



**DELHI PUBLIC SCHOOL NEWTOWN**  
**SESSION 2022-23**  
**HALF YEARLY EXAMINATION**

**CLASS: IX**

**SUBJECT: GEOGRAPHY (SET A)**

**FULL MARKS: 80**

**TIME: 2 HOURS**

*Answers to this Paper must be written on the paper provided separately.*

*You will not be allowed to write during the first 15 minutes.*

*This time is to be spent in reading the question paper.*

*The time given at the head of this Paper is the time allowed for writing the answers.*

*Part I is compulsory. All questions from Part I are to be attempted.*

*A total of five questions are to be attempted from Part II.*

*The marks intended for questions are given in brackets [ ].*

*This paper consists of seven printed pages.*

**PART I (30 marks)**

*(Attempt all questions from this Part.)*

**Question 1**

**Answer the following questions:**

- |  |            |
|--|------------|
| <b>(i) What are lines of longitude?</b>                                | <b>[2]</b> |
| <b>(ii) Which is the densest part of the earth? Why?</b>               | <b>[2]</b> |
| <b>(iii) How are structural plains formed? Give an example.</b>        | <b>[2]</b> |
| <b>(iv) State any two characteristics of igneous rocks.</b>            | <b>[2]</b> |
| <b>(v) What is the difference between epicentre and seismic focus?</b> | <b>[2]</b> |

**Question 2**

**On the outline map of world provided:**

- |   |            |
|---|------------|
| <b>(i) Shade and label Black Sea.</b>                                 | <b>[1]</b> |
| <b>(ii) Shade and label the river Euphrates.</b>                      | <b>[1]</b> |
| <b>(iii) Mark and name the strait between Asia and North America.</b> | <b>[1]</b> |
| <b>(iv) Shade and label Gulf of Mexico.</b>                           | <b>[1]</b> |
| <b>(v) Shade and label Tibetan Plateau.</b>                           | <b>[1]</b> |
| <b>(vi) Mark and label the Drakensberg.</b>                           | <b>[1]</b> |
| <b>(vii) Shade and name the largest river of the world.</b>           | <b>[1]</b> |
| <b>(viii) Mark and name the Urals.</b>                                | <b>[1]</b> |
| <b>(ix) Shade and label the river Mekong.</b>                         | <b>[1]</b> |
| <b>(x) Mark and label the Rockies.</b>                                | <b>[1]</b> |

**Question 3**

**Choose the correct option:**

**[10]**

**(i) What is the average temperature of the earth?**

- (a) 18°C
- (b) 17°C
- (c) 20°C
- (d) 15°C

**(ii) Which of the following extends between the Tropic of Cancer and Arctic Circle?**

- (a) South Frigid Zone
- (b) South Temperate Zone
- (c) North Frigid Zone
- (d) North Temperate Zone

**(iii) \_\_\_\_\_ is caused by the rotation of the earth.**

- (a) Coriolis Effect
- (b) Seasons
- (c) Unequal length of day and night
- (d) Solstice

**(iv) A piece of land reclaimed from the sea or lake is called \_\_\_\_\_.**

- (a) Bhangar
- (b) Loess
- (c) Polder
- (d) Khadar

**(v) \_\_\_\_\_ is the metamorphosed form of limestone.**

- (a) Quartzite
- (b) Marble
- (c) Graphite
- (d) Slate

**(vi) Which of the following is an example for an active volcano?**

- (a) Mt. Aconcagua
- (b) Mt. Kilimanjaro
- (c) Mt. Kenya
- (d) Mt. Etna

(vii) \_\_\_\_\_ is the process of breaking down of rocks but not its removal.

- (a) Erosion
- (b) Denudation
- (c) Weathering
- (d) Mass wasting

(viii) Distributaries are seen at the \_\_\_\_\_ course of a river.

- (a) Upper
- (b) Middle
- (c) Lower
- (d) Middle and Lower

(ix) \_\_\_\_\_ Current is also known as Black Stream.

