

[climatology \(CT-5\).pdf](#)

[Coastal management question \(SEC-1\).pdf](#)

[ECONOMIC GEOGRAPHY \(CT-9\).pdf](#)

[Environmental geography \(CT-10\).pdf](#)

[hyman geography \(CT-3\).pdf](#)

[population geography.pdf](#)

[remote sensing \(CT-12\).pdf](#)

[research question \(SEC-2,CT-11\).pdf](#)

[Statistics \(CT-6\).pdf](#)

[Urban geography \(DSE-4\).pdf](#)

1. Mention the two favourable factors for condensation.
2. Discuss the significance of condensation.
3. What do you mean by supersaturated air?
4. Why does dry adiabatic lapse rate remain always higher than wet adiabatic lapse rate?
5. What are the necessary conditions for occurring condensation?
6. Define condensation nuclei.
7. Mention the source of hygroscopic nuclei.
8. What is the climatological significance of condensation nuclei?
9. Why are the condensation nuclei also known as hygroscopic nuclei?
10. Analyse the mechanism of precipitation.
11. Discuss the salient features of air mass source regions.
12. Classify air masses with their salient features.
13. Mention the bases of classifying the air masses.
14. What is thermodynamic modification?
15. Define front.
16. Distinguish between warm front and cold front.
17. Discuss the weather sequence of passing warm and cold fronts.
18. Discuss the sequence of clouds and weather condition associated with a warm front.
19. Discuss the sequence of clouds and weather condition associated with a cold front.
20. Distinguish between frontogenesis and frontolysis.
21. What are the favourable conditions for frontogenesis and frontolysis?
22. Define front.
23. What is ground front?
24. Name the different types of front with diagram.
25. What is warm front?
26. Name the sequence of clouds for the approaching warm front?
27. Draw a vertical cross section of a warm front.
28. Name the sequence of clouds for the approaching cold front.
29. Draw a vertical cross section of a cold front.
30. Why is the term 'line of discontinuity' applied to the frontal zone?
31. Discuss the salient features of a front.
32. Why is the slope of a warm front small?
33. Why are the changes of temperature and wind direction slower in warm front than that of a cold front?
34. Why do warm front usually yield moderate to gentle precipitation over a larger area and longer time than cold front?
35. Mention the weather associated with the passage of warm front.
36. Find out the relationship between slope of front and wind velocity.
37. What do you mean by atmospheric stability and instability?
38. What do you mean by Barotropic and Baroclinic conditions?
39. What do you mean by conditional instability?
40. What do you mean by primary, secondary and tertiary circulations?
41. Why are the hot deserts found in the tropical areas?
42. Why are the mid-latitudinal westerlies more variable than trade winds?

43. Why are the westerlies stronger with directional persistency in the southern hemisphere than its northern counterpart?
44. What is a Jet stream?
45. What are geostrophic balance and geostrophic wind?
46. Why is geostrophic balance possible usually above 600 meters earth surface?
47. What are Rossby waves?
48. What do you mean by polar front?
49. Compare the different stages of index cycle.
50. What do you mean by eye of a cyclone?
51. What are the different stages of the life cycle of mid-latitude cyclone?
52. What is occlusion stage of a mid-latitude cyclone?
53. Explain the term 'monsoon'. (Marks-2)
54. Name the factors responsible for monsoon circulation. (Marks-2)
55. What is Mascarenes high? (Marks-2)
56. What are the heat source and heat sink component of a Walker cell? (Marks-2)
57. What is 'burst of the monsoon'? (Marks-2)
58. Find out the main cause of El Nino. (Marks-2)
59. What is Southern Oscillation? (Marks-2)
60. Why is winter monsoon not considered as monsoon in strict sense? (Marks-2)
61. What is equatorial double trough before the onset of the summer monsoon? (Marks-2)
62. Mention the objectives of climatic classification. (marks-5)
63. Discuss the need and objectives of climatic classification. (marks-5)
64. Define climatic region and climatic type. (marks-5)
65. Explain 'genetic approach' to climatic classification. (marks-2)
66. What is empirical climatic classification? (marks-2)
67. Compare the empirical climatic classification with genetic climatic classification. (marks-5)
68. What is potential evapotranspiration? (marks-2)
69. Why is Oliver's Model of Climatic Classification known as 'Air Mass Frequency Model'? (marks-2)
70. Compare the Thornthwaite's 1931 classification with 1948 classification. (marks-10)
71. Give a comparative analysis between Koppen, Thornthwaite and Oliver's climatic classification. (marks-10)
72. Compare the following pairs of Koppen's major climatic types— A and E, A and B, C and D. (marks-5 each)
73. Discuss the first and second order subdivisions of Koppen's A, B, C, D and E major climatic types. (marks-5 each)
74. Analyse the importance of shorthand letter code in Koppen's scheme of climatic classification. (marks-5)
75. Why did Koppen introduce the concept of effective precipitation? (marks-5)
76. Name the major plant groups associated with the major climatic types of Koppen. (marks-2)
77. Why is exclusion of airmass considered as major drawback in Koppen's climatic classification? (marks-2)
78. What is precipitation effectiveness (P/E) ratio in Thornthwaite's climatic classification? (marks-2)
- How did Thornthwaite divided the five major humidity provinces? (marks-5)
79. Explain the limitation of following same code designation for Oliver's scheme of climatic classification. (marks-2)

