Myfuture CBC Revision

Geography - Grade 10

Question Paper

1. Which of these is an example of a representative fraction (RF) scale?

A. Scale written as 'half inch to one mile'

B. 1 cm = 1 km

C. 1:50 000

D. Bar scale drawn on a map

2. Why is community participation important when planning new energy projects in Kenya?

A. It allows companies to avoid paying any compensation to affected people

B. It forces villagers to work for free on construction sites

C. It guarantees that projects will be built without any planning or approval

D. It ensures local needs and concerns are considered, reducing conflict and improving

3. Why is Lake Turkana Wind Power important for Kenya's electricity supply?

A. It is a coal-fired power plant located on the lake shore

B. It provides a large amount of renewable electricity from strong winds in northern Kenya

C. It stores water for irrigation in the Rift Valley highlands

D. It refines crude oil found under the lake

4. What is artisanal and small-scale mining (ASM)?

A. Mining that only extracts sand from beaches

B. Large industrial mining run by multinational corporations

C. Small, informal mining by individuals or small groups using simple tools

D. A government-run program for environmental rehabilitation

5. What causes the banding seen in gneiss, a high-grade metamorphic rock?

A. Layering of volcanic ash and lava flows

B. Accumulation of coral reefs

C. Segregation of light and dark minerals under intense pressure and temperature

D. Deposition of alternating sand and clay beds

6. Which type of plate boundary is mainly responsible for the earthquakes associated with the East African Rift in Kenya?

