

SYBA (SEM III)
Geography Paper II
Introduction to Climatology

Unit I

1. Explain the nature, scope and importance of Climatology.
2. Write a detail note on branches of Climatology.
3. With the help of a diagram discuss the structure of the atmosphere.
4. Explain the elements of climate?
5. Discuss the factor affecting distribution of temperature.

Unit II

1. Discuss the tri-circular model in detail.
2. Explain the horizontal distribution of the earth.
3. Explain the factors affecting air pressure.
4. Explain in detail various types of winds.
5. Write a detail note on Jet Stream.

Unit III

1. Explain the various types of Humidity.
2. Explain the different forms of condensation.
3. Write a detail note on types of precipitation (Rainfall).
4. Give in detail Global distribution of rainfall.

Unit IV

1. Explain the formation of tropical cyclone and its features.
2. Discuss the formation of temperate cyclone.
3. Write a detail note on tornado.
4. Write a difference between temperate and tropical cyclone.
5. Explain the concept of El-Nino and its impact on Indian monsoon.
6. Explain the causes and consequences of Global Warming.

द्वितीय वर्ष कला (सत्र III)

हवमानशास्त्राची ओळख

युनिट I

१. हवामान शास्त्राचे स्वरूप व्याप्ती व महत्व स्पष्ट करा.
२. हवमानशास्त्राच्या शाखांवर सविस्तर टीप लिहा .
३. आकृतीच्या आधारे वातावरणाच्या संरचनेवर चर्चा करा.
४. हवामानाचे घटक स्पष्ट करा.
५. तापमानाच्या वितरणावर परिणाम करणारे घटक स्पष्ट करा.

युनिट II

१. पृथ्वीवर वायुभाराचे क्षितिजसामंतर (आडवे) वितरण स्पष्ट करा.
२. हवेच्या दाबावर परिणाम करणारे घटक स्पष्ट करा.
३. वाऱ्याचे विविध प्रकार सविस्तर स्पष्ट करा.
४. जेट प्रवाहावर सविस्तर टीप लिहा.

युनिट III

१. आर्द्रतेचे प्रकार स्पष्ट करा.
२. संद्रिभवनाची विविध रूपे स्पष्ट करा.
३. पर्जन्याचे विविध प्रकार स्पष्ट करा.
४. पर्जन्याचे जागतिक वितरण लिहा.

युनिट IV

१. उष्णकटिबंधीय आवर्ताची निर्मिती व वैशिष्ट्ये लिहा.
२. समशीतोष्ण कटिबंधीय आवर्ताची निर्मिती प्रक्रिया स्पष्ट करा.
३. टोर्नाडो बद्दल सविस्तर माहिती लिहा.
४. समशीतोष्ण कटिबंधीय आवर्ताची वैशिष्ट्ये लिहा.
५. एल- निनो ही संकल्पना स्पष्ट करून त्याचा भारतीय पर्जन्यावर होणारा परिणाम सांगा.
६. जागतिक तापमान वाढीची कारणे व परिणाम स्पष्ट करा.

IMD : WEATHER SIGNS AND SYMBOLS

The map which represents weather conditions of a particular day (any one day) is termed as weather map.

In India, weather map is presented by the Meteorological Department of India. Which is known as IMD – INDIAN METEOROLOGICAL DEPARTMENT. Head office of IMD is at Shivaji Nagar, Pune, Maharashtra.

It is necessary to understand signs and symbols used in the weather maps.

WEATHER SYMBOLS

| | | | |
|--|---------------|--|---------------|
| | Drizzle | | Fog |
| | Rain | | Shallow Fog |
| | Shower | | Dust Whirl |
| | Hail | | Squall |
| | Snowfall | | Sand Storm |
| | Drifting Snow | | Lightning |
| | Haze | | Thunder Storm |
| | Mist | | |

WIND SPEED

| | |
|--|----------|
| | 5 knots |
| | 10 knots |
| | 15 knots |
| | 20 knots |
| | 25 knots |
| | 30 knots |
| | 35 knots |
| | 40 knots |
| | 45 knots |
| | 50 knots |

RAINFALL

| | | | |
|--|-----------------|--|-----------------|
| | 0.25 to 0.74 cm | | 0.75 to 1.49 cm |
|--|-----------------|--|-----------------|

