

2023
GEOGRAPHY
PAPER-I

Time Allowed — 3 Hours.

Full Marks — 200

If the questions attempted are in excess of the prescribed number, only the questions attempted first up to the prescribed number shall be valued and the remaining ones ignored.

Answer may be given either in English or in Bengali but all answers must be in one and same language.

Answer any five questions, taking at least two from each group.

[Suitable illustrations in answers will be appreciated.]

Group-A

1. Distinguish between weathering and mass wasting. Examine the factors and processes of mass wasting. State the postulates and principle of 'dynamic equilibrium'. 5+10+25=40
2. What is an airmass? Classify it stating your basis. Explain the processes of airmass modification with associated changes in weather conditions. Give the principles of Bjerkén's theory of frontogenesis. 5+15+10+10=40
3. What are the factors influencing the origin of ocean currents? Account for the ocean currents in the Atlantic Ocean. How does the T-S diagrams help to identify a watermass? 15+15+10=40
4. Write brief notes on—ecotone, homeostasis, ecological niche, and ecological pyramids. What is a biogeochemical cycle? Briefly discuss the 'nitrogen cycle' with a diagram. (5×4)+5+15=40
5. Define and classify 'map projections' stating the basis. Explain the terms—principal and real scale, loxodrome and standard parallel, constant of a cone. What are thematic maps, and what are their different types? 10+(10×2)+10=40

Group-B

6. Account for the salient features of intensive subsistence farming in monsoon Asia. Critically discuss Von Thünen's model of agricultural land use with present day relevance. 20+20=40
7. Examine the factors and measures of population growth. Discuss the patterns and trends of growth of the world population with annotated diagrams. 20+20=40

8. Write brief notes on—absolute and relative space, boundaries and frontiers, nation and state. Give a critical appraisal of 'Heartland Theory'. (8×3)+16=40
 9. Distinguish between rural and urban settlements. Account for the types and patterns of rural settlements over the Upper, Middle and Lower Ganga plains. Critically discuss the model of urban growth after Burgess. 8+12+20=40
 10. Discuss the concept and types of 'region'. Briefly write the principles and methods of 'regionalization'. Give the basis of the 'Growth Pole Theory' after Perroux. 10+20+10=40
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