

261548

COMBINED COMPETITIVE EXAMINATION (MAIN)

GEOGRAPHY

Paper-I

Time : 3 Hours

Full Marks : 200

- Note : (1) The figures in the right-hand margin indicates full marks for the questions.*
(2) Attempt five questions in all.
(3) Question No. 1 is compulsory.

1. Answer any *ten* questions from the following : 4×10=40
- (a) Discuss the composition of earth's crust.
 - (b) How do earthquakes trigger Tsunami waves?
 - (c) With the help of a diagram, discuss the variation in temperature across different layers of the atmosphere.
 - (d) How are coastal regions threatened by the effects of climate change?
 - (e) Describe about different biosphere zones.
 - (f) What are pelagic ocean deposits? What do they consist of?
 - (g) What are the major causes of eutrophication?
 - (h) Discuss the major push factors in migration.
 - (i) Describe the importance of sex ratio as a demographic parameter.
 - (j) Differentiate between frontiers and boundaries.
 - (k) Explain the primary causes of regional distribution of industries.
 - (l) Discuss agglomerative versus deglomerative factors in industrial location.

2. Answer any *eight* questions from the following : 5×8=40
- (a) Discuss the evidences on which Wegener relied upon for his assertion that continents have drifted from their original location.
 - (b) With the help of a diagram, discuss the pressure belts of the world.
 - (c) Discuss the factors influencing formation of soils.
 - (d) What are the ideal conditions for the growth of corals? Discuss.
 - (e) What are the causes of biodiversity depletion? Discuss.
 - (f) Describe, with examples, patterns of rural settlements based on their form.
 - (g) Discuss the demographic effects of out migration.
 - (h) Differentiate between nation and state.
 - (i) Define urban fringe and discuss about its characteristics.
 - (j) Discuss the factors responsible for energy crisis in the world.
3. Answer any *five* questions from the following : 8×5=40
- (a) What is groundwater? Describe its nature, occurrence and tapping for human use.
 - (b) Differentiate between cyclones and anti-cyclones. Discuss the mechanism of frontogenesis.
 - (c) Differentiate between currents and tides. What are the causes of ocean currents?
 - (d) With examples, discuss the major causes of environmental degradation.
 - (e) Discuss the trends of urban growth in the developed countries of the world.
 - (f) Define a cultural realm and compare the occidental with Islamic cultural realm.
 - (g) What is buffer zone? How is it different from frontiers?
4. Answer any *four* questions from the following : 10×4=40
- (a) Discuss the Rimland theory of Spykman as an alternative to Mackinder's Heartland theory.
 - (b) Discuss Karst cycle of erosion with examples of associated landforms in each stage.
 - (c) Explain different types of earthquake wave.
 - (d) Discuss the major global effects of ecological imbalance on the biosphere.
 - (e) Critically assess G. K. Zipf's concept of rank-size rule.

5. Answer any *two* questions from the following : 20×2=40
- (a) Critically assess the relevance of limit of growth concept of the Club of Rome in the present times.
 - (b) Explain the theory of seafloor spreading.
 - (c) Describe the geographical distribution of the major human races of the world.
6. Answer any *two* questions from the following : 20×2=40
- (a) Explain the causes of soil erosion and methods generally adopted for soil conservation.
 - (b) Discuss the models of internal structure of the cities.
 - (c) Discuss the changing trade pattern of India under the impact of globalisation.
7. Answer any *two* questions from the following : 20×2=40
- (a) Explain, in detail, Thornthwaite's classification of world climate.
 - (b) Explain the central place theory as advanced by Christaller.
 - (c) Discuss the impact of population growth on ecosystem and environment of the developing countries of the world.
8. What is a tectonic plate? What forces drive the plates? Discuss the theory of plate tectonics and explain different plate boundaries with the resultant landforms associated with it. 40
9. Explain climate change as it has taken place in the geological past. How is it different from the present-day climate change? What are the likely impacts of climate change as it is unfolding in the present? 40
10. Explain the demographic transformation of world's population with the help of demographic transition model. To what extent India's demographic change fits into the model? Give reasons if there are misfits. 40