

EXAMINATIONS COUNCIL OF ZAMBIA

**Joint Examination for the School Certificate
and General Certificate of Education Ordinary Level**

GEOGRAPHY

2218/1

PAPER 1

Friday

17 OCTOBER 2014

1:50 000 Survey Map is enclosed with this question paper.

Additional materials:

Multiple Choice answer sheet

Soft pencil (type B or HB is recommended)

TIME 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

- 1 Do not open this question paper until you are told to do so.**
- 2** Ensure that your name, centre number and candidate number have been correctly written on the Answer Sheet provided.
- 3** There are **fifty (50)** questions in this paper. Answer **all** the questions. For each question, there are four possible answers, **A, B, C** and **D**. Choose the one you consider correct and shade your choice in clear pencil on the separate Answer Sheet.
- 4 Read very carefully the instructions on the answer sheet provided.**

INFORMATION FOR CANDIDATES

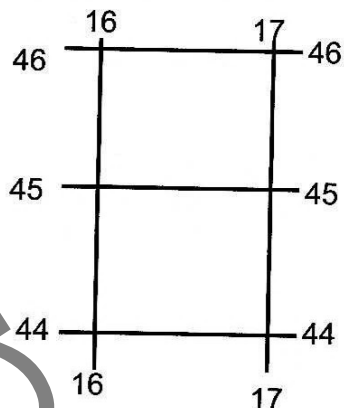
- 1** Each correct answer will score one mark. A mark will **not** be deducted for a wrong answer.
- 2 Cell phones and calculators are not allowed in the examination room.**

Section A: Mapwork and Basic Techniques

Questions 1 to 12 are based on the 1:50 000 map extract of Mbalabala (Zimbabwe).

- 1** What is the six figure grid reference of the Ruins just east of Incema River?
A 133445
B 135436
C 435135
D 436135
- 2** What is the bearing of the Water Intake Tower in grid square 2146 from the trigonometrical station in grid square 2150?
A 0°
B 90°
C 180°
D 270°
- 3** What is the height above sea level of the peak of Mbalani hill in grid square 2243?
A 366/T metres
B 1220 metres
C 1228.6 metres
D 1240 metres
- 4** Which of the following indicate that there is cattle rearing east of grid line 18 and south of grid line 43?
A Dams
B Dip tanks
C Pastures
D Rivers
- 5** The feature followed by the track road starting at grid square 225380 up to the junction at grid square 232406 is a ...
A contour line.
B forest.
C river.
D watershed.
- 6** The general slope of the land between grid line 16 to 18 and from 51 to 49 is from ...
A North-West to South-East.
B North-East to South-West.
C South-East to North-West.
D South-West to North-East.

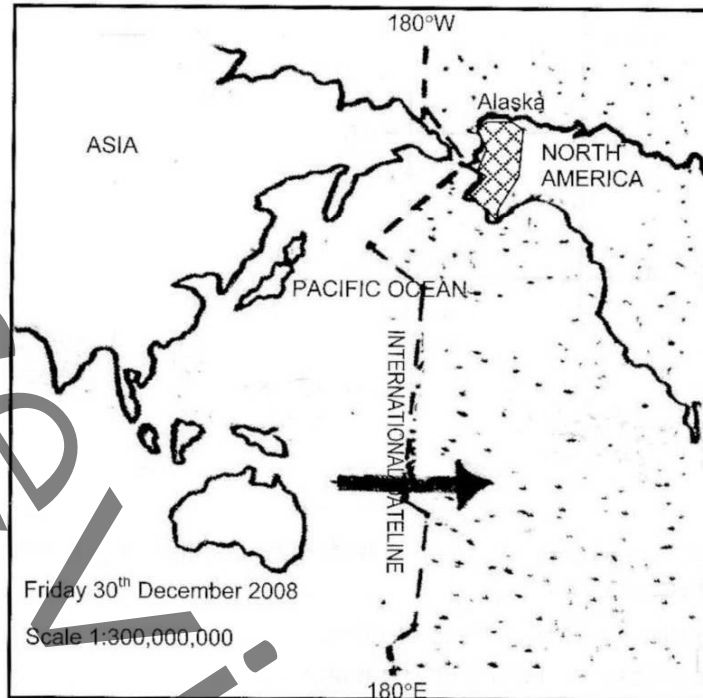
- 7 What type of drainage pattern is found in the map extract shown below?