A. Subduction zone

B. Convergent (compressional) boundary

C. Transform (strike-slip) boundary

D. Divergent (tensional) boundary

7. Which approach best helps Kenya increase access to modern energy in off-grid areas quickly and affordably?

A. Building nuclear power plants in every village

B. Promoting off-grid solutions like solar home kits and mini-grids alongside selective grid

C. Waiting until the national grid reaches every small village regardless of cost

D. Shipping coal to each off-grid household for local burning

8. What is value addition in the context of Kenya's agricultural industries?

A. Planting fewer crops to increase prices

B. Moving farms closer to cities to attract tourists

C. Selling raw crops abroad without processing

D. Transforming raw agricultural products into higher-value goods, like making tea bags from

9. What is one economic benefit of a reliable electricity supply for Kenyan factories and small businesses?

A. Immediate closure of factories to conserve electricity

B. Increased dependence on imported torches

C. Higher production and ability to run machines, increasing jobs and incomes

D. Lower product quality due to too much power

10. Which seismic waves arrive first at a seismograph station after an earthquake?

A. Surface waves (Love and Rayleigh)

B. P-waves (primary waves)

C. Tsunami waves

D. S-waves (secondary waves)

11. What is a syncline?

A. A coastal depositional feature

B. A fold overturned completely on one side

C. An upfold exposing the oldest rocks

D. A downfold where the youngest rocks are in the centre

12. Which of the following is the main rock type formed by cooling and solidification of magma or lava?

A. Sedimentary rock

B. Metamorphic rock

C. Organic rock

D. Igneous rock

13. How do folds differ from faults?

A. Faults are always older than folds

B. Folds are caused by volcanic eruptions while faults are caused by wind

C. Folds form only underwater while faults form on land

D. Folds involve bending of rocks, while faults involve fracturing and movement along a plane

14. What is Practical Geography?

A. The study of physical features only, without fieldwork

B. Purely using textbooks and photographs to learn about places

C. Memorising capitals and country names without visiting places

D. The use of fieldwork, maps and instruments to study places and environments

15. Which geological hazard is especially likely in areas of saturated loose sand during strong shaking?

A. Metamorphism

B. Erosion by rivers

C. Liquefaction

D. Desertification

16. Why are early warning systems limited but helpful during earthquakes?

A. They can completely stop earthquakes from occurring

B. They predict exact magnitude and building damage before the quake

C. They can send a few seconds to minutes of warning based on first P-waves, allowing

D. They provide several hours' notice before shaking begins

17. Which of these best describes a footloose industry?

A. An industry that only operates at sea

B. An industry that can be located almost anywhere because it does not depend on bulky

C. An industry that only uses animal power

D. An industry that must be located beside a specific raw material

18. Why is metadata important when using GIS data for a school project in Kenya?

A. Because it automatically corrects errors in the data

B. Because it increases the file size and makes the map look official

C. Because it is the same as the attribute table and stores population numbers

D. Because it records the data source, date, accuracy and projection so you know if the data

19. What is the main purpose of practical geography in school fieldwork?

A. To collect and analyse geographical data through field observations and measurements

B. To focus only on theoretical map projections

C. To memorise names of capitals and countries without visiting places

D. To read novels about travel destinations

20. What is an aftershock?

A. A smaller earthquake that follows the mainshock in the same area

B. A tidal wave created by shaking on land

C. A small tremor that occurs before the main earthquake

D. A volcanic eruption triggered by an earthquake

21. Which local building practice reduces earthquake damage in areas like the Rift Valley?

A. Building tall, narrow buildings without reinforcement

B. Constructing on steep, loose slopes to increase height

C. Using reinforced concrete and building on stable ground

D. Using heavy unreinforced masonry on soft soils

22. What is the main difference between an earthquake's magnitude and its intensity?

A. Magnitude counts aftershocks while intensity counts foreshocks

B. Magnitude measures energy released; intensity measures local effects on people and

C. Intensity is used only for volcanic eruptions

D. Magnitude measures local damage, intensity measures global energy

23. Which Kenyan locations are more likely to experience earthquakes because they lie along the East African Rift?

A. Highland tea farms in Kericho exclusively

B. All of Kenya receives equal earthquake risk

C. Coastal beaches like Mombasa and Kilifi only

D. Areas along the Great Rift Valley such as Turkana, Nakuru and parts of central Kenya

24. Which factor is least important when deciding the viability of a mining project?

A. Market price of the mineral

B. Colour of nearby residential houses

C. Presence of skilled workforce nearby

D. Cost of extraction and processing

25. What information does a GPS receiver provide directly in the field?

A. Precise latitude and longitude coordinates and often elevation

B. Map scale of nearby maps

C. Population density estimates

D. Soil pH and nutrient levels

26. Which process best explains the formation of limestone found along parts of the Kenyan coast?

A. Metamorphism of sandstone under high pressure

B. Accumulation and cementation of marine shells and coral fragments

C. Solidification of lava flows

D. Deposition of wind-blown volcanic ash

27. What is a seismic hazard map used for in Kenya?

A. To show historical rainfall patterns only

B. To predict the exact time of the next earthquake

C. To show where tourists can find hot springs

D. To identify areas at higher risk of strong shaking to guide planning and construction

28. Which practice helps restore soil fertility between crop seasons?

A. Ploughing deeper each year without adding fertiliser

B. Continuous mono-cropping of the same crop every season

C. Burning crop residues to clear fields quickly

D. Crop rotation with legumes

29. Which cooking fuel contributes most to deforestation and indoor air pollution in many Kenyan rural areas?

A. Natural gas from pipelines

B. Charcoal and firewood

C. Electric induction stoves

D. Solar cooked food

30. Why are flower farms and processing plants common around Naivasha?

A. Because Naivasha has a large coal mine supplying energy

B. Because the climate, water from Lake Naivasha and good transport links suit

C. Because it is the only place in Kenya with fertile soil

D. Because Naivasha is far from any road or airport

31. Which term describes sediments laid down at the mouth of a river where it meets the sea, commonly forming flat land of deposited material?

A. Butte

B. Delta

C. Dune

D. Moraine

32. What is the primary agent that transports sediments down the slopes of the Kenyan highlands into the Rift Valley rivers?