CLOUD AMOUNT

| | |
|--|-----------------------------|
| | Clear sky |
| | 1/8 sky covered with clouds |
| | 1/4 sky covered with clouds |
| | 3/8 sky covered with clouds |
| | 1/2 sky covered with clouds |
| | 5/8 sky covered with clouds |
| | 3/4 sky covered with clouds |
| | 7/8 sky covered with clouds |
| | Overcast |
| | Sky obscured |

SEA CONDITION

| | |
|-------|----------------|
| | Wave Direction |
| Cm | Calm |
| Sm | Smooth |
| Sl | Slight |
| Mod | Moderate |
| Ro | Rough |
| V. Ro | Very Rough |
| Hi | High |
| V. Hi | Very High |
| Ph | Phenomenal |

WIND ROSE / STAR DIAGRAM - EXERCISES

Draw wind rose for the data given below, Give interpretation.

1.

| | | | | | | | | | |
|-------------------|---|----|---|----|---|----|---|----|-------|
| Direction of wind | N | NE | E | SE | S | SW | W | NW | Calm. |
| No. of Days | 2 | 1 | 3 | 3 | 5 | 8 | 6 | 3 | 2 |

2.

| | | | | | | | | | |
|-------------------|---|----|---|----|---|----|---|----|-------|
| Direction of wind | N | NE | E | SE | S | SW | W | NW | Calm. |
| No. of Days | 8 | 10 | 7 | 5 | 4 | 3 | 4 | 2 | 2 |

3.

| | | | | | | | | | |
|-------------------|----|----|----|----|----|----|---|----|-------|
| Direction of wind | N | NE | E | SE | S | SW | W | NW | Calm. |
| No. of Days | 12 | 15 | 20 | 17 | 10 | 8 | 7 | 5 | 4 |

4.

| | | | | | | | | | |
|-------------------|---|----|----|----|----|----|----|----|-------|
| Direction of wind | N | NE | E | SE | S | SW | W | NW | Calm. |
| No. of Days | 5 | 10 | 20 | 25 | 30 | 30 | 20 | 10 | 5 |

5.

| | | | | | | | | | |
|-------------------|----|----|---|----|---|----|---|----|-------|
| Direction of wind | N | NE | E | SE | S | SW | W | NW | Calm. |
| No. of Days | 15 | 10 | 8 | 5 | 2 | 3 | 7 | 10 | 3 |

6.

| | | | | | | | | | |
|-------------------|----|----|---|----|---|----|----|----|-------|
| Direction of wind | N | NE | E | SE | S | SW | W | NW | Calm. |
| No. of Days | 12 | 10 | 2 | 6 | 7 | 12 | 18 | 15 | 4 |

7.

| | | | | | | | | | |
|-------------------|---|----|----|----|----|----|----|----|-------|
| Direction of wind | N | NE | E | SE | S | SW | W | NW | Calm. |
| No. of Days | 8 | 10 | 12 | 14 | 17 | 20 | 18 | 15 | 5 |

8.

| | | | | | | | | | |
|-------------------|---|----|---|----|----|----|----|----|-------|
| Direction of wind | N | NE | E | SE | S | SW | W | NW | Calm. |
| No. of Days | 5 | 6 | 7 | 8 | 10 | 12 | 10 | 5 | 4 |

9.

| | | | | | | | | | |
|-------------------|----|----|----|----|----|----|----|----|-------|
| Direction of wind | N | NE | E | SE | S | SW | W | NW | Calm. |
| No. of Days | 65 | 70 | 60 | 50 | 20 | 20 | 55 | 10 | 10 |

10.

| | | | | | | | | | |
|-------------------|----|----|----|----|----|----|----|----|-------|
| Direction of wind | N | NE | E | SE | S | SW | W | NW | Calm. |
| No. of Days | 30 | 50 | 60 | 70 | 65 | 55 | 20 | 10 | 5 |

CLIMOGRAPH - EXERCISES

Draw neat climograph for the data given below. Give interpretation.