- A Dendritic
B Trellis
C Radial
D Rectangular
- 8 From map evidence, which of the following factors could have largely determined the location of the village in grid square 1940?
- A Closeness to railway transport and electricity supply.
B Employment at Limerick farm and irrigation farming.
C Fishing on the Umzingwani and mineral prospecting.
D Flat land for farming and river for water supply.
- 9 From map evidence, the reservoir in grid square 2138 gets its water from ...
- A Inyankuni river.
B Rainfall directly.
C Umzingwani river.
D Underground borehole.
- 10 Which of the following could be a reason for the scarcity of cultivation north of gridline 42?
- A Hilly nature of the land.
B People are employed in the mines.
C The area is mainly a forest reserve.
D The area receives very little rainfall.
- 11 Which of the following grid squares has the highest density of both bush and streams?
- A 1539
B 1639
C 1739
D 1839
- 12 From map evidence, which one of the following services is **not** available in Mbalabala?
- A Accommodation
B Security
C Telegraphic
D Transport

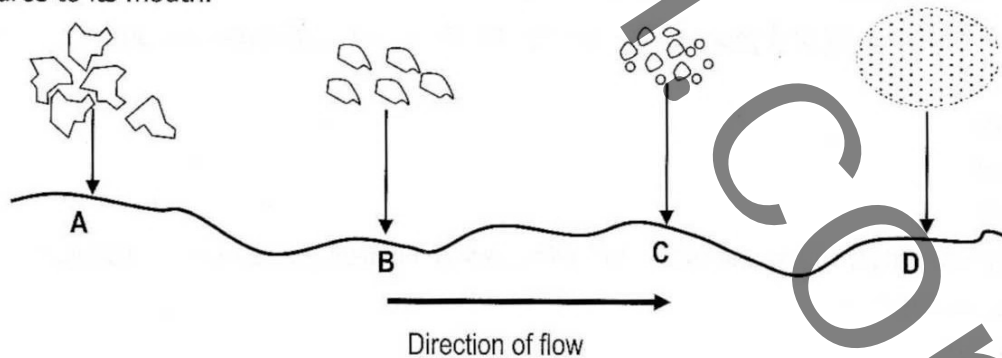
Section B: Elements of Physical Geography

13 Study the map below.



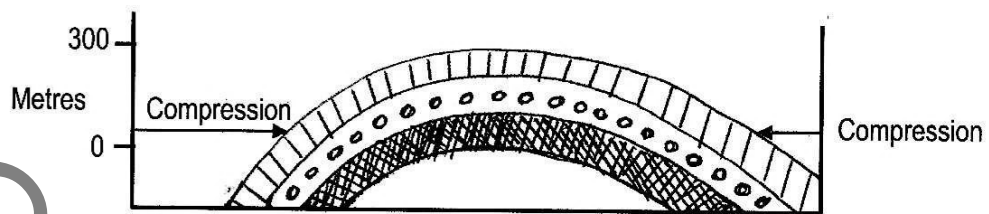
Which of the following was the correct date in Alaska?

- A Thursday 29th December 2008
 - B Friday 30th December 2008
 - C Saturday 31st December 2008
 - D Sunday 1st January 2009
- 14 The Sun's angle of elevation at noon at latitude 48°N on 21st June would be •••
- A 24½°
 - B 42°
 - C 65½°
 - D 90°
- 15 The diagram below shows the changes in the size of the load transported by a river from its source to its mouth.



Which of the points **A**, **B**, **C** or **D** represents the plain course of a river?

