

SATISH CHANDRA MEMORIAL SCHOOL

Geography – Class IX

Class: IX

Time: 30 Minutes

Subject: Geography

Maximum Marks: 25

Note: Answer all questions. Each question carries 5 marks. Draw neat, labelled diagrams wherever required.

Q1. Plate Movement [5 Marks]

Situation: Oceanographers studying the seafloor near a crack running along the middle of the ocean have found that new rock keeps appearing there, slowly pushing the ocean floor apart on either side over millions of years.

Task: Represent, with proper labelling, the plate movement responsible for this continuous formation of new seafloor, clearly showing the direction in which the two plates are moving.

Q2. Heat Zones [5 Marks]

Situation: A geography class compares notes from three pen-pals living in different parts of the world – one near the equator writes about continuous, year-round heat; another, living roughly midway between the equator and the pole, describes distinct hot and cold seasons; the third, close to the pole, writes of long, freezing nights lasting for months at a stretch.

Task: Represent, with proper labelling, the division of the Earth's surface that explains why these three friends experience such different conditions, based on the latitudes at which they live.

Q3. River Landform [5 Marks]

Situation: A farmer whose fields lie along a slow, winding river notices that a wide loop in the river's course has grown even more curved over the years. After an unusually heavy flood one monsoon, he finds the loop has been cut off entirely from the main channel, leaving behind a crescent-shaped body of still water in his field.

Task: Sketch and label the stages that led to the still water body the farmer now finds in his field, showing the river's course before and after the flood.

Q4. Atmospheric Layers [5 Marks]

Situation: A weather balloon launched from a meteorological station records a steady fall in temperature as it rises, followed by unexpected temperature changes further up, before it eventually bursts long before reaching outer space.

Task: Represent, with proper labelling, the layers through which the balloon travelled, in the order it passed through them, along with their approximate heights. State which layer supports weather phenomena such as clouds and rainfall.

Q5. Karst Topography [5 Marks]

Situation: Explorers venturing into a cave in a limestone region find the ceiling hung with icicle-like rock formations, while columns of a similar kind rise up to meet them from the cave floor – both said to have taken thousands of years to form through the slow dripping of mineral-rich water.

Task: Represent, with proper labelling, the underground features described by the explorers, showing those hanging from the ceiling and those rising from the floor. Name the type of landscape in which such features are commonly found.