A. Wind only

B. Running water (rivers and streams)

C. Glacial ice

D. Tectonic uplift alone

33. Why might an industry choose to locate close to a major port like Mombasa?

A. So they can rely solely on air transport for exports

B. To reduce the need for any road transport

C. Because ports provide unlimited cheap labour

D. To lower transport costs for importing raw materials and exporting finished goods

34. Which of these is a major location factor for industries that need a lot of electricity, such as steel or cement factories?

A. Close access to tourist attractions

B. Availability of reliable and cheap power supply

C. High local rainfall

D. Low agricultural productivity

35. What feature would you expect in an extrusive igneous rock like basalt that cooled quickly at the surface?

A. Fine-grained crystals and possibly vesicles (gas holes)

B. Rounded detrital grains cemented together

C. Large interlocking crystals visible to the eye

D. Metamorphic foliation

36. How would you measure the real distance between two towns on a paper map?

A. Use a compass to find the distance directly

B. Estimate by eye without using the scale

C. Measure with a thermometer

D. Use a ruler to measure map distance then convert using the map scale

37. Which statement about metamorphic rocks is correct?

A. They are always porous and hold groundwater easily

B. They are produced only by biological activity

C. They form only from melting and rapid cooling

D. They form from pre-existing rocks changed by heat and pressure without melting

38. Which of these can reduce GPS location accuracy during field data collection in Nairobi?

A. The brand of pen used to record locations

B. The name of the village you are in

C. The colour of the surveyor's clothing

D. Tall buildings and trees blocking satellite signals

39. Which of these Kenyan resources is commonly associated with coastal heavy mineral sands?

A. Marble quarries

B. Coal seams

C. Ilmenite and zircon

D. Basalt lava flows

40. What is Kenya's standard time relative to Coordinated Universal Time (UTC)?

A. UTC-3

B. UTC-8

C. UTC+1

D. UTC+3

41. What effect does climate change have on Kenyan agriculture?

A. Elimination of all pests

B. Increased variability of rainfall and more frequent droughts or floods

C. Guaranteed higher yields everywhere

D. Shorter growing seasons that are the same across the country

42. What is an aftershock?

A. A seismic wave that travels only on the surface

B. An earthquake that occurs before the main shock

C. A smaller earthquake that follows the main shock in the same area

D. A tsunami triggered after an earthquake

43. When recording field observations, which piece of information is essential to note down?

A. Only the name of your friend who went with you

B. How hungry you were during the trip

C. The weather, date, time and precise location of the observation

D. The exact brand of equipment used but not the location

44. A bearing of 090° from your location indicates you should go in which direction?

A. South

B. West

C. North

D. East

45. Which part of Kenya is most likely to experience frequent earthquakes due to rifting?

A. The Rift Valley region (including areas like the Central Rift and Turkana)

B. The coastal plains of Mombasa

C. The flat lake basins of eastern Kenya far from the rift

D. The island of Lamu

46. What is liquefaction and why is it dangerous during earthquakes?

A. When rock becomes harder, reducing shaking

B. When saturated loose soils temporarily behave like a liquid, causing buildings to sink or

C. When groundwater turns dry and prevents damage

D. When aftershocks stop and the ground becomes stable

47. A six-figure grid reference on a topographic map gives a location accurate to about:

A. 100 metres

B. 1 kilometre

C. 10 metres

D. 10 kilometres

48. Which region of Kenya lies within the East African Rift system and is more likely to experience rift-related earthquakes?

A. Rift Valley region

B. Coastal beaches near Mombasa

C. Islands of the Indian Ocean

D. Lamu archipelago

49. Which Kenyan landmark is formed mainly of intrusive igneous rock (granite)?

A. Lamu Island coral reefs

B. Mount Kenya

C. Tana River Delta

D. Turkana Basin sediments

50. Which soil-forming process is most directly linked to the breakdown of parent rock into smaller mineral particles?

A. Compaction

B. Weathering

C. Transpiration

D. Irrigation