16 Study the diagram below.



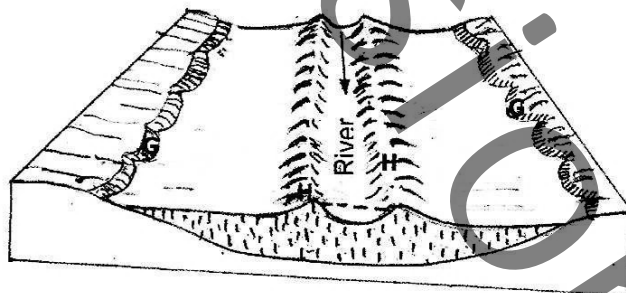
What feature is represented by the diagram above?

- A Anticline
- B Horst
- C Syncline
- D Valley

17 Which one of the following describes the process of weathering?

- A The break-up of rocks when exposed to the atmosphere.
- B The removal of rock material by rivers.
- C The removal of top soil in areas of heavy rainfall.
- D The wearing away of rock by wind-blown sand.

18 Study the diagram below.



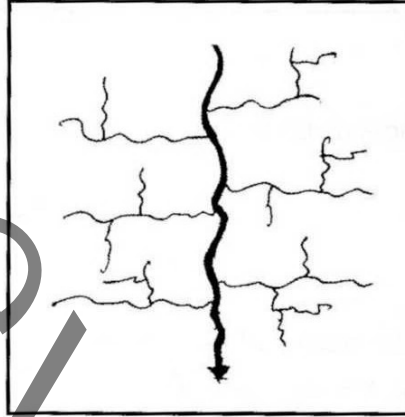
What are features **G** and **H**?

- | G | H |
|--------------|----------|
| A Bluff | Levee |
| B Bluff | Spur |
| C Escarpment | Levee |
| D Plateau | Valley |

19 Which one of the following processes is the most active in limestone areas?

- A Freeze and thaw
- B Hydraulic action
- C Mass wasting
- D Solution

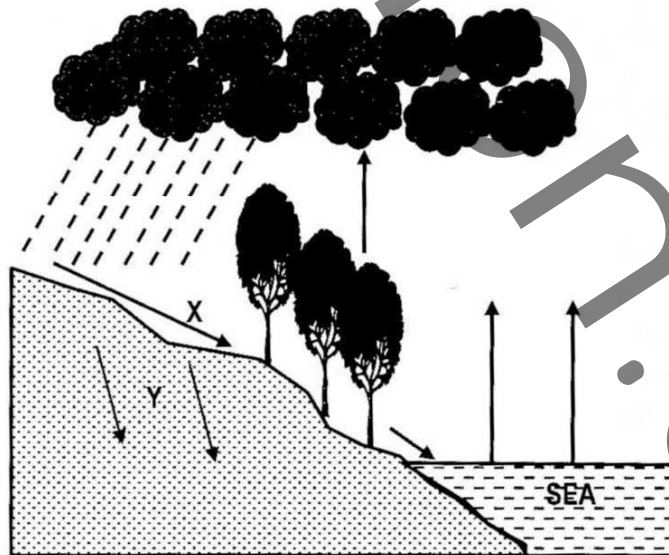
20 Study the diagram below.



What type of drainage pattern is shown above?

- A Dendritic
- B Radial
- C Rectangular
- D Trellis

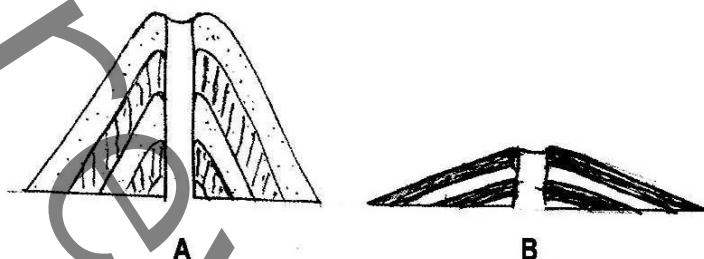
21 Study the hydrological cycle shown below.



