

GEOGRAPHY FORM 4 MARKING SCHEME

1. a) Divisions of Physical Geography: Geomorphology, Climatology, Biogeography. (3 mks) b) Geography & Agriculture: Soil maps (fertilizers), Climate maps (crops), Landforms (systems). (2 mks)

2. a) Difference:

- Latitude: Angular distance N/S of Equator.
- Longitude: Angular distance E/W of Greenwich. b) Time Calculation:
- Diff = 109° . Time diff = $109 \times 4 = 436 \text{ min} = 7\text{h } 16 \text{ min}$.
- Time = 8:00 AM + 7h 16 min = 3:16 PM (15:16). (3 mks)

3. Structure of the Earth

- P: Crust. Q: Mantle. R: Gutenberg discontinuity (or Moho if P=Mantle boundary).

4. Mineral: Naturally occurring, inorganic, solid, definite chemical composition, crystalline structure. (2 mks)
Classification: Mode of formation, Mineral composition, Texture. (Any 3).

5. Field Study

- (i) Characteristics: Colour, Hardness, Lustre, Cleavage.
- (ii) Follow up: Report writing, Data analysis, Displaying specimens.

6. a) Karst Scenery: Landscape on limestone shaped by chemical weathering/solution. (2 mks) b) Stalactite formation: Rain water + $\text{CO}_2 = \text{Carbonic acid}$. Dissolves CaCO_3 in limestone. Reaches roof of cave; water evaporates/ CO_2 released; Calcite deposited. (4 mks)

7. a) (i) Lake: Depression filled with water. (2 mks) (ii) Formation: Tectonic, Volcanic, Damming, Glacial, Wind. (Any 4). b) Salinity: High evaporation, Lack of outlet (inland drainage), Volcanic mineral washing. (Any 2 x 2 = 4 mks).

8. i) Soil Colour Factors: Parent material, Organic matter, Drainage/Oxidation. (2 mks) ii) Soil Erosion: Removal/transportation of topsoil by agents like water/wind faster than formation. (2 mks).