80. Interpret the nature of air mass dominance for two sets of air masses with suitable diagram.  
(marks-10)
81. Find out the position of the following climatic regimes in diagrams after John E. Oliver. Also describe their salient feature.
82. Define aerosols. (Marks-2)
83. Why are the some gases known as inert gas? Give examples. (Marks-2+3)
84. Which is the most important gas of the atmosphere and why? (Marks-2)
85. Mention different constituent gases of the atmosphere with their percentage shares. (Marks-5)
86. Which are the sources of CO<sub>2</sub> in atmosphere? (Marks-2)
87. Mention the climatic significance of CO<sub>2</sub>. (Marks-5)
88. How CO<sub>2</sub> is causing climatic change? (Marks-5)
89. Why ozone (O<sub>3</sub>) is considered so important in the atmosphere? (Marks-2)
90. Discuss the significance of atmospheric moisture. (Marks-5)
91. Discuss the salient features of atmospheric moisture. (Marks-5)
92. What do you mean by saturated air? (Marks-2)
93. How is moisture holding capacity related to temperature? (Marks-2)
94. What are the different sources of atmospheric dust particles? (Marks-5)
95. Discuss the meteorological significance of atmospheric dust particles. (Marks-5)
96. How is the knowledge of the layered atmosphere obtained?  
(Marks-2)
97. Name the scientists who contributed to the knowledge of atmosphere. (Marks-2)
98. Explain the basis of classifying the different layers of the atmosphere. (Marks-2)
99. Name the different layers of the atmosphere according to Petterssen. (Marks-2)
100. Explain the nomenclature of troposphere.  
(Marks-2)
101. Discuss the marked spatio-temporal variations about the different heights of the troposphere. (Marks-2)
102. What are the salient features of the troposphere?  
(Marks-5)
103. Explain the nomenclature of tropopause.  
(Marks-2)
104. Why you will see lower temperature in equatorial tropopause than polar tropopause?  
(Marks-2)
105. Explain why the greatest height of tropopause is seen near the equator?  
(Marks-2)
106. Why the mid-latitudes tropopause is of different heights?  
(Marks-2)
107. Discuss the salient features of tropopause.  
(Marks-2)
108. Why is the tropopause considered as the higher limit of lapse rate?  
(Marks-2)
109. Explain the reasons behind the higher temperature in the upper stratosphere (above 35 kilometres from the earth surface.).  
(Marks-2)
110. Discuss the salient features of the stratosphere.  
(Marks-2)
111. Distinguish between troposphere and stratosphere.  
(Marks-5)

112. Mention the mechanism for the formation of ozonosphere.  
(Marks-2)
113. Analyse the biological significance of ozonosphere.  
(Marks-2)
114. Which layer of the atmosphere is known as chemosphere and why?  
(Marks-2)
115. Why does temperature rise in the ionosphere?  
(Marks-5)
116. Name the different sub-layers of the ionosphere.  
(Marks-2)
117. Discuss the formation of different sub-layers of the ionosphere.  
(Marks-5)
118. Analyse the uniqueness of the ionosphere among the other layers of the atmosphere? (Marks-10)
119. Distinguish between the temperatures of troposphere to that of exosphere. (Marks-5)
120. Discuss the salient features of homosphere. (Marks-2)
121. Why is heterosphere also known as thermosphere? (Marks-2)
122. Name the different sub-layers of the homosphere. (Marks-2)
123. Discuss the salient features of the different sub-layers of the homosphere (Marks-5)
124. Define insolation. (Marks-2)
125. Mention the spectral distribution of insolation. (Marks-2)
126. Explain the mechanism of heat production from incoming solar radiation. (Marks-2)
127. Explain the significance of earth's tilted axis to the *plane of the ecliptic*. (Marks-5)
128. Explain how solstices and equinoxes influence the global insolation pattern? (Marks-5)
129. How does angle of solar incidence influence heating effect. (Marks-5)
130. Analyse the meteorological significance of *intensity* and *duration* of insolation?  
(Marks-5)
131. What do you mean by solar constant? (Marks-5)
132. Bring out the relationship between sunspot, solar radiation and solar constant. (Marks-5)
133. Why winter is in the northern hemisphere milder than the southern hemisphere? (Marks-5)
134. Explain how aphelion and perihelion influence the global insolation pattern? (Marks-5)
135. Discuss the mechanisms of atmospheric depletion of insolation. (Marks-10)
136. Distinguish between light wave and heat wave. (Marks-2)
137. When does scattering occur? When does it become most effective? (Marks-2)
138. Analyse the effect of scattering on sky colour. (Marks-5)
139. Explain the relationship between scattering and twilight. (Marks-2)
140. What is the favourable condition for diffuse reflection? (Marks-2)
141. Name the process which provides us sufficient working light before the sunrise and after the sunset.  
Name different types of this process, with their salient features. (Marks-5)
142. What are the salient features of absorption of insolation? (Marks-5)  
Compare the absorptive capacity of Nitrogen, oxygen, ozone water vapour and carbon dioxide.  
(Marks-5)
143. Analyse the role of transformation of short-wave energy into long-wave energy leading to greenhouse-effect. (Marks-5)
144. What are the controlling factors of albedo? (Marks-5)
145. Analyse how albedo varies spatio-temporally? (Marks-5)
146. What is heat budget? (Marks-5)
147. How do global heat budget maintain the balance between incoming short wave solar radiation and the out-going long-wave terrestrial heat radiation? (Marks-10)
148. Why isotherm is considered essential for the study of horizontal distribution of temperature?  
(Marks-5)
149. Analyse the factors responsible for the horizontal distribution of temperature? ( Marks-10)