What processes do **X** and **Y** represent?

- | X | Y |
|-------------------------|----------------|
| A evaporation | transpiration |
| B percolation | surface runoff |
| C surface runoff | percolation |
| D transpiration | evaporation |

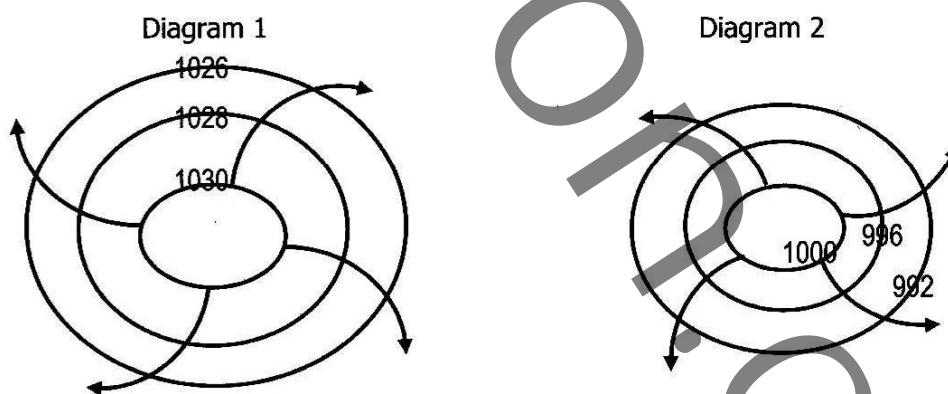
22 Study the volcanic features shown below.



What materials formed features **A** and **B**?

- | A | B |
|---------------------------|--------------|
| A fluid lava | viscous lava |
| B mixture of gases | smoke |
| C viscous lava | fluid lava |
| D volcanic bombs | ash |

23 Diagrams 1 and 2 show pressure systems with associated winds.



Which of the following correctly describes the pressure systems?

- | Diagram 1 | Diagram 2 |
|---|----------------------------------|
| A Anticyclone, Northern Hemisphere | Anticyclone, Southern Hemisphere |
| B Anticyclone, Southern Hemisphere | Cyclone, Northern Hemisphere |
| C Cyclone, Northern Hemisphere | Anticyclone, Southern Hemisphere |
| D Cyclone, Southern Hemisphere | Anticyclone, Southern Hemisphere |

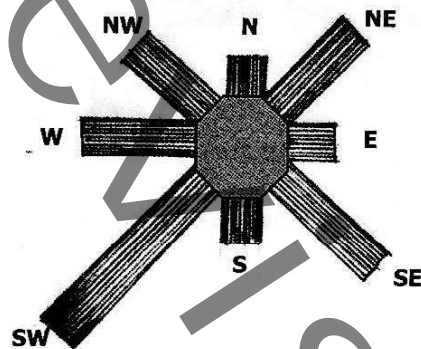
24 Study the climatic table below.

| RELATIVE HUMIDITY | | |
|-------------------|----------|-----|
| Dry Bulb | Wet Bulb | % |
| 25°C | 25°C | 100 |

What is likely to occur as the temperatures fall?

- A Decrease in cloud cover
- B Decrease in pressure
- C Increase in sunshine
- D Precipitation

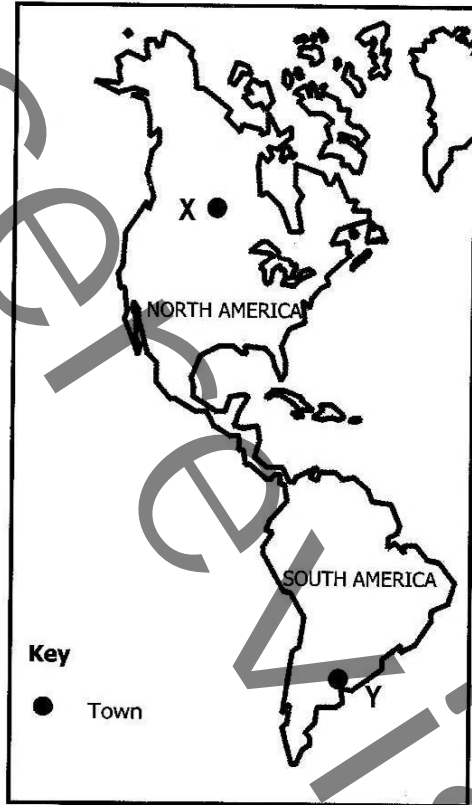
25 Study the windrose shown below.



