

## MODEL QUESTIONS

### GEOGRAPHY

#### 1<sup>ST</sup> YEAR

#### GEOTECTONICS

1. Describe the characteristics of different plate margins with special reference to the development of the associated landforms. (10)
2. What is the theory of plate tectonics? How can it explain the present layout of the young fold mountain chains of the earth? (10)
3. Discuss the theories put forward by Pratt and Airy.(10)
4. Classify different types of folds mentioning the basis of your classification. (10)
5. Give an account of the different types of fault. (10)
6. Justify why Airy assumed that mountains have 'roots'. (4)
7. State how plate tectonics explain the differences between oceanic and continental crust. (4)
8. How can you justify that the sea floors originate and spread from the mid oceanic ridges? (4)
9. Give evidences of the existence of crustal plates? (4)
10. Explain the origin of island arcs. (4)
11. How can sea floor spreading be explained by palaeomagnetism? (4)
12. Distinguish between strike slip faults and dip slip fault. (4)
13. Distinguish between a normal fault and a reverse fault. (4)
14. Distinguish between recumbent fold and nappe. (4)
15. Discuss with the help of a sketch map, how the present global pattern of seismicity and volcanism may be explained by the present global lay out of the subduction sites. (4)

#### GEOMORPHOLOGY

1. Discuss the landforms produced by Aeolian erosion in desert regions. (10)
2. Give an account of the landforms developed by the depositional action of wind in hot deserts with suitable sketches. (10)
3. Describe the development of landforms as proposed by L.C. King. (10)
4. Discuss the erosional features in a glaciated mountainous region. (10)
5. Discuss the landforms produced in a karst region. (10)
6. Give an account of Davis' normal cycle of erosion with sketches. (10)
7. Describe the development of landforms in a terrain of folded structure. (10)
8. What are the processes of chemical weathering? Discuss the importance of chemical weathering in the humid tropics? (10)
9. Are different weathering processes basically dependent in climate? Support your answer with suitable examples. (10)

10. Explain the geomorphic ideas of J.T. Hack and point out how it is different from the cyclic concept of landform evolution (10)
11. How does an esker form? (4)
12. Describe the different types of sand dunes. (4)
13. Describe the characteristics of a river valley in its mountainous course. (4)
14. What are the difference between a pediment and a bajada? (4)
15. Discuss the formation of alluvial fan. (4)
16. Describe the different types of moraine. (4)
17. Distinguish between a hogback and a cuesta. (4)
18. Describe the landforms produced in a granitic region under humid tropical climate. (4)
19. Describe the four components of slope according to the model of L.C. King. (4)
20. Explain the formation of cirques and glacial steps. (4)
21. Distinguish between hydration and hydrolysis. (4)
22. What is meant by 'interruption' of normal cycle of erosion? (4)
23. Explain the formation of zuegen and yardang. (4)
24. Explain the formation of the different types of dolines. (4)
25. Explain the formation of kame terraces and eskers. (4)
26. What are the conditions which favor the formation of deltas? (4)
27. Explain the formation of a river meander. (4)
28. How do glacial troughs and hanging valleys develop? (4)
29. Distinguish between peneplain and pediplain. (4)

## **HYDROLOGY**

1. Discuss the different modes of occurrence of water in earth. (10)
2. Explain the processes of groundwater recharge and discharge. (10)
3. Describe the factors that influence the recharge of ground water. (10)
4. Discuss the various factors that affect surface run off. (10)
5. Describe global hydrological cycle with sketches. (10)
6. Discuss how do climate and vegetation influence surface run off. (10)
7. Describe the different components of a hydrological cycle. (4)
8. Discuss the origin of different types of springs. (4)
9. Distinguish between permeability and porosity. (4)
10. Discuss the influence of landuse on surface runoff. (4)
11. What are the different types of aquifers? (4)
12. Explain how rainfall characteristics influence surface run off. (4)
13. Discuss the influence of landuse and precipitation on surface run off. (4)
14. What is vadose water? (4)
15. What are effects of variation of angle of land slope on surface runoff? (4)
16. Distinguish between intermittent spring and incessant spring. (4)
17. Describe ground water circulation and its storage. (4)
18. What is the relationship between water table and surface run off? (4)

## **OCEANOGRAPHY**

1. Elucidate the categories of oceanic sediments according to their origin. (10)
2. Analyse the factors responsible for the variation of oceanic temperature throughout the globe. (10)
3. How oceanic salinity varies over and below the major oceanic surfaces – Give evidences in support of your answer. (10)
4. What do you mean by Coral island? Analyse the sequential formation of coral reefs with proper illustrations. (10)
5. Explain with proper diagrams about the major warm and cold currents found inside the Atlantic Ocean. (10)
6. Analyse about any five important oceanic topographical features in the light of Plate tectonic mechanism. (10)
7. Write a brief note on the T-S diagram. (4)
8. Mention about the process of Coral bleaching. (4)
9. Why the salinity quotient of Red Sea is higher in comparison with the Mediterranean Sea? (4)
10. Explain briefly about the formation of Mid Oceanic ridge. (4)
11. Distinguish between Fringing reef and barrier reef. (4)
12. Differentiate between Constructive and Destructive oceanic waves. (4)
13. How high tides are formulated with the lunar attraction? (4)
14. What do you know about the relation between wave length, wave frequency and wave velocity? (4)
15. Briefly mention about the major oceanic currents of Pacific Ocean. (4)
16. Distinguish between Continental slope and continental shelf. (4)

### **ECONOMIC GEOGRAPHY**

1. Analyse the concept of Sustainable Development in the light of resource conservation. What do you know about ‘limits to the growth’? (10)
2. Compare between the Economic and Environmental approach of resource utilization by providing suitable examples. (10)
3. Critically analyse the land use principles stated by J.H. Vonthunen with suitable sketches. (10)
4. Asses the relevance of Weber’s locational model in light of present day industrial context. (10)
5. Critically asses the Circular Cumulative causation process on the economy of a less developed nation as stated by Myrdal. (10)
6. Analyse the factors behind the establishment of cotton textile industry in New England region. Why it had shifted towards the southern provinces in recent past? (10)
7. Mention about the causes behind the agglomeration of iron & steel industry in eastern India. Why the newly built plants are found port centric rather raw material based? (10)

8. Asses the locational factors behind the growth of Petro-Chemical industry in both India as well as in the USA. (10)
9. Why trade is regarded as both engine and hindrance towards the growth of nation's economy? – Give reasons in support of your answer. (10)
10. Analyse the role of World Trade Organization regarding the monitoring of global trade practices in contemporary global economy. (10)
11. Briefly state about the phases of Forrester-meadows hypothesis. (4)
12. Why transport and communication is regarded as the most important sector of tertiary sector of present day economy? (4)
13. Compare between Railway and Roadway transport modes on the basis of cost advantage and connectivity criterion. (4)
14. Briefly state about the landuse principles stated by L.D. Stamp. (4)
15. What do you know about the 'Crop intensity and diversification' model after Weaver. (4)
16. State the characteristics and formulation of 'Spatial demand cone'. (4)
17. Mention about the causes behind the growth of cotton textile industry in Mumbai-Ahmedabad region. (4)
18. Analyse the role of resource creating factors with suitable examples. (4)
19. How locational advantage and technological advances boost the steel industry of Japan without having any proper resource base. (4)
20. Asses the problems faced by Haldia industrial belt by suggesting some remedial measurements. (4)
21. Critically elaborate the Richardian principles of international trade. (4)
22. Why Lake District of USA is regarded as one of the major industrial belts throughout the globe? (4)