150. Why in reality the isotherms are not parallel to parallels of latitude? (Marks-10)
151. Why the annual range of temperature is higher in the mid-latitudinal regions than the Polar Regions? (Marks-5)
152. Why temperature in the high altitudinal areas is remain high throughout the year? (Marks-5)
153. Analyse the role of ocean currents in modifying horizontal distribution of temperature. ( Marks-5)
154. Discuss the role of prevailing wind in modifying horizontal distribution of temperature. (Marks-5)
155. Discuss the role of precipitation and cloudiness in modifying horizontal distribution of temperature. (Marks-5)
156. Why southern slope of the Himalayas is remain warmer than the northern slope? (Marks-5)
157. Discuss the role of proximity to sea in modifying horizontal distribution of temperature. (Marks-5)
158. What is vertical temperature gradient? (Marks-2)
159. Which factors influence the vertical temperature Gradient and how? (Marks-10)
160. How is vertical temperature gradient influenced by high or low pressure system? (Marks-2)
161. In summer, the vertical temperature gradient is steeper over the continents, while in winter it is steeper over the oceans"-Elucidate the statement. (Marks-5)
162. Why does the lower layer of atmosphere remain warmer than the upper one? (Marks-5)
163. What is lapse rate? (Marks-2)
164. Which factors influence the Lapse Rate and how? (Marks-10)
165. Why does lapse rate remain highly variable in the lower part of the atmosphere while the same remains stationary on the upper part of the atmosphere? (Marks-5)
166. Distinguish between normal lapse rate and environmental lapse? (Marks-2)
167. Explain the causes of diurnal and seasonal variations of lapse rate. (Marks-5)
168. Explain the impacts of local relief features on lapse rate. (Marks-5)
169. Why the lapse rate suddenly drops to zero at the outer boundary of the troposphere? (Marks-2)
170. Divide troposphere on the basis of lapse rate and give reasons for these divisions. (Marks-5)
171. Why does lapse rate remain highly variable in the lower part of the atmosphere while the same remains stationary on the upper part of the atmosphere? (Marks-5)
172. "Thus, it is clear that sometimes the actual lapse rate is larger than the normal lapse rate, and at times it is smaller than that".-Elucidate the statement. (Marks-5)
173. Which conditions are responsible for surface temperature inversion? (Marks-5)
174. Distinguish between lapse rate and temperature inversion. (Marks-2)
175. What are the salient features of lapse rate? (Marks-5)
176. What are the salient features of vertical temperature distribution? (Marks-5)
177. Why is the knowledge of the vertical temperature distribution essential? ( Marks-2)
178. "Outside the polar region, inversion of temperature over continents is of common occurrence during winter and on the oceans it is during summer". -Elucidate the statement. (Marks-5)
179. Why you won't find stratospheric temperature inversion beyond 60° North and South to the poles during winter? (Marks-5)
180. Why is the tropopause considered as the higher limit of lapse rate? (Marks-5)
181. What do you mean by inversion of temperature? (Marks-5)
182. Name different types of temperature inversion. (Marks-5)
183. When is the normal lapse rate reversed? (Marks-2)
184. Which conditions are responsible for surface temperature inversion? (Marks-2)
185. Discuss the favourable factors of temperature inversion? (Marks-5)
186. Why are the orange gardens found on the slopes of the hills rather than on valley floors? (Marks-5)
187. Evaluate the significance of temperature inversion? (Marks-10)
188. Explain the behavior of inversion layer as atmospheric lid. (Marks-5)
189. How does the inversion layer cause hazards in the industrial cities? (Marks-5)
190. Discuss the weather conditions below and above the inversion layer. (Marks-5)

191. How does the process of inversion of temperature protect atmosphere and biosphere? (Marks-5)
192. How are two inversion layers formed in the high pressure regions? (Marks-2)
193. Discuss the clouds formed due to turbulence and convective inversion. (Marks-2)
194. Discuss the consequences of turbulence inversion of upper level and lower level. (Marks-2)
195. How is frontal temperature inversion different from other temperature inversions? (Marks-5)
196. Discuss the meteorological, biological and economic impacts of inversion of temperature (Marks-10)
197. Discuss the different types of thermal anomalies and how it is shown on map? (Marks-5)
198. Explain how the thermal anomalies are controlled by –
- seasons
  - maritime and continental effect
  - Warm and cold ocean currents. Cite suitable examples (Marks-2  $\frac{1}{2}$  + 2  $\frac{1}{2}$  + 2  $\frac{1}{2}$  + 2  $\frac{1}{2}$  )
199. Why it is said that the nomenclature ‘greenhouse effect’ is based on faulty analogy? (Marks-2)
200. Define green house effect. (Marks-2)
201. Trace the evolution of the concept green house effect? (Marks-5)
202. Analyse how the transformation of wave lengths is responsible for the mechanism of green house effect? (Marks-5)
203. How greenhouse effect is maintaining atmospheric temperature? (Marks-2)
204. Discuss the effects of green house gases on temporal temperature trend. (Marks-2)
205. Name the green house gases. (Marks-2)
206. How are the green house gases contributing to the green house effect and global warming? (Marks-2)
207. What are the major sources of green house gases in the atmosphere? (Marks-2)
208. What are the major sources of CO<sub>2</sub> concentration in the atmosphere? (Marks-5)
209. Discuss the increasing role of CO<sub>2</sub> in the green house effect. (Marks-5)
210. Discuss the increasing role of CH<sub>4</sub> in the green house effect. (Marks-5)
211. What are the major sources of CH<sub>4</sub>? (Marks-2)
212. Discuss the increasing role of CFCs in the green house effect. (Marks-5)
213. What are the major sources of CFCs? (Marks-2)
214. Discuss the increasing role of N<sub>2</sub>O in the green house effect. (Marks-2)
215. What is ppmv? (Marks-2)
216. Discuss the significance of ozonosphere? (Marks-2)

