Index No.:……

GEOGRAPHY

(Three hours and a quarter)

(*The first 15 minutes of the examination are for reading the paper **ONLY**. Candidates must **NOT** start writing during this time*).

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INSTRUCTIONS: **Answer Question 1** ***(COMPULSORY) from Part I and any FIVE questions from Part II. Sketches, Maps and diagrams should be drawn wherever they serve to illustrate your answers. The intended marks for questions are given in brackets [ ]***

Part I- Compulsory [15X2=30]

Question 1

a) Name TWO types of surface waves.
b) 'Inspite of high temperatures in the interior of the Earth, rocks act as a solid'. Justify the statement.
c) What is diastrophism? Name TWO forces of diastrophism.
d) Discuss any TWO physical properties of soil.
e) 'The river systems produce several types of drainage patterns'. Explain any two.
f) "Sand dunes are never stationary". Explain the statement withtwo reasons.
g) What do the curved path of the earthquake waves indicate?
h) "Out of Geosynclines have come mountains". Discuss the statement.
i) Define frost weathering.
j) Illustrate any one depositional landform of glacier.
k) When is the international Ozone day celebrated? Name the recent volcanic eruption in Hawaii.
l) Why are Aeolian processes more prominent in the desert area?
m) Name two agents of physical weathering.
n) "Metamorphic rocks are the changed forms of igneous and sedimentary rocks". Explain.
o) Explain the movement of glacier by Lious Agassiz.

Question 2.

In the outline map of world locate the following: [10 Marks]

a) Name and shade over the area of Tundra soil.
b) Name and mark **PM** for Prime Meridian.
c) Write **HM** over thearea of Himalayan Mountains.
d) Name and locate largest canyon of the world with **LCW**.
e) Name Atacama Desert and mark **A**.
f) Write **SD** over Sahara desert.
g) Write **WAD**over the Western Australian desert.
h) Locate Bay of Bengal.
i) Mark **EQUATOR.**
j) Shade **AC** over Arctic Circle.

Question 3 **[MAP PROJECTION]** **[10 Marks]**

a) What is map projection? [1]
b) Define the following terms; [1]
   i) Graticule
   ii) Map
c) How is the pole shown in the cylindrical equal area map projection? [1]
d) Give the limitations of cylindrical projections. [1]
e) Mention any two uses of cylindrical equal area map projection. [1]
f) Draw the graticule of cylindrical equal area map projection on a scale of 1:320,000,000 for the whole world with the graticule interval of 30^{O}. [5]

Part II [70 MARKS]

Answer any *FIVE* questions

Question4

a) Define rock. Why is igneous rock called parent rock? [2]
b) Write short notes on pressure inside the earth surface. [2]
c) Illustrate the formation of Block Mountain and Rift Valley with the help of a proper diagram. [3]
d) Assess any TWO importance of water vapor in the atmosphere. [2]
e) What are moraines? [1]

Question 5

a) What are fluvial landforms? Name its three major courses. [2]
b) Draw and explain an intermontane plateau. [2]
c) What do you mean by shadow zone? What is its significance [2]
d) Explain the process of deflation by wind. [2]
e) What is metamorphism? Give one example of metamorphic rock. [2]

Question 6

a) Discuss the process of insolation as an agent of physical weathering. [2]
b) What are the different agents of gradation which are responsible for the formation of the following land features? [2]
   i) Natural levees
   ii) Mushroom rocks
   iii) Arêtes
   iv) Rapids
c) Why are plateaus regarded as storehouses of minerals? [2]
d) Explain the formation of waterfall in detail with the aid of a diagram. [3]
e) Why are the sedimentary rocks called as stratified rocks? [1]

Question 7

a) Distinguish between the following. [$^1/_2$x10=5]

i) Snowfield and Snowline
ii) P- Waves and S Waves
iii) Rocks and Soil
iv) Folding and Faulting
v) Alluvial Fans and Alluvial Cones

b) Give a ***single*** term for each of the following: [1x5=5]

i) A very deep-seated intrusive rock of igneous group.
ii) A stream that gets divided into a network of interconnected channels.
iii) The outgoing radiation from the surface of the earth.
iv) Basket of eggs topography.
v) Vertical cross section from the surface to the bedrock.

Question 8

a) What are the In-direct evidences that enable us to study about earth's interior? [2]
b) Explain the formation of river meander with the help of a diagram [2]
c) "Airplanes are incapable of flying through troposphere". Give two valid reasons. [2]
d) Illustrate the formation of oasis in the desert area. **[**4**]**

Question 9

a) What is the name given to Sandy desert and Rocky desert in Sahara? **[**2**]**
b) Explain the formation of U-shaped valley with the aid of a diagram. **[**3**]**
c) Explain two factors affecting the erosional work of river. **[**2**]**
d) List down the active factors of soil formation. Explain one in detail. [2]
e) Define Gorge. [1]

Question 10

a) Mention two factors responsible for the depletion of ozone**.** **[**2**]**
b) Analyze the importance of metamorphic rocks to human beings. **[**2**]**
c) Draw and explain any two erosional landforms by wind. [4]
d) Explain the greenhouse effect. [2]