SRINAGAR (India) Ht. 1587m. Lat. - 34°05'N. Lon. - 74°50'E.

| | | | | | | | | | | | | |
|-----------|----|----|----|----|----|----|----|----|----|----|----|----|
| 1. Months | J | F | M | A | M | J | J | A | S | O | N | D |
| Temp°C | 0 | 3 | 8 | 12 | 16 | 20 | 25 | 25 | 20 | 15 | 8 | 3 |
| R. H. | 76 | 68 | 57 | 52 | 43 | 40 | 46 | 49 | 43 | 48 | 51 | 63 |

JIDDA (Saudi Arabia) Ht. 6m. Lat. - 21°28'N. Lon. - 39°10'E.

| | | | | | | | | | | | | |
|-----------|----|----|----|----|----|----|----|----|----|----|----|----|
| 2. Months | J | F | M | A | M | J | J | A | S | O | N | D |
| Temp°C | 23 | 23 | 23 | 26 | 28 | 29 | 32 | 32 | 30 | 28 | 27 | 25 |
| R. H. | 54 | 52 | 52 | 56 | 55 | 55 | 50 | 51 | 61 | 61 | 59 | 54 |

BERLIN (Germany) Ht. 55m. Lat. - 52°27'N. Lon. - 13°18'E.

| | | | | | | | | | | | | |
|-----------|----|----|----|----|----|----|----|----|----|----|----|----|
| 3. Months | J | F | M | A | M | J | J | A | S | O | N | D |
| Temp°C | 0 | 0 | 4 | 9 | 13 | 17 | 19 | 18 | 15 | 10 | 5 | 2 |
| R. H. | 82 | 78 | 67 | 60 | 57 | 58 | 61 | 61 | 65 | 73 | 83 | 86 |

ATHENS (Greece) Ht. 107m. Lat. - 37°58'N. Lon. - 24°43'E.

| | | | | | | | | | | | | |
|-----------|----|----|----|----|----|----|----|----|----|----|----|----|
| 4. Months | J | F | M | A | M | J | J | A | S | O | N | D |
| Temp°C | 10 | 11 | 12 | 14 | 20 | 25 | 28 | 28 | 24 | 20 | 17 | 12 |
| R. H. | 62 | 57 | 54 | 48 | 47 | 39 | 34 | 34 | 42 | 52 | 61 | 63 |

ALEXANDRIA (Egypt) Ht. 32m. Lat. - 31°12'N. Lon. - 29°53'E.

| | | | | | | | | | | | | |
|-----------|----|----|----|----|----|----|----|----|----|----|----|----|
| 5. Months | J | F | M | A | M | J | J | A | S | O | N | D |
| Temp°C | 15 | 16 | 18 | 19 | 22 | 24 | 26 | 27 | 26 | 24 | 21 | 18 |
| R. H. | 61 | 59 | 57 | 60 | 64 | 68 | 70 | 68 | 63 | 61 | 60 | 60 |

CAPE TOWN (S. Africa) Ht. 17m. Lat. - 33°54'S. Lon. - 18°32'E.

| | | | | | | | | | | | | |
|-----------|----|----|----|----|----|----|----|----|----|----|----|----|
| 6. Months | J | F | M | A | M | J | J | A | S | O | N | D |
| Temp°C | 22 | 22 | 20 | 17 | 14 | 13 | 12 | 13 | 14 | 16 | 18 | 19 |
| R. H. | 54 | 54 | 57 | 60 | 65 | 64 | 67 | 65 | 62 | 58 | 56 | 54 |

VANCOUVER (Canada) Ht. 14m. Lat. - 49°17'N. Lon. - 123°05'W.

| | | | | | | | | | | | | |
|-----------|----|----|----|----|----|----|----|----|----|----|----|----|
| 7. Months | J | F | M | A | M | J | J | A | S | O | N | D |
| Temp°C | 3 | 5 | 8 | 10 | 12 | 18 | 19 | 19 | 14 | 10 | 6 | 4 |
| R. H. | 85 | 78 | 70 | 67 | 63 | 65 | 62 | 62 | 72 | 80 | 84 | 88 |

HYTHERGRAPH - EXERCISES

Prepare Hythergraph for the data given below. Give interpretation.