## Unit-1-1:

- Define aerosols.
- Why are some gases known as inert gas?
- Which is the most important gas of the atmosphere and why?
- Which are the sources of CO<sub>2</sub> in atmosphere?
- Why ozone (O<sub>3</sub>) is considered so important in the atmosphere?
- What do you mean by saturated air?
- How is moisture holding capacity related to temperature?
- How is the knowledge of the layered atmosphere obtained?
- Name the scientists who contributed to the knowledge of atmosphere.
- Explain the basis of classifying the different layers of the atmosphere.
- Name the different layers of the atmosphere according to Petersen.

12. Explain the nomenclature of troposphere.
13. Discuss the marked spatio-temporal variations about the different heights of the troposphere.
14. Explain the nomenclature of tropopause.
15. Why you will see lower temperature in equatorial tropopause than polar tropopause?
16. Explain why the greatest height of tropopause is seen near the equator?
17. Why the mid-latitudes tropopause is of different heights?
18. Discuss the salient features of tropopause.
19. Why is the tropopause considered as the higher limit of lapse rate?
20. Explain the reasons behind the higher temperature in the upper stratosphere (above 35 kilometres from the earth surface.).
21. Discuss the salient features of the stratosphere.
22. Mention the mechanism for the formation of ozonosphere.
23. Analyse the biological significance of ozonosphere.
24. Which layer of the atmosphere is known as chemosphere and why?
25. Name the different sub-layers of the ionosphere.
26. Discuss the salient features of homosphere.
27. Why is heterosphere also known as thermosphere?
28. Name the different sub-layers of the homosphere.

### **Unit-1-2:**

1. Define insolation.
2. Mention the spectral distribution of insolation.
3. Explain the mechanism of heat production from incoming solar radiation.
4. When does scattering occur? When dose it become most effective?
5. Explain the relationship between scattering and twilight.
6. What is the favourable condition for diffuse reflection?
7. Distinguish between light wave and heat wave.

### **Unit-1-3:**

1. What is vertical temperature gradient?
2. How is vertical temperature gradient influenced by high or low pressure system?
3. What is lapse rate?
4. Distinguish between normal lapse rate and environmental lapse?
5. Why the lapse rate suddenly drops to zero at the outer boundary of the troposphere?
6. Why is the knowledge of the vertical temperature distribution essential?
7. When is the normal lapse rate reversed?
8. Which conditions are responsible for surface temperature inversion?
9. How are two inversion layers formed in the high pressure regions?
10. Discuss the clouds formed due to turbulence and convective inversion.
11. Discuss the consequences of turbulence inversion of upper level and lower level.

### **Unit-1-4:**



1. Why it is said that the nomenclature 'greenhouse effect' is based on faulty analogy?
2. Define green house effect.
3. How greenhouse effect is maintaining atmospheric temperature?
4. Discuss the effects of green house gases on temporal temperature trend.
5. Name the green house gases.
6. How are the green house gases contributing to the green house effect and global warming?
7. What are the major sources of green house gases in the atmosphere?
8. What are the major sources of CH<sub>4</sub>?
9. What are the major sources of CFCs?
10. Discuss the increasing role of N<sub>2</sub>O in the green house effect.
11. What is ppmv?
12. Discuss the significance of ozonosphere?

### **Unit-2-1:**

1. Discuss the significance of condensation.
2. What do you mean by supersaturated air?
3. Why does dry adiabatic lapse rate remain always higher than wet adiabatic lapse rate?
4. What are the necessary conditions for occurring condensation?
5. Define condensation nuclei.
6. Mention the source of hygroscopic nuclei.
7. What is the climatological significance of condensation nuclei?
8. Why are the condensation nuclei also known as hygroscopic nuclei?

### **Unit-2-2:**

1. Define air mass.
2. What is an air mass source region?
3. How is an air mass considered as warm or cold?

### **Unit-2-3:**

1. Define front.
2. Define warm front.
3. Define cold front.
4. What do you mean by frontogenesis?

### **Unit-2-4:**

1. What is wet and dry adiabatic lapse rate?
2. What do you mean by absolute stable condition?
3. What do you mean by mechanical instability?

### **Unit-2-5:**

1. What do you mean by primary, secondary and tertiary circulations?

2. What do you mean by macro, meso and micro circulations?
3. Define plenary winds.
4. What is geostrophic balance and geostrophic wind?
5. Define Jet stream.
6. What is Westerly Subtropical Jet Stream?
7. What is Rossby Waves?

