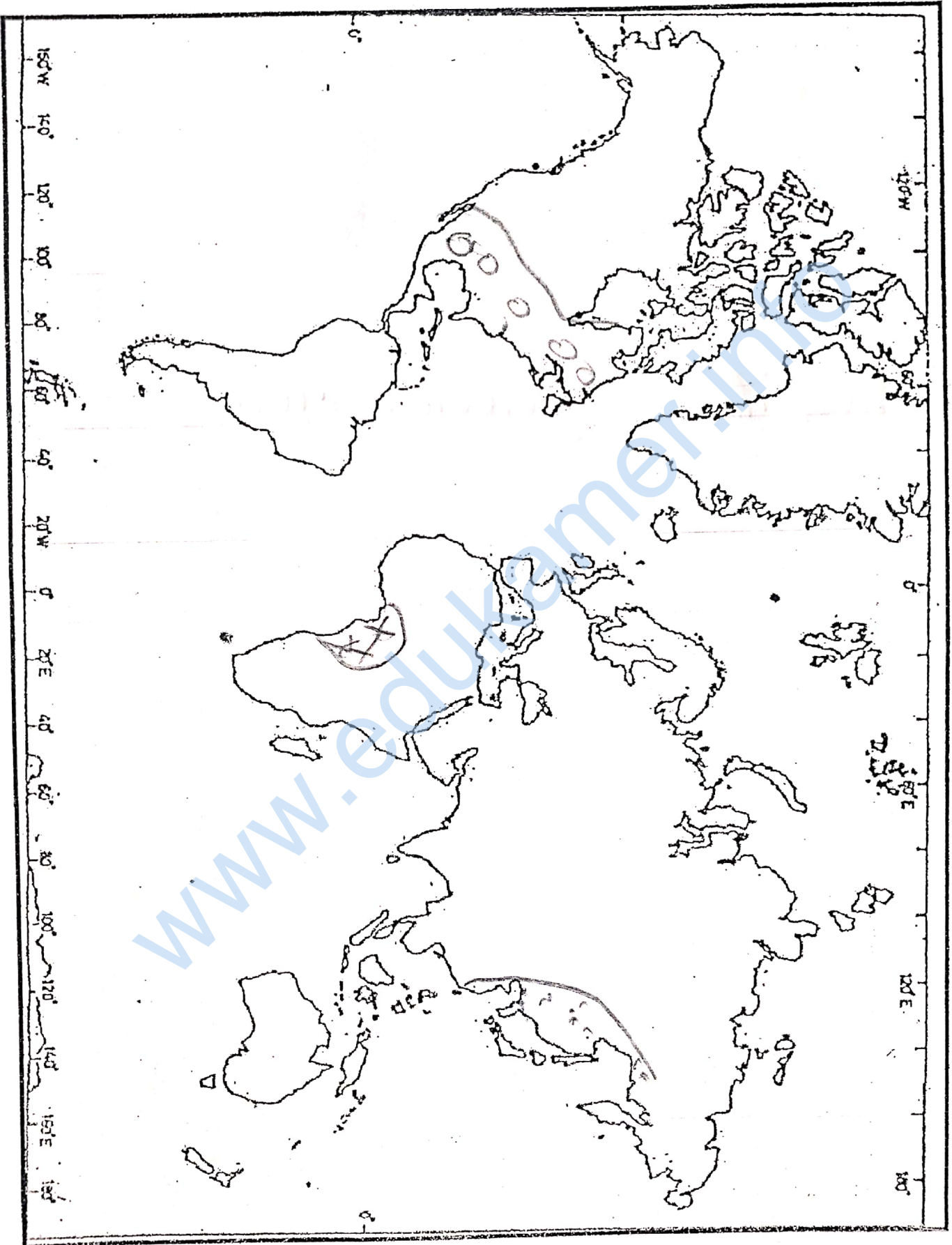
1. (a) Define the following terms as used in Astrogeology:
- (i) Planets;
 - (ii) Galaxy;
 - (iii) Nebular;
 - (iv) Maria;
 - (v) Meteors. (10 marks)
- (b) On the world map provided, mark and label the distribution of the major belts of earthquakes. (5 marks)
- (c) Describe FIVE syndepositional sedimentary structures. (10 marks)
- (Total = 25 marks)**
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2. (a) Briefly discuss the evidences of Continental Drift. (10 marks)
- (b) List THREE factors that influence the violence of a volcanic eruption. (3 marks)
- (c) Discuss the acid igneous rocks, under the following headings:
- (i) Composition;
 - (ii) Texture;
 - (iii) Mode of occurrence. (12 marks)
- (Total = 25 marks)**
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3. (a) Compare and contrast the crystallography of the Hexagonal system and the Trigonal system. (10 marks)
- (b) Describe the following physical properties as used in the identification of minerals:
- (i) Colour; (4 marks)
 - (ii) Streak; (2 marks)
 - (iii) Hardness. (4 marks)
- (c) With named examples of rocks, outline foliated textures in metamorphic rocks. (5 marks)
- (Total = 25 marks)**
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4. (a) Describe the layered structure of the Earth paying particular attention to:
- (i) Variation in composition;
 - (ii) Physical states. (10 marks)
- (b) Discuss the genetic classification of folds. (10 marks)
- (c) Analyse the environmental effects of the eruptions of Mount Cameroon. (5 marks)
- (Total = 25 marks)**

