



**DELHI PUBLIC SCHOOL NEWTOWN**  
**SESSION 2022-23**  
**FINAL 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 five printed pages.*

**PART I (30 Marks)**

*Attempt all questions from this Part.*

**Question 1**

- i) Which is the longest day and the shortest night in the Northern Hemisphere and why? [2]
- ii) Calculate the local time at Singapore (104°E) when it is 6:00 pm at Greenwich. [2]
- iii) How is a rift valley formed? Give one example. [2]
- iv) Mention any two chief characteristics of metamorphic rocks. [2]
- v) What is acid rain? Write its two effects on the environment. [2]

**Question 2**

On the outline map of the World mark and label the following:

- i) Mediterranean Sea [1]
- ii) Strait of Gibraltar [1]
- iii) River Indus [1]
- iv) Gulf of Carpentaria [1]
- v) Hudson Bay [1]
- vi) Shade and label the Temperate grasslands in the continent of Africa [1]
- vii) Shade and label the Tropical monsoon region of Asia [1]
- viii) Brazilian Highlands [1]
- ix) River Colorado [1]
- x) Shade and label the Taiga Region of North America [1]

### **Question 3**

- i) The Taiga region is located between [1]  
a. 55°-70°S  
b. 55°-70°N  
c. 30°-50°N  
d. None of the above
- ii) Conglomerate is an example of \_\_\_\_ formed sedimentary rock. [1]  
a. Chemically  
b. Mechanically  
c. Aeolian  
d. Organically
- iii) The Gulf Stream moves in north eastern direction under the influence of \_\_\_\_ [1]  
a. Trade winds  
b. Tropical cyclones  
c. Westerlies  
d. Polar winds
- iv) The temperature at which air gets saturated is known as \_\_\_\_ [1]  
a. Evaporation  
b. Absolute humidity  
c. Frost  
d. Dew point
- v) \_\_\_\_ is where a river enters the sea. [1]  
a. Erosion  
b. Source  
c. Mouth  
d. Tributary
- vi) Name the gas that makes the largest component of Earth's atmosphere? [1]  
a. Argon  
b. Oxygen  
c. Nitrogen  
d. Carbon dioxide
- vii) The plains which are formed at the foothills of the mountains are \_\_\_\_ [1]  
a. Polder  
b. Structural plains  
c. Piedmont Alluvial plains  
d. None of the above

viii) The atmosphere is mainly heated by the \_\_\_\_\_

[1]

- a. Shortwave solar radiation
- b. Scattered solar radiation
- c. Terrestrial radiation
- d. None of the above

ix) Trade winds bring heavy rainfall to the \_\_\_\_\_ of the continent lying within the Tropics. [1]

- a. Western coast
- b. Northern coast
- c. Eastern coast
- d. Southern coast

x) The sun shines vertically over the \_\_\_\_\_ on 23<sup>rd</sup> September. [1]

- a. Tropic of Capricorn
- b. Equator
- c. Tropic of Cancer
- d. Arctic Circle

### Part II (50 Marks)

*Attempt any five questions from this part.*

#### Question 4

(i) State two causes for the change of seasons on the earth. [2]

(ii) Distinguish between Local Time and Standard Time. [2]

(iii) Give reasons for the following [3]

a. The distance between two consecutive meridians, is roughly equal to about 111 kilometers only at the equator.

b. Latitudes and Longitudes are always expressed in angles.

c. Norway is called the 'land of midnight sun'.

(iv) Why is every fourth year a leap year? Write two effects of rotation of the Earth. [3]

#### Question 5

(i) Define the following: [2]

a. Polder

b. Volcanic plateaus

(ii) What is meant by lithosphere? Why is the lithosphere known as mineral skin? [2]

(iii) Give reasons for the following: [3]

a. Young Fold mountain regions are prone to Earthquake and Volcanic activities.

b. Residual mountains are also called mountains of denudation.

c. The asthenosphere is in a semi-molten state.

(iv) Draw the diagram of the interior of the earth and label the following using geographical terms: [3]

a. The layer which is responsible for earth's Magnetic field.

b. The boundary between the mantle and the core.

c. The layer with an average thickness of 2900 km.

**Question 6**

- (i) The 'Pacific Rim' is ridden by active volcanoes and tectonic earthquakes. Give reasons. [2]  
(ii) Briefly explain any two causes of earthquakes. [2]  
(iii) Draw the diagram of common intrusive landforms and label Sill, Dyke and Laccolith. [3]  
(iv) Give reasons for the following:  
a. The Dead Sea has a very high salinity.  
b. Intrusive igneous rocks are called plutonic rocks.  
c. Hot springs are considered good for health.

**Question 7**

- (i) Name the following: [2]  
a. Peeling off of the outer layer of rock through contraction and expansion.  
b. The leveling of land surface by erosion and deposition.  
(ii) Distinguish between weathering and denudation. [2]  
(iii) Give reasons for the following: [3]  
a. Chemical weathering occurs in moist and cold climates.  
b. Vegetation prevents disintegration of rocks.  
c. Weathering cannot take place on the moon's surface.  
(iv) State any three conditions for the formation of delta. [3]

**Question 8**

- (i) Define the following: [2]  
a. Ocean current  
b. Low tide water  
(ii) What are tides? Name one factor causing tides. [2]  
(iii) Give a reason for each of the following: [3]  
a. Grand Banks south east of Newfoundland has dense fog.  
b. Tidal range is not constant  
c. The western coast of Europe remains ice free in winter.  
(iv) Draw a suitable diagram of spring tide and label it. [3]

**Question 9**

- (i) What would be the effects of ozone layer depletion? [2]  
(ii) Name any four factors that affect the temperature of a place. [2]  
(iii) Give reasons for each of the following: [3]  
a. Annual range of temperature is more at the deserts.  
b. Kolkata is warmer than Darjeeling in summer.  
c. Chennai has a lower range of temperature than Lucknow.  
(iv) Define the following: [3]  
a. Heat Balance  
b. Greenhouse effect  
c. Tropopause

**Question 10**

- (i) How are periodic winds different from permanent winds? [2]
- (ii) Explain process of formation of the following: [2]
- Frost
  - Hail
- (iii) Draw a well labeled diagram of orographic rainfall. [3]
- (iv) Give reasons for the following: [3]
- There is a seasonal shifting of the pressure belt.
  - The westerlies blow with great force and regularity in the southern hemisphere.
  - Frontal rain is common in mid-latitudes.

**Question 11**

- (i) Explain how sewage and transportation accidents cause marine water pollution. [2]
- (ii) Differentiate between Genetic variation and Somatic variation with example. [2]
- (iii) On the basis of Chernobyl disaster, answer the following questions: [3]
- When and where did it happen?
  - What was the cause?
- (iv) Define the following: [3]
- Bioaccumulation
  - Eutrophication
  - Radioactive pollution

**Question 12**

- (i) Which natural region is called ‘Granaries of the world’? Why? [2]
- (ii) Study the map given below and answer the questions that follow: [2]



- a) Name the natural region shown on the given map.
- b) What is the special climatic condition experienced here?
- (iii) Write any three climatic characteristics of the Tundra region. [3]
- (iv) Give a reason for each of the following: [3]
- The Tropical Monsoon region experiences seasonal climate.
  - Tropical deserts have xerophytic plants.
  - The savannas are called the ‘the natural cattle country’.