#### **Unit-2-6:**

1. Define cyclone.
2. What are the salient features of a tropical cyclone?
3. Mention the weather sequence for a tropical cyclone.
4. What do you mean by Baroclinic and Barotropic condition?
5. What do you mean by occluded front?

#### **Unit-2-7:**

1. Explain the term 'monsoon'.
2. Mention the factors for the origin of monsoon circulation.
3. What is burst of monsoon?
4. What is 'Mascarenes High'?

#### **Unit-2-8:**

1. Mention the objectives of climatic classification?
2. What is empirical climatic classification?
3. What is genetic climatic classification?
4. What is the basis of Koppen's climatic classification?
5. What are the 5 principal categories of climate after Koppen?
6. What weather elements are lacking in Koppen's climatic classification?
7. What is the basis of Thornthwaite's climatic classification?
8. What is precipitation effectiveness index?
9. What is T/E index?
10. What is potential evapotranspiration?
11. Find out the limitations of Oliver's climatic classification.

\*\*\*\*\*

## SEC-1T Coastal Management

1. Define coastal area?
2. What do you mean by coastal zone management?
3. Write the principles of coastal zone management?
4. What is integrated coastal zone management?
5. Difference between coastal zone management and integrated coastal zone management?
6. What is EEZ?
7. Write the importance of EEZ in Indian context?
8. What you know about coastal regulation zone in India?
9. Define territorial waters?
10. What is contiguous zone?
11. Write about the changes that came with 2018 CRZ regulation?
12. What is No development zone?
13. Differentiate between territorial water and EEZ?
14. What is long shore current (Diagram)?
15. Differentiate between long shore current and long shore drift?
16. What is high sea?
17. What is fore shore, back shore and near shore region (diagram)?
18. Write the role of long shore drift in beach formation?
19. What is surf zone?
20. What is fetch?
21. What do you mean by coastal hazards?
22. Write the role of coastal zone management in controlling coastal hazards?
23. What are structural measures give examples?
24. What are non structural measures give examples?
25. Differentiate between structural and non structural measures?
26. Write about various structural measures of coastal erosions?
27. Write about how global warming is affecting coastal flood?
28. What is sand encroachment?
29. What are the consequences of coastal flood?
30. What is dune degeneration?
31. Discuss the comparison between dune degeneration and dune regenerations?
32. Write the negative impact of dune degeneration in coastal environment?
33. As present, marine pollutions is a matter of conceal to the enter world. Providing your own opinion on this topic?
34. What is bio-magnification give examples?
35. What are types of marine pollutions?
36. What is point source pollution?
37. What are the effects of marine pollution

38. What are non point source pollutions?
39. What is ocean current?
40. Write the basic differences between ocean wave and ocean current?
41. What is swell?
42. Write a short note on progressive wave?
43. Distinguish between deep water and shallow water waves?
44. Define capillary waves?
45. What is breaking waves?
46. What is storm surge?
47. Define plunging breaker?
48. What is refraction?
49. What is wave base?
50. What is fetch?
51. What is wave reflection?
52. Why tide is considered as gravitational wave?
53. Why back wash is called bottom flow?
54. What are the main causes of ocean wave generation?
55. Distinguish between destructive wave and constructive wave?
56. Write about the function of ocean wave?
57. What are the importances of tide?
58. Define rip current?
59. What is tidal current?
60. What is beach nourishment?
61. Define bay?
62. What is berm?
63. Define offshore bar?
64. What is tombolo?
65. What is wave cut platform?
66. What is cross shore current?
67. What are the harmful effects of mining in coastal area?
68. Write the importance of estuary?
69. What is estuary?
70. What are the causes of estuarine sediment pollution?
71. What is land reclamation?
72. What are the negative impacts of coastal tourism on coastal environment?
73. 1 ) In which year CZMA was passed?
74. 2) What is Eustatic sea level change?
75. 3) Write the demarcating value of coastal zone in India?
76. 4) Which state have the longest shoreline in India ?
77. 5) write the full form of ICZM?
78. 6) What is EEZ?
79. 7) Write the area of EEZ in India?

80. 8) According to 2011 notification CRZ is divided into how many categories ?
81. 9) What is NDZ (No Development Zone)?
82. 10) Write the definition of point source pollution?
83. 11) Write two examples of non –structural measures of coastal hazards?
84. 12) Give an example of non point source pollution ?
85. 13) Write the geographical definition of coastal zone?
86. 14) write the definition of foreshore zone?
87. 15) Give two examples of coastal morphodynamic agent?
88. 16) what is Berm?
89. 17) Write the name of two engineer solution for coastal protection ?
90. 18) What is Beach- nourishment ?
91. 19) Write the tidal range which experienced meso – tidal coast?
92. 20) Mention two important coastal hazard?
93. 21) what is top sheet bed ?
94. 22) what is Bio-erosion?
95. 23) Give the definition of parabolic Dune?
96. 24) Mention the two common source of pollution in coastal region?
97. 25) what is high sea?
98. 26) Arrange the following from the land outward into sea- a. Internal water b. EEZ c. Contiguous zone d. Territorial sea e. Base Line
99. 27.) What is long shore current?

- 1 ) In which year CZMA was passed?
- 2) What is Eustatic sea level change?
- 3) Write the demarcating value of coastal zone in India?
- 4) Which state have the longest shoreline in India ?
- 5) write the full form of ICZM?
- 6) What is EEZ?
- 7) Write the area of EEZ in India?