5. (a) Discuss the preservation potentials of the following rocks:
- (i) Igneous rocks; (3 marks)
 - (ii) Metamorphic rocks; (3 marks)
 - (iii) Fine-grained clastic sedimentary rocks; (3 marks)
 - (iv) Coarse-grained clastic sedimentary rocks. (3 marks)
- (b) Discuss TWO methods of mining. (6 marks)
- (c) Explain the factors that will determine the quantity of ground water. (7 mark)

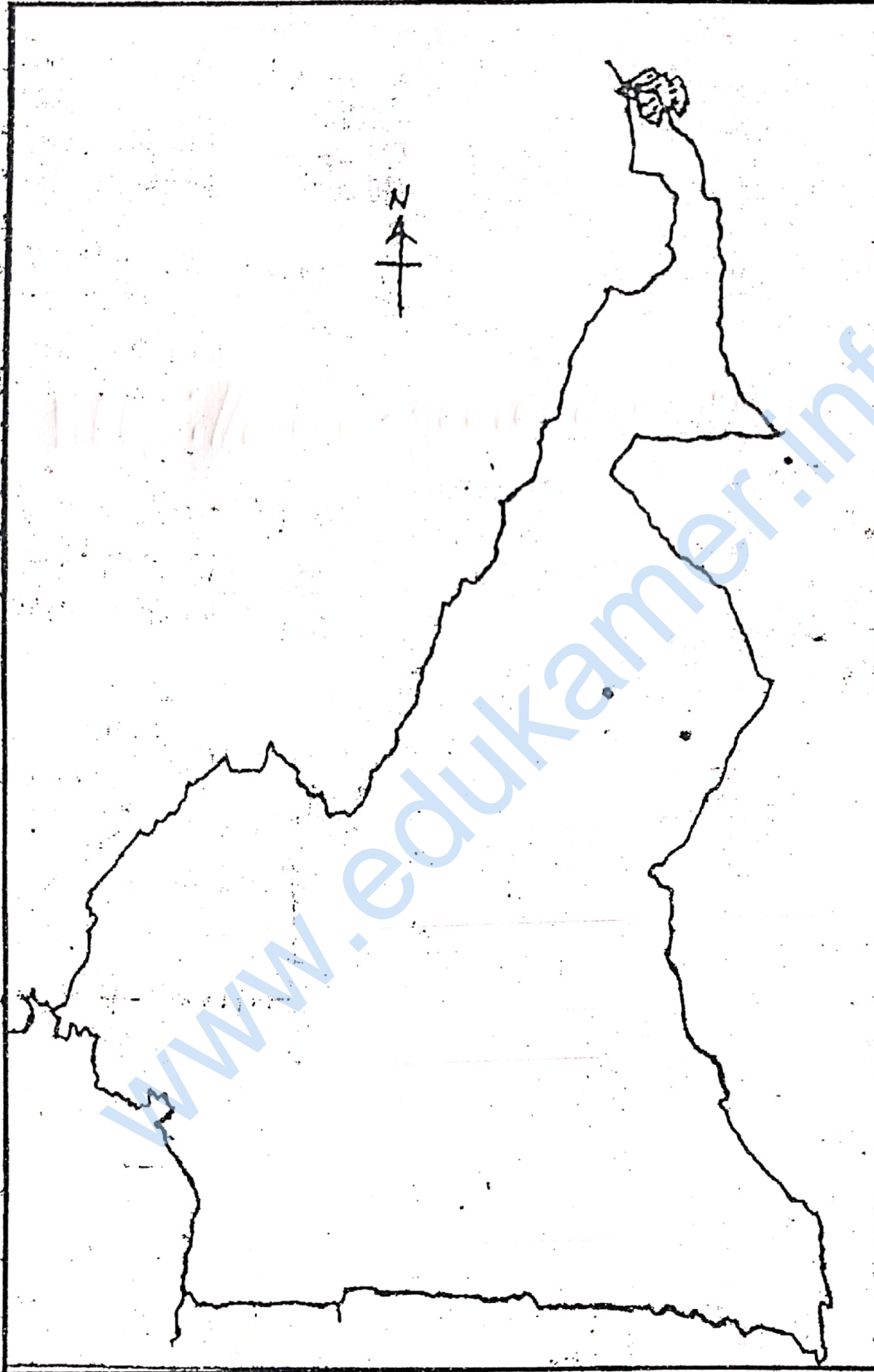
(Total = 25 marks)

6. (a) What are the various methods by which geologists determine the chronological order of events and features without reference to their absolute ages? (12 marks)
- (b) What factors affect the rate of erosion along coastlines? (4 marks)
- (c) Distinguish between the following terms as applied in Economic Geology:
- (i) A mineral resource and a mineral reserve;
 - (ii) A mineral deposit and an ore deposit;
 - (iii) Gangue mineral and gem mineral. (9 marks)

(Total = 25 marks)



2019/0550/2A



MAP FOR QUESTION 7