What is the location of the station on which the windrose is based?

- A 0° and 23½°N
- B 0° and 23½°S
- C 40°S and 60°N
- D 40°S and 60°S

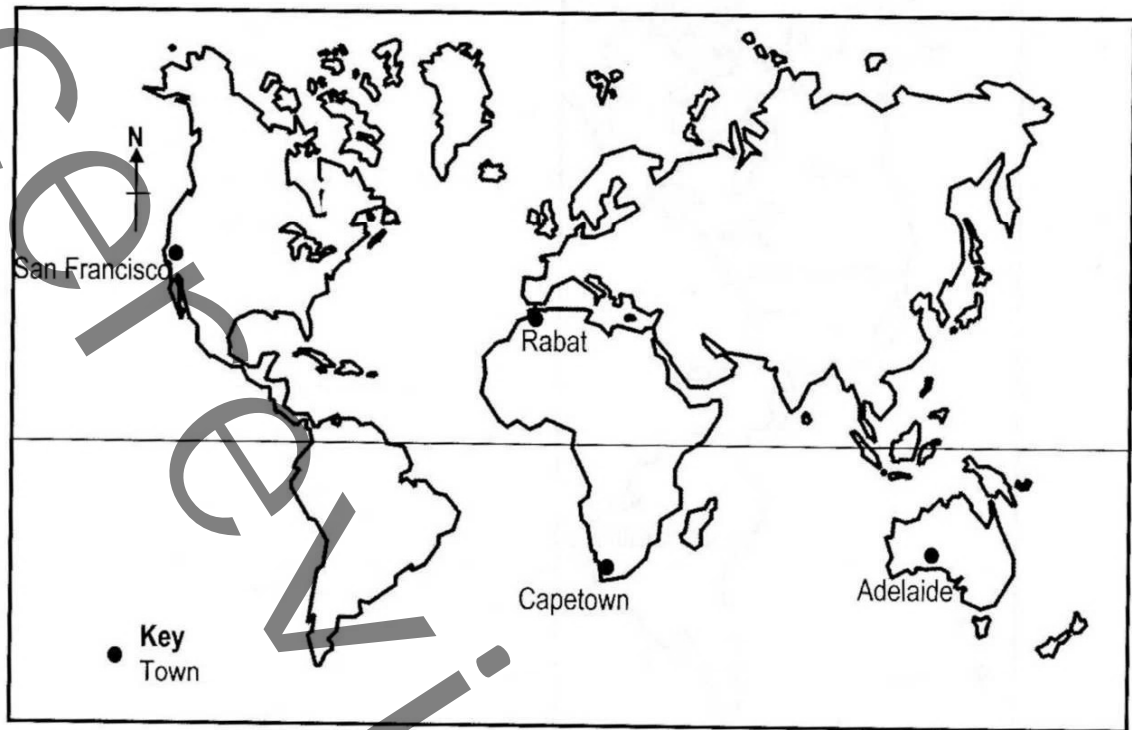
26 Study the map below.



What causes town **X** to experience a larger annual temperature range than town **Y**?