# **ECONOMIC GEOGRAPHY**

MARKS:-2

1. *What do mean by veblan goods ?*
2. *What do mean by economic man ?*
3. *What is are the economic distance ?*
4. *Difination of economic activities ?*
5. *How have primary economic activities evolved*
6. *What is the nature and characteristics or primary economic activities ?*
7. *What do mean by pink collar activities ?*
8. *What do you mean by gold collar activities ?*
9. *What are the methods of forest resource conservation ?*
10. *What are the problems associated with deforestation ?*
11. *What is the necessity of social forestry in india ?*
12. *What do mean by social forestry ?*
13. *What is the economic significance of in land fishing ?*
14. *Discuss the economic significance of sea ?*
15. *Problems of tea plantationas in india ?*
16. *Discuss the nature of dicentralisation of the india cotton textile industry ?*
17. *What are the objectives to develop se2 in india ?*
18. *What is gatt ?*
19. *What do meen by w.t.o ?*
20. *What are the factons of growth of e-commerce in india ?*
21. *What do you understand by accessiblity ?*
22. *Isotime isodapan,critical isodapan ?*

# **ECONOMIC GEOGRAPHY**

MARKS:-5

1. Define of economic geography?
2. What are the differences between goods and services ?
3. What is the importance of consumption ?
4. Throw light on the evolution of new economic geography ?
5. Distinguish between production and productivity ?
6. Discuss the significance of types of economic distance ?
7. Bring out the concept of economic man ?
8. What is the weakness of the concept of economic man ?
9. What industries could be set up based on forest resources ?
10. Why are forests regarded as resource ?
11. What are the uses and problems of tropical rain forests ?
12. Compare pelagic fish and demersal fish ?
13. What are the objectives and merits of blue revolution in India ?
14. What is meant by ferro alloy metals ?
15. What is the influence of coal on location of industries ?
16. Why is tropical region backward in commercial fishing ?
17. Discuss the distribution of Gondwana coal fields in India ?
18. What are the factors responsible for the development of Haldia ?
19. What are the salient features of SEZ in India ?
20. What is the importance and present state of technology parks in India?
21. What is the locational pattern of India iron and steel industry conform to the classical Weberian model ?

# **ECONOMIC GEOGRAPHY**

MARKS:-10

- 1. Briefly discuss the land use model of von thunen with special emphasis on the concept of economic rent ?*
- 2. Briefly describe the problems and prospects of tea plantation in india?*
- 3. Elucidate the growth and development of iron and steel industry in india ?*
- 4. Discuss the causes of rapid depletion of resource in present days .write about the measures to conserve forest ?*
- 5. Discuss about the advantages and disadvantages of se2 ?*
- 6. Briefly discuss the distribution of iron are in the USA?*
- 7. Define economic geography explain the scope and contant of economic geography ?*
- 8. Critically analyze the concept of economic man ?*
- 9. Explain the nature and characteristics of different types of economic activites ?*
- 10. Analyse webers least cost theory of industrial location ?*
- 11. Discuss the barisof international trade and the role of world trade organisation?*
- 12. Explain the gravity model and initial allocation model or transport ?*
- 13. Explain the decreasing nature of world forest area ?*



GEOGRAPHY 4<sup>th</sup> SEMESTER-

(ENVIRONMENTAL GEOGRAPHY)

Short answer type questions (answer any ten questions within 50 words). 2 marks each

GROUP-A

1. What is green bench?
2. What is trophic level?
3. What is G.A.P?
4. What is Badland Topography?
5. What is habitat?
6. What is biological community?
7. What is Ecotone or Edge-effect?
8. Write the different types of ecological pyramid?
9. Write the different between autotroph and heterotroph?
10. Write the concept of holistic environment?
11. What is Montreal protocol?
12. What is Kyoto protocol?
13. What do you mean by the ' Earth Sumit'?
14. What is acid rain?
15. What is smog?
16. Define minamata/Hai Hai or ouch ouch/Black foot disease/Dislexia/Arsenic poisoning?
17. What is B.O.D and C.O.D?
18. What is eutrophication?
19. What are Bio concentrations and Bio magnification?
20. Mention the significance of Bio Geo-chemical cycle .

21. Distinguish between Autecology and synecology.
22. Write the difference between ecology and ecosystem.
23. What is Ecological Niche?
24. What is Homeostasis?
25. Write the stages of production in ecosystem?
26. Write the difference between GPP and NPP?
27. What is E.I.A.?
28. What is system approach in environmental studies?

GROUP-C 5 MARKS each

1. Discuss the changing environmental perception during the different stages of human civilization?
2. Write the structure and components of ecosystem?
3. Which factors are responsible for land erosion?
4. Classify the urban solid waste management system.
5. Explain the global level environmental policy?
6. Write the national level policy with special reference to India?
7. What is energy flow and how it flows through different stages within an ecosystem?
8. Write the local level environmental problems in India?
9. Define food chain with different types.
10. Write the difference between food chain and food web?
11. What is ecology? Why it is so important in environmental study?
12. Explain the causes and consequences of soil pollution?

GROUP-C 10 MARKS each

1. Discuss any global level environmental problem according to space, time and hierarchy?
2. Discuss any regional level environmental problem with special reference to India?