SINGAPORE (Singapore)

| | | | | | | | | | | | | |
|--------------|----|----|----|----|----|----|----|----|----|----|----|----|
| 1. Months | J | F | M | A | M | J | J | A | S | O | N | D |
| Temp°C | 26 | 27 | 28 | 28 | 28 | 28 | 28 | 27 | 27 | 26 | 26 | 26 |
| Rainfall-cm. | 10 | 7 | 8 | 7 | 7 | 7 | 7 | 8 | 7 | 8 | 10 | 10 |

KOLKATA (India)

| | | | | | | | | | | | | |
|--------------|----|----|----|----|----|----|----|----|----|----|----|----|
| 2. Months | J | F | M | A | M | J | J | A | S | O | N | D |
| Temp°C | 20 | 25 | 27 | 30 | 30 | 30 | 29 | 29 | 29 | 28 | 23 | 19 |
| Rainfall-cm. | 0 | 1 | 1 | 2 | 6 | 12 | 13 | 13 | 10 | 5 | 1 | 0 |

KANO (Nigeria)

| | | | | | | | | | | | | |
|--------------|----|----|----|----|----|-----|-----|-----|-----|----|----|----|
| 3. Months | J | F | M | A | M | J | J | A | S | O | N | D |
| Temp°C | 21 | 24 | 28 | 31 | 30 | 28 | 26 | 25 | 26 | 27 | 25 | 22 |
| Rainfall-cm. | 0 | 1 | 2 | 8 | 71 | 119 | 209 | 311 | 137 | 14 | 1 | 0 |

JACOBABAD (Pakistan)

| | | | | | | | | | | | | |
|--------------|----|----|----|----|----|----|----|----|----|----|----|----|
| 4. Months | J | F | M | A | M | J | J | A | S | O | N | D |
| Temp°C | 15 | 18 | 24 | 30 | 35 | 37 | 35 | 34 | 32 | 28 | 22 | 17 |
| Rainfall-cm. | 8 | 8 | 7 | 2 | 4 | 6 | 37 | 22 | 1 | 0 | 1 | 3 |

SAN FRANCISCO (USA)

| | | | | | | | | | | | | |
|--------------|-----|----|----|----|----|----|----|----|----|----|----|-----|
| 5. Months | J | F | M | A | M | J | J | A | S | O | N | D |
| Temp°C | 9 | 10 | 12 | 13 | 15 | 16 | 17 | 17 | 18 | 16 | 13 | 10 |
| Rainfall-cm. | 102 | 88 | 68 | 33 | 12 | 3 | 1 | 1 | 5 | 19 | 40 | 104 |

PERTH (Australia)

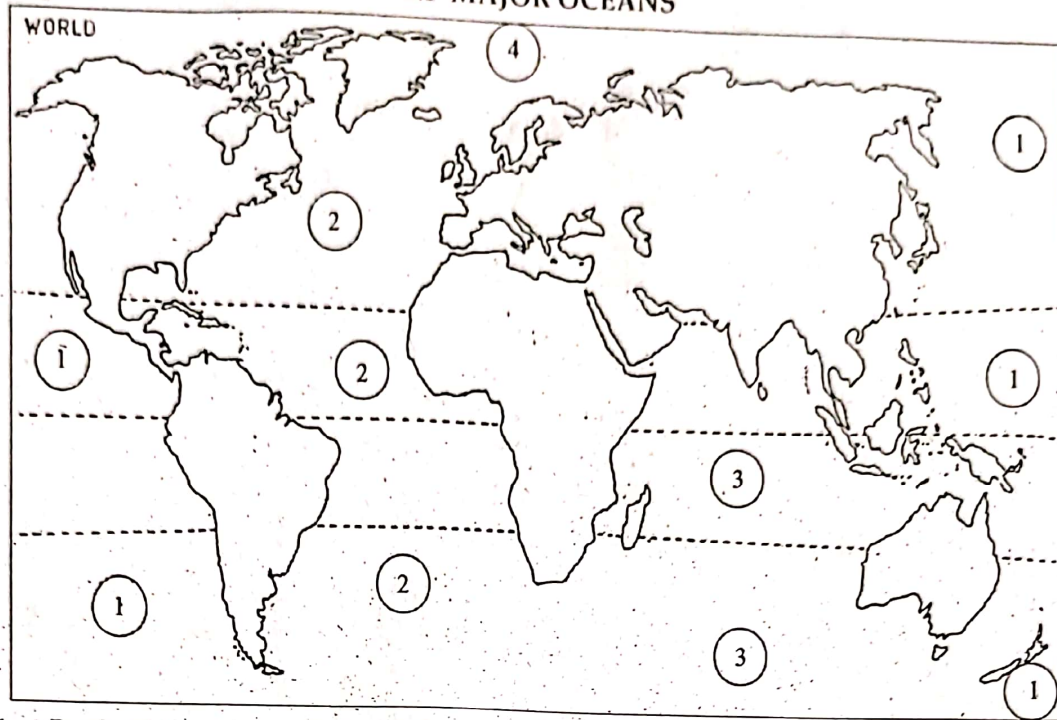
| | | | | | | | | | | | | |
|--------------|----|----|----|----|-----|-----|-----|-----|----|----|----|----|
| 6. Months | J | F | M | A | M | J | J | A | S | O | N | D |
| Temp°C | 23 | 24 | 22 | 19 | 16 | 14 | 13 | 14 | 15 | 16 | 19 | 22 |
| Rainfall-cm. | 7 | 12 | 22 | 52 | 125 | 192 | 183 | 135 | 69 | 54 | 23 | 15 |