- A** Altitude
- B** Continentality
- C** Latitude
- D** Wind

27 Study the map below.



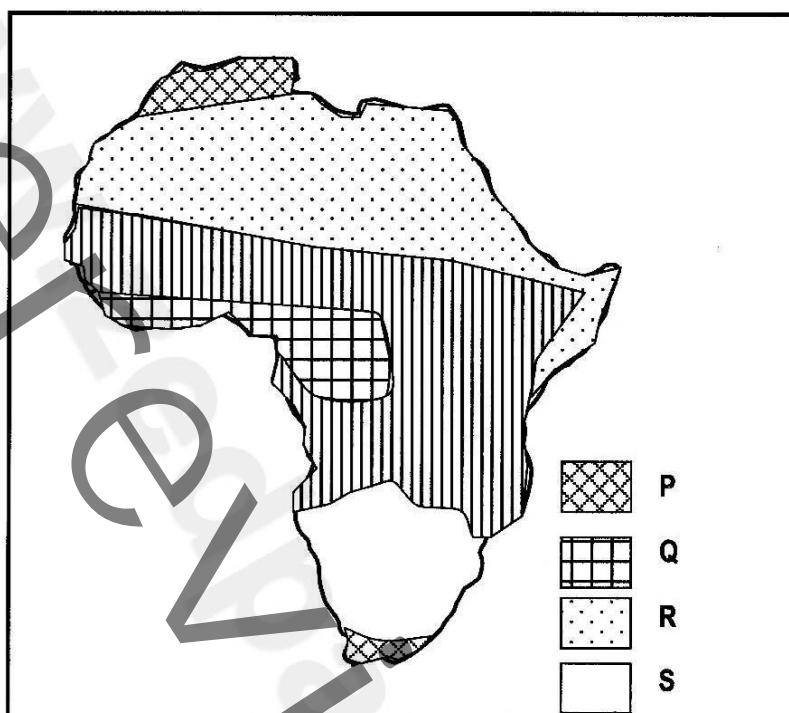
Which of the following statements best describes the climatic characteristics of the towns shown on the map?

- A Hot and dry throughout the year.
- B Hot and wet throughout the year.
- C Mild rainy winters, hot dry summers.
- D Severe snowy winters, warm wet summers.

28 Which of the following climatic features is characteristic of hot deserts?

- A High rainfall during the equinoxes.
- B Light winds with no prevailing direction.
- C Low relative humidity throughout the year.
- D Small daily range of temperature.

29 Study the map of Africa below.



Which of the following regions **P, Q, R, or S** experiences westerly winds in winter and off-shore trade winds in summer?

- A P
- B Q
- C R
- D S

30 Which of the following climatic regions is **not** crossed by the Prime Meridian?

- A Equatorial
- B Hot desert
- C Savanna
- D Temperate continental

31 Which of the following best describes secondary forest.

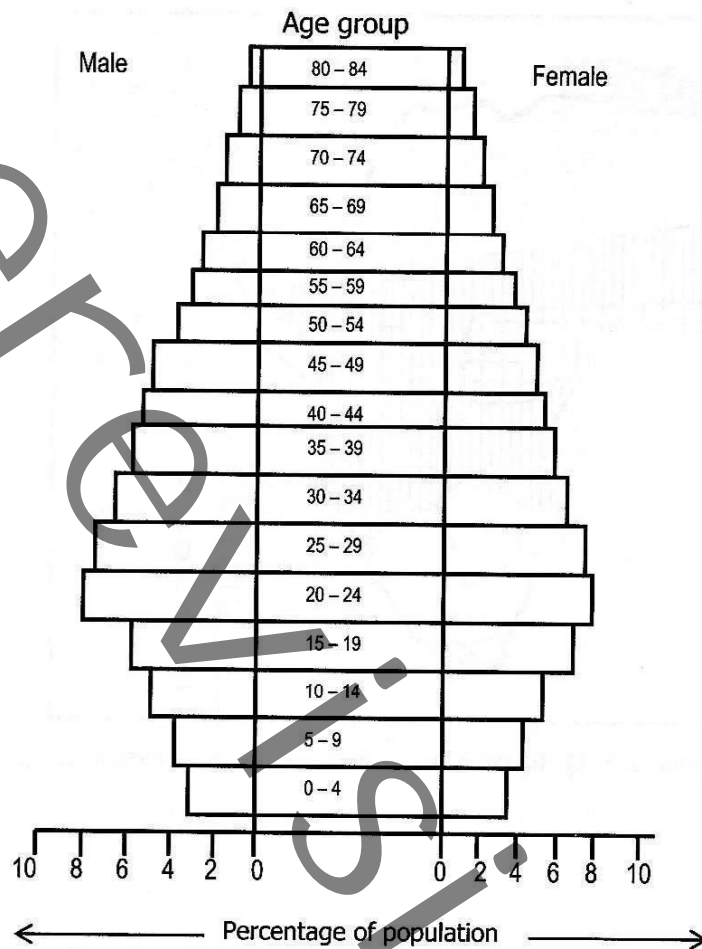
- A Forest in which the trees have been recently planted.
- B Forest in which small plants grow on branches of trees.
- C Forest which grows along the banks of rivers.
- D Forest which grows where the original vegetation has been cleared.