3. Explain different approaches related to environmental geography.
4. Write the causes and consequences of water and air pollution.

## Human Geography

Marks-2

1. What is 'kayak' ?
2. What is Harpoon? What is it used for.
3. How do Eskimos make use of the animals they hunt.
4. Difference between Igloo and topic?
5. What is natural growth rate.
6. Define imposed growth rate?
7. Define zero population?
8. What is fertility?
9. Difference between fertility and fecundity.
10. What is Birth rate?
11. What is death rate?
12. Define crude birth rate?
13. What is age specific birth rate?
14. Define crude death rate?
15. What is age specific death rate.
16. What is neo natal and post neo natal death rate?
17. Distinguished between immigration and emigration.
18. What is seasonal migration?
19. What is transhuman?
20. Define population projection.
21. What is population density?
22. What is sex ratio?
23. What is progressive pyramid?
24. What is regressive pyramid?
25. What is dependency ratio?

- 26.
27. Difference between progressive and regressive pyramid.
28. Write the definition of pink, red, blue, white and gold colour worker?
29. What is demography?
30. What is demo graphic dividend?
31. Define population resource region?
32. What is land man ratio?
33. What do you mean by optimum , over and under population.
34. What is baby boom?
35. What is population explosion?
36. Difference between rural and urban settlement.
37. What is Nucleated or compact settlement?
38. What is Dispersed settlement?
39. What is linear settlement?
40. Define hamlet?
41. What is dry point and wet point settlement?
42. Distinguished between compact and dispersed settlement.
43. What is CBD?
44. Define Threshold population?
45. Define rural urban fringe?
46. Definition of metropolitan?
47. What is conurbation?
48. What is Revenue village?
49. Define satellite town?
50. Difference between site and situation?

51. Difference between settlement type and settlement pattern?
52. What is urban morphology.
53. What is Ekistics?
54. What is primate city?
55. What is suburb?

#### Marks-5

1. Briefly discuss the hunting process of Eskimos community?
2. Recent days what types of problems faced Eskimos community.
3. Impact of modern civilization on Eskimos livelihood.
4. Discuss the problems of jarwas community?
5. Discuss the recent changes of santal livelihood.
6. Write the measurement methods of population growth.
7. Discuss the background of population growth in developed and developing countries.
8. Impact of high rate of population growth in socio economic condition.
9. Write the different types of population density.
10. Elaborate the various causes of varying distribution of population.
11. Impact of different controlling factors of population distribution and density of India.
12. Impact of over and under population.
13. Discuss the negative impact of population explosion.

14. Discuss the various methods of controlling over population.
15. Discuss the various types of population pyramid.
16. Importance of population pyramid .
17. Discuss the different types of economic activities .
18. Discuss the different types of rural settlement.
19. Elucidate the different pattern or shape if rural settlement.
20. Discuss the different form or shape of urban settlement.
21. Discuss the functional classification of rural settlement.

#### Marks-10

1. Give a reasoned account of the traditional livelihood pattern and challenges of Eskimos.
2. Briefly discuss the environmental adaptation of santal.
3. Give an account of the traditional livelihood pattern of the Masai.
4. Give a brief account of world population distribution on the basis of population density.
5. Discuss the Demographic transition model.
6. Elaborate the different types of migration.
7. Write the trends of international migration.
8. Discuss the population resource region.
9. Write the indicator of fertility.
10. The shape and building materials if rural houses in India reflect the surrounding physical environment – explain with suitable example.

11. Elaborate the centre place theory enunciated by Christaller.
12. Discuss the concentric zone theory.
13. Discuss sector model on urban structure.
14. Discuss Multiple Nuclei theory.
15. Discuss the population growth in India in post independence period.



KHEJURI COLLEGE

DEPARTMENT OF GEOGRAPHY

REVISION EXAMINATION – 2023

Total Marks – 60

6<sup>th</sup> semester. Paper – DSE3T

Time – 3 hours

Population Geography

Answer Ten of the following questions (10×2 = 20 )

1. Mention the different sources of population data ?
2. Name the different types of density to understand population resources relationship?
3. Mention the different name of measure fertility ?
4. What do you mean by optimum population ?
5. Write the difference between develop and developing country?
6. What do you mean by “ Age Sex Pyramid “ ?
7. Write the different types of migration?
8. What do you mean by Population boom ?
9. Write the various components of HDI ?
10. What do you mean by zero population growth?
11. Name the very thin population and low density areas of the world?
12. Mention the indicators of birth rate ?
13. What do you mean by Population resource region ?
14. What is international migration?

Answer four of the following questions ( 5×4 = 20 )

1. What are the factors of seasonal migration?
2. Explain the features of human poverty index?
3. What is the impact of economic development of population?
4. How does declining child sex ratio affect the population?
5. What is fertility ? Explain the features of fertility?
6. Write the difference in present state of population of china and India ?

Answer any two of the following questions ( 10×2 = 20 )

1. What are the features of less develop and developing countries of the world?
2. Briefly discuss the population resource region by Ackerman?
3. Discuss the Malthusian theory of population?
4. Elaborate Demographic Transition Model in the context of population growth pattern of India?