GREENWICH (U.K.)

| | | | | | | | | | | | | |
|--------------|----|----|----|----|----|----|----|----|----|----|----|----|
| 7. Months | J | F | M | A | M | J | J | A | S | O | N | D |
| Temp°C | 4 | 4 | 7 | 9 | 12 | 16 | 18 | 17 | 15 | 11 | 7 | 5 |
| Rainfall-cm. | 51 | 38 | 36 | 46 | 46 | 41 | 51 | 56 | 46 | 58 | 63 | 51 |

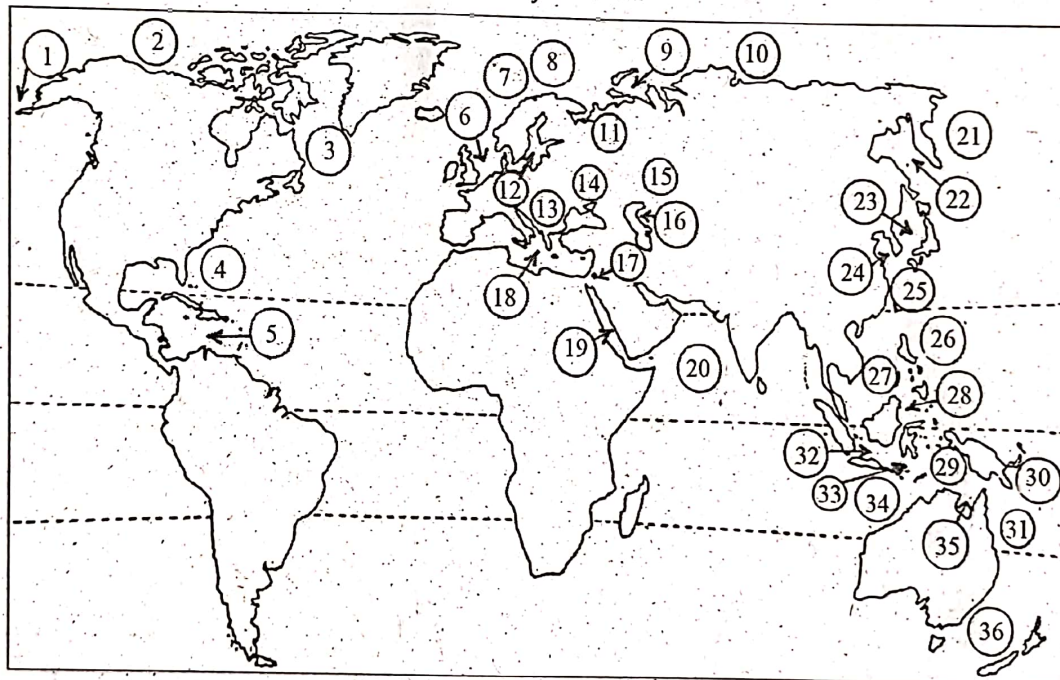
1. MAP FILLING : RELATED TO OCEANOGRAPHY

1.1 MAJOR OCEANS



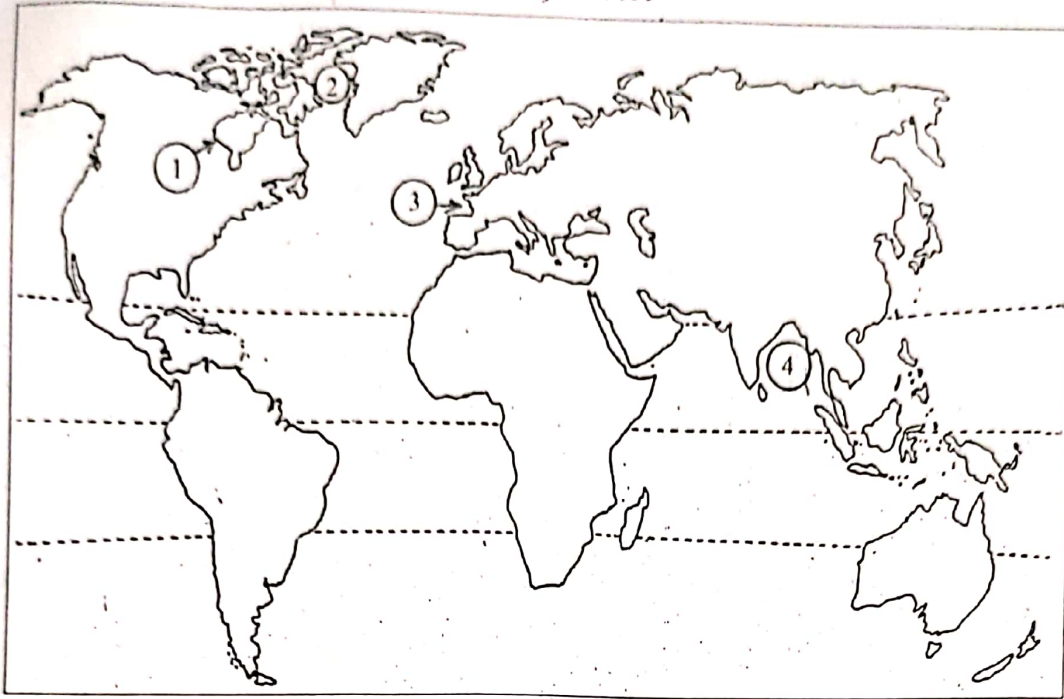
1. Pacific Ocean 2. Atlantic Ocean 3. Indian Ocean 4. Arctic Ocean

1.2 MAJOR SEA



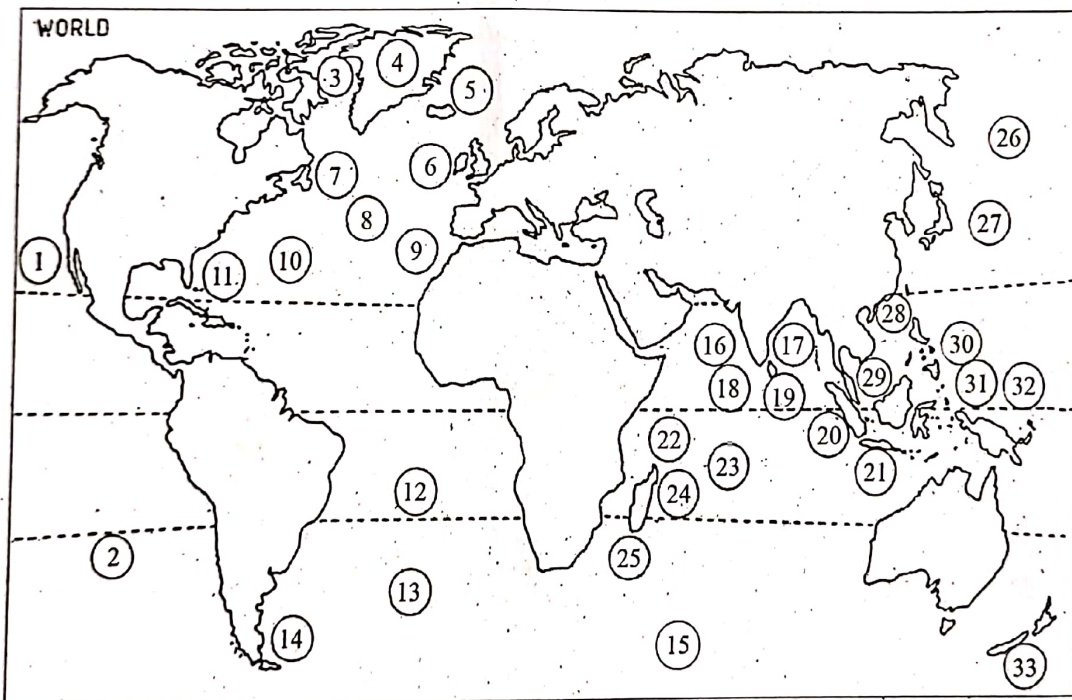
- | | | | |
|--------------------|-----------------------|---------------------|-----------------|
| 1. Bearing Sea | 2. Beaufort Sea | 3. Labrador Sea | 4. Sargasso Sea |
| 5. Caribbean Sea | 6. North Sea | 7. Norwegian Sea | 8. Barents Sea |
| 9. Kara Sea | 10. Laptev Sea | 11. White Sea | 12. Baltic Sea |
| 13. Adriatic Sea | 14. Black Sea | 15. Aral Sea | 16. Caspian Sea |
| 17. Dead Sea | 18. Mediterranean Sea | 19. Red Sea | 20. Arabian Sea |
| 21. Bering Sea | 22. Okhotsk Sea | 23. Sea of Japan | 24. Yellow Sea |
| 25. East China Sea | 26. Philippine Sea | 27. South China Sea | 28. Celebes Sea |
| 29. Banda Sea | 30. Solomon Sea | 31. Coral Sea | 32. Java Sea |
| 33. Sunda Sea | 34. Timor Sea | 35. Arafura Sea | 36. Tasman Sea |