32 What is the characteristic feature of the natural vegetation found in the hot desert area?

- A It has dwarf and twisted trees.
- B It has small dense shrubs.
- C Plants are of medium height.
- D Plants have small waxy leaves.

Section C: Elements of World Human Geography

33 Study the diagram below which shows population structure.



Which statement is true regarding the population as depicted in the above structure?

There is ...

- A high fertility and high mortality.
- B low fertility and high mortality.
- C low fertility and low mortality.
- D low life expectancy.

34 Study the table below.

| COUNTRY | ANNUAL (%) POPULATION GROWTH RATE |
|----------------|-----------------------------------|
| Canada | 0.8 |
| France | 0.5 |
| United Kingdom | 0.1 |
| United States | 0.7 |
| Sweden | 0.01 |

What condition has led to a decrease in population growth rate in these countries?

- A A greater decline in birth rate than the death rate.
- B A greater decline in death rate than the birth rate.
- C A greater improvement in medical services and the diet of the population.
- D A larger life expectancy of the population leading to an aged population

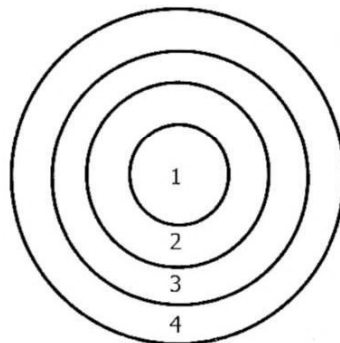
35 Which of the following is **not** an indicator of over-population?

- A Decrease in the standard of living.
- B High dependency ratio.
- C High Gross National Product (GNP) per capita income.
- D Low levels of national development.

36 Which of the following factors is **not** a push factor in the rural-urban migration process?

- A A low cost of living in rural areas.
- B Drought in rural areas.
- C Lack of schools in rural areas.
- D Rural unemployment.

37 Study the concentric City Model that shows different land use zones.



Which of the following land uses are represented by zones 2 and 3 respectively?

- A Agricultural and Residential
- B Central Business District and Agriculture
- C Industrial and Residential
- D Residential and Central Business District

38 Which one of the following is a geographical requirement for the successful growth of maize?

- A Average rainfall of 650 – 1 000 mm.
- B Average temperatures of about 16°C.
- C Rich alluvial soils with an impervious subsoil.
- D Thick clay soil on gentle slope.

39 Study the diagram below that shows countries which produce rice under irrigation?

| COUNTRY | Cultivated area (000 hectares) | Area under irrigation (000 hectares) |
|-------------|-----------------------------------|--|
| Japan | 5 684 | 3 171 |
| Indonesia | 12 697 | 3 668 |
| Thailand | 11 415 | 1 768 |
| India | 163 720 | 27 520 |
| Phillipines | 8 546 | 960 |

Which of the following countries has the largest percentage of area under irrigation?