## Remote sensing

- 1) What do you mean by standard FCC?
- 2) What is the difference between FCC and SFCC?
- 3) What is TM?
- 4) What is OLI?
- 5) What is the significance of association as photo interpretation keys?
- 6) how shadow helps to identify features in satellite images?
- 7) What is DN value of a satellite image?
- 8) What is digital image?
- 9) Define image interpretation?
- 10) Distinguished between natural/ visual and digital processes of image interpretation?
- 11) Discuss characteristics of unsupervised classification?
- 12) Distinguished between supervised and unsupervised classification?
- 13) What are the importances of FCC?
- 14) Define gray value or gray level?

## GIS

- 1) What is pseudo range?
- 2) What are the advantages of PRN Code?
- 3) What are cold receiver and warm receiver?
- 4) What is almanac data?
- 5) What is PPS?
- 6) What is meant by the space segment of GPS?
- 7) What is DGPS?
- 8) Define GPS?
- 9) What is meant by GNSS positioning?
- 10) What are the major advantages of GNSS?
- 11) What is GALILEO?
- 12) What are the sources of error in GPS system?
- 13) Define GLONASS?
- 14) Write a short note about IRNSS?
- 15) What is Doppler Effect?
- 16) What is GPS triangulation?
- 17) What are the main applications of GPS?
- 18) Make a comparison between DGPS and GPS?

## SEC 2: Research methods

Marks-2

1. Definition of Research.
2. What is research ethics?
3. What is plagiarism.
4. What is literature review?
5. What is peer reviewed journal?
6. Define Research gap?
7. What do you mean by research hypothesis.
8. What is Null hypothesis?
9. What is alternative hypothesis?
10. What is type-I and type-II error.
11. Define critical value?
12. What do you mean by significance level.
13. Define research objective?
14. What is questionnaire?
15. Difference between open ended and close ended questionnaire.
16. Distinguished between questionnaire and survey schedule.
17. What is primary data?
18. What is secondary data?
19. Define qualitative data.
20. Write the definition of quantitative data.
21. Difference between primary and secondary data.
22. Distinguished between qualitative and quantitative data.
23. Compare participant and non participant observation.
24. What is data editing.
25. What is research design.
26. What is methodology.
27. What is logistics in field survey.

28. What is impact factor?
29. What is scientometric index.
30. Correlation between abstract and key word.
31. Importance of citation in research work.
32. Difference between reference and bibliography.
33. Distinguished between end note and foot note.

Marks -5

1. Write the importance of literature review.
2. Characteristics of research.
3. Discuss the objectives of research.
4. Importance of hypothesis.
5. Write the characteristics of hypothesis.
6. Write the classification of hypothesis.
7. Discuss the elements of research ethics.
8. Write the criteria of good questionnaire.
9. Write the steps of framing questionnaire.
10. How dose the questionnaire proforma prepared.
11. Write a shorte note on abstract.
12. Importance of foot notes and end notes.
13. Discuss the various methods of data representation.
14. Difference between reference and bibliography.
15. How does inventory report help for preparing Master data table.
16. Write the characteristics of good research report.

Marks-10

1. Briefly discuss the different methods of data collection.
2. Write the different types of questionnaire.
3. Analysis the technique of quantitative data.
4. Write the merits and demerits of questionnaire methods.
5. Write the merits and demerits of interview methods.
6. Briefly discuss the structure of research report.



## STATISTICS

- 1) Mention the uses of statistics in geography?
  - 2) Define data?
  - 3) What do you mean by population universe?
  - 4) What is sample ?
  - 5) What do you mean by variable?
  - 6) What are the ordinal data?
  - 7) What are the nominal data?
  - 8) Classify data on the basis of sources.
  - 9) What is geographical or spatial data ?
  - 10) Mention the different parts of a table.
  - 11) Mention different types of sampling.
  - 12) Mention the merits of random sampling.
  - 13) Mention the uses of sampling in geography.
  - 14) Define probability.
  - 15) What is Ratio data?
  - 16) Define frequency.
  - 17) What do you mean by cumulative frequency?
  - 18) Define frequency distribution.
  - 19) What do you mean by simple or ungrouped frequency distribution?
  - 20) What do you mean by open-end class interval?
1. Explain central tendency.
  2. Define mean.
  3. Define median
  4. Define mode.
  5. Explain partition value.
  6. Define quartile.
  7. Define quintile.
  8. Define deciles.
  9. Define percentile.
  10. Explain the measures of dispersion
  11. Name the different absolute measures of dispersion .
  12. Name the different relative measures of dispersion.
  13. What do you mean by standard deviation?
  14. Explain coefficient of variation.
  15. What do you mean by correlation?
  16. Why is Karl Pearson's measurement of correlation coefficient known as product moment correlation coefficient?
  17. Name the different types of correlation.
  18. What is positive correlation?

19. What is negative correlation?
20. What is zero correlation?
21. What is coefficient of correlation?
22. What is scatter diagram?
23. What is regression analysis?
24. What is time series analysis?

## Urban Geography

1. Discuss the different stages of urbanizations?
2. Write the characteristics of internal structure of cities in mediaeval period?
3. Write the characteristics of internal structure of cities in ancient period?
4. Discuss the factors influence on urbanizations in different time period?
5. Write the different between site and situation?
6. Write the definition of site? Discuss the different site factors influence on city development?
7. What is situation? Types of situation?

Or

Discuss the different situation influence on city development?

8. Discuss the favorable factor of urban development?
9. What is Ghost town?
10. Write the census definition of urban place?