- (a) Kuroshio
- (b) Labrador
- (c) Oyashio
- (d) Gulf Stream

(x) \_\_\_\_\_ rocks have the minerals arranged in a series of bands.

- (a) Igneous
- (b) Metamorphic
- (c) Sedimentary
- (d) All of the above

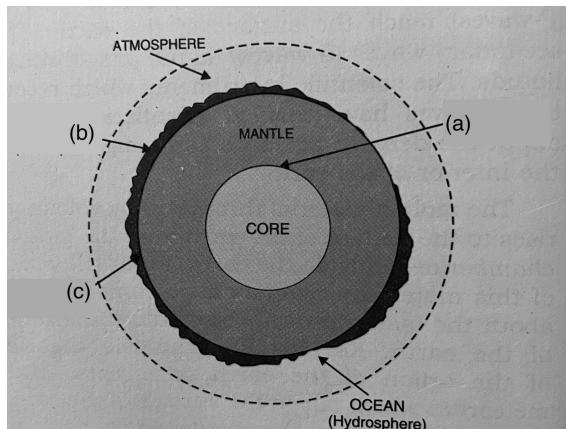
## PART II (50 marks)

*(Attempt any five questions from this part.)*

### Question 4

- |   |     |
|---|-----|
| (i) How does the atmosphere help in keeping the earth warm?     | [2] |
| (ii) What is the biosphere? Why is it important?                | [2] |
| (iii) Give reasons for the following:                           | [3] |
| (a) Earth is neither too hot nor too cold.                      |     |
| (b) The S-waves disappear in the outer core.                    |     |
| (c) The core of the earth is responsible for earth's magnetism. |     |

(iv) Study the diagram given below and label the features marked as (a), (b) and (c). [3]



#### Question 5

- (i) What is IDL? Why does the IDL go zigzag at the Bering Strait? [2]  
(ii) Calculate the local time in Singapore ( $104^{\circ}\text{E}$ ) when it is 4:00pm at Greenwich. [2]  
(iii) What is a Great Circle? What are the two limitations in using Great Circles for travelling? [3]  
(iv) Write any three characteristics of lines of latitudes. [3]

#### Question 6

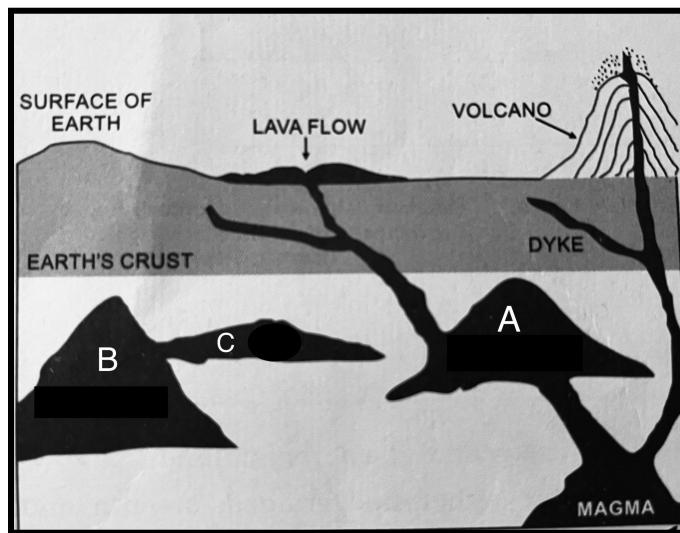
- (i) Distinguish between Torrid zone and Frigid zone. [2]  
(ii) State any two characteristics of revolution of the earth. [2]  
(iii) With reference to Winter Solstice in the northern hemisphere, answer the following:  
    (a) Which latitude receives vertical rays of the sun?  
    (b) What is the season in the Southern Hemisphere?  
    (c) What will be the duration of daylight between the  $66\frac{1}{2}^{\circ}\text{S}$  and  $90^{\circ}\text{S}$ ? [3]  
(iv) Draw a well labelled diagram of the circle of illumination. [3]

