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Index Number..... Student's signature.....

312/1

GEOGRAPHY

PAPER 1

TIME: 2 HRS 45MIN

December 2021

BUNAMFAN CLUSTER EXAMINATION 2021

Kenya Certificate of Secondary Education

312/1

GEOGRAPHY

PAPER 1

TIME: 2 HRS 45MIN

DECEMBER

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the spaces provided at the top of the page\
2. Answer all the questions in section **A**.. In section **B** answer question **6** and any other **two** questions from this section.
3. All answers must be written in the answer booklet provided.
4. This paper consist of 5 printed pages.
5. Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no question is missing.

1. a) State how the coriolis force affects the direction of wind. (2 marks)
- b) Give **three** characteristics of cumulonimbus clouds (3 marks)
2. The table below shows the mean monthly rainfall and temperature for station

Months	J	F	M	A	M	J	J	A	S	O	N	D
Mean monthly rainfall (mm)	15	8	8	13	31	51	51	51	28	25	18	20
Mean monthly temperature (⁰ C)	-22	-18	-12	-1	4	10	11	11	5	-11	-18	-22

Describe the climatic characteristics represented by the mean monthly rainfall and temperature table station X. (5 marks)

3. a) What is an earthquake (2 marks)
- b) Identify the scales used to measure (2 marks)
 - (i) The intensity of earthquake
 - (ii) The magnitude of earthquake
4. a) Name **two** types of boundaries according to the plate tectonic theory (2 marks)
- b) Give **three** effects of the movement of tectonic plates. (3 marks)
5. a) State **three** conditions that influence the process of solifluction in mass wasting . (3 marks)
- b) Give **two** negative effects of mass wasting on the physical environment (2 marks)

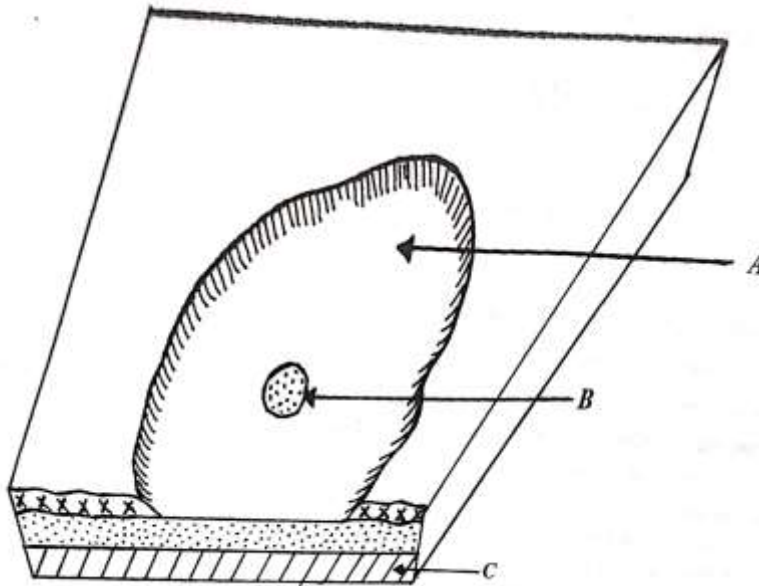
SECTION B

*Answer question **6** and ANY OTHER TWO questions from this section.*

6. Study the map of kijabe 1;50, 000 (Sheet 134/3) provided and answer the following questions.
 - (a) (i) What type of map is the Kijabe (1 mark)
 - (ii) In which hemisphere is the area covered by the Kijabe Map located? (2 marks)
 - (iii) Give the longitudinal extent of the area covered by the Kijabe Map. (2 marks)

- (b) (i) Convert the linear scale of the map into a statement. (2 marks)
- (ii) Give **six** figure grid reference of trigonometrical station 2610. (2 marks)
- (c) On the graph paper provided, reduce the area enclosed by Eastings 34 to 40 and Northings 91 to 97 by a scale factor of 2 (3 marks)
- (i) On the new map, accurately mark the following;
- (a) All weather road bound surface (1 mark)
- (b) Forest guard post (1 mark)
- (c) Githoito plantation (1 mark)
- (ii) Give the new scale of the reduced map (2 marks)
- (d) Describe the vegetation of the area covered by the map (4 marks)
- (i) Citing evidence from the map, explain two factors influencing trade in the area covered by the map (4 marks)
7. a) (i) Identify **three** features found in the sea floor (3 marks)
- (ii) State **three** sources of ocean salts (3 marks)
- b) Explain how the following factors may cause horizontal movement of ocean water
- (i) Prevailing winds (2 marks)
- (ii) The earth's rotation (2 marks)
- c) (i) Identify **two** cold ocean currents that flows along the west coast of Africa. (2 marks)
- (ii) State **four** characteristics of the currents defined in b (ii) above. (4 marks)
- d) (i) Explain **three** effects of cold ocean currents to the climate of the adjacent land. (6 marks)
- (ii) You intend to carry out a field study on tides in Mombasa. State the type of information you would collect. (3 marks)
8. a) Describe the following wind erosion processes
- (i) Abrasion (2 marks)
- (ii) Deflation (2 marks)

b) Use the diagram below to answer the following questions.



(i) Name the feature marked A and B (2 marks)

(ii) State **four** significances of feature A to the human environment (4 marks)

c) Using a well-labelled diagram, explain how the following features are formed.

(i) Canyon (6 marks)

(ii) Zeugen (6 marks)

d) State **four** characteristics of a barchan (4 marks)

9 a) (i) Define a coastline (2 marks)

(ii) Give **three** types of a coral reef (3 marks)

b) Using a well labelled diagram describe the formation of the following coastal landforms.

(i) A Tombolo (6 marks)

(ii) Off-shore bar (6 marks)

- c) (i) Give **three** factors that determine the size of a wave in the open sea. (3 marks)
- (ii) State **three** uses of coral reefs (3 marks)
- (iii) Students from Mombasa high school carried out a field study along the coastline of Indian Ocean. Give the reason for carrying the following items (2 marks)
- Stop watch
 - Camera
10. (a) (i) State **three** characteristics of a maximum thermometer. (3 marks)
- (ii) Explain how a maximum thermometer is used to measure temperature (6 marks)
- b) Describe (i) How lake Victoria influences the temperature of the surrounding region. (4 marks)
- (iii) How south east trade wind. Influence temperature at the coast. (2 marks)
- c) (i) Explain **two** ways in which vegetation adapts to climate. (4 marks)
- (ii) Describe the characteristics of equatorial climate (6 marks)