- A India
- B Indonesia
- C Japan
- D Phillipines

40 Why is India not a major beef producer although it is the leading cattle producer?

- A Cattle are regarded as sacred.
- B Cattle are used for draft power.
- C Cattle produce poor quality beef.
- D There are no proper beef storage facilities.

41 Which of the following crops has adversely been affected by the increase in synthetic products of petroleum?

- A Maize
- B Rye
- C Sisal
- D Wheat

42 Why are some oil refineries constructed at the port of import of crude oil?

- A It is cheaper to transport the different refined oil products.
- B It is dangerous to refine crude oil at the oil wells.
- C Oil producing countries have no technical skills to build refineries.
- D Such ports have high demand for oil products.

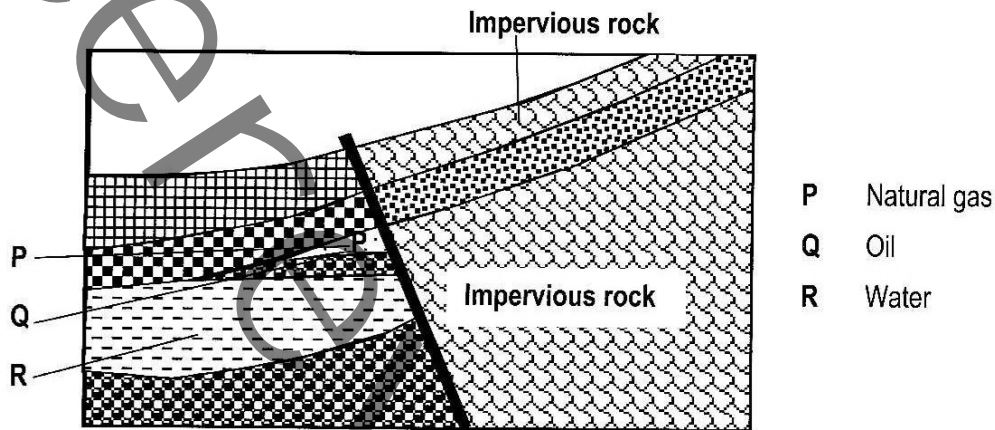
43 Which of the following **A, B, C** or **D** lists types of coal in **increasing** order of heat produced?

- A Anthracite, Bituminous, lignite
- B Bituminous, Anthracite, lignite
- C lignite, Anthracite, Bituminous
- D lignite, Bituminous, Anthracite

44 Which of the following sources of energy is the most widely used in the world?

- A Coal
- B Crude oil
- C Natural gas
- D Uranium

45 The diagram below shows an oil trap.



What is the type of oil trap shown above?

- A Anticlinal trap
- B Fault trap
- C Salt-plug trap
- D Synclinal trap

46 Which one of the following is the largest producer of steel?

- A France
- B Japan
- C UK
- D U.S.A.

47 Which of the following factors of iron and steel industrial location would be considered the least in importance?

- A Labour
- B Market
- C Raw materials
- D Transport

48 Which of the listed groups contains two types of iron ore and two types of coal?

- A Bituminous, lignite, peat, siderite
- B Haematite, lignite, limonite, anthracite
- C Magnetite, haematite, lignite, limonite
- D Siderite, peat, anthracite, bituminous

- 49 The table below shows the supply of raw materials to the iron and steel industries of Japan, German and the U.S.A.

| Source | Raw material | Destination |
|--------------|--------------|-----------------------|
| Sweden | Iron Ore | Essen, Germany |
| South Africa | X | Osaka, Japan |
| Labrador | Y | Sparrow Point, U.S.A. |

What are the raw materials **X** and **Y**

- | | X | Y |
|----------|-----------|-----------|
| A | Coal | Iron ore |
| B | Iron ore | Limestone |
| C | Limestone | Coal |
| D | Nickel | Limestone |
- 50 Which of the following requirements was not a factor in the early development of the Rhur iron and steel industry?
- A** Canal transport
 - B** Hydro-electric power
 - C** Iron ore
 - D** Rail transport