1.3 MAJOR BAY



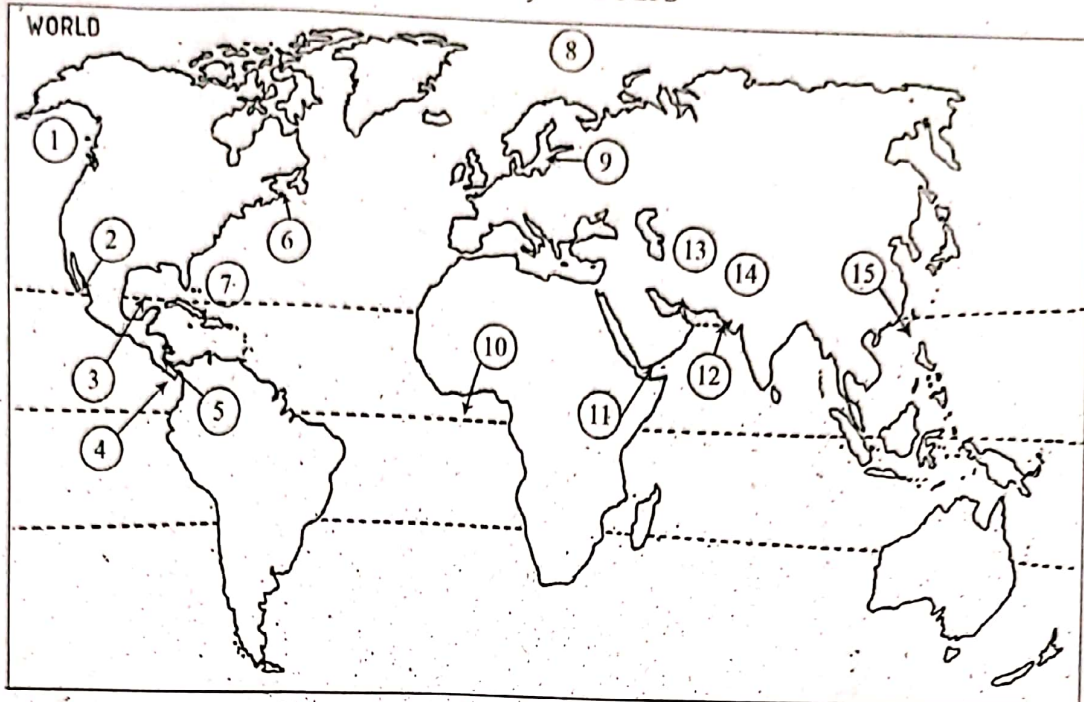
1. Hudson Bay 2. Baffin Bay 3. Bay of Biscay 4. Bay of Bengal

1.4 MAJOR ISLANDS