#### Question 7

- (i) Define the following: [2]  
    (a) Mountain  
    (b) Piedmont alluvial plains  
(ii) Draw a well labelled diagram of anticlines and synclines. [2]  
(iii) Give geographical reasons for the following: [3]  
    (a) The Rockies have steep slopes and river valleys.  
    (b) There are endless variations in plains.  
    (c) Alluvial plains are called granaries of the world.  
(iv) State three characteristics of fold mountains. [3]

### **Question 8**

- (i) Distinguish between Rocks and Minerals . [2]
- (ii) Define regional metamorphism. [2]
- (iii) Give reasons for the following: [3]
- (a) Extrusive igneous rocks have small crystals.
  - (b) Igneous rocks are also known as primary rocks.
  - (c) Metamorphic rocks do not have fossils.
- (iv) Study the diagram given below and name the features labelled as A, B and C. [3]



### **Question 9**

- (i) What is a hot spring? Why are they considered good for health? [2]
- (ii) Explain two destructive effects of earthquakes. [2]
- (iii) State the geographical terms for the following: [3]
- (a) Forces originating from the interior of the earth.
  - (b) Depression formed by the repeated eruptions of a volcano.
  - (c) Ripples and storms in oceans generated by oceanic earthquakes.
- (iv) Explain three types of volcanoes on the basis of their eruption. [3]

### **Question 10**

- (i) Write two differences between mechanical weathering and chemical weathering. [2]
- (ii) Draw a well labelled diagram of mechanics of physical weathering. [2]
- (iii) Define the following terms: [3]
- (a) Solution
  - (b) Oxidation
  - (c) Block disintegration
- (iv) Explain how humans, plants and animals cause weathering. [3]

### **Question 11**

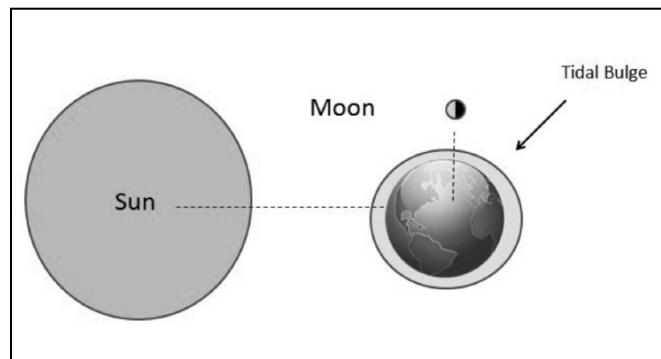
- (i) How does the velocity of water affect erosion, transportation and deposition work of a river? [2]
- (ii) State any two characteristics of seifs. [2]
- (iii) Give geographical reasons for the following: [3]
- (a) Erosion action is more effective in the upper course of a river.
  - (b) The migration of barchans is a threat to desert life.
  - (c) V-shaped valleys have steep slopes.
- (iv) Study the picture given below and answer the questions that follow: [3]



- (a) Identify the geographical feature shown in the given picture.  
(b) In which course of the rivers is this feature formed?  
(c) State one condition needed for the formation of this feature.

### **Question 12**

- (i) Study the diagram given below and answer the questions that follow: [2]



- (a) What does the given picture represent?  
(b) When does this occur?

- (ii) How does the temperature affect ocean currents? [2]
- (iii) Give geographical reasons for the following: [3]
- (a) The most extreme tidal range occurs during spring tides.
  - (b) Heavy fog is experienced on the coast of Newfoundland.
  - (c) The Atlantic water flows into the Mediterranean Sea's surface.
- (iv) State the geographical terms for the following: [3]
- (a) The rise of sea water and its movement towards the coast.
  - (b) Large masses of surface water that circulate in regular patterns around the oceans.
  - (c) The period of the shortest distance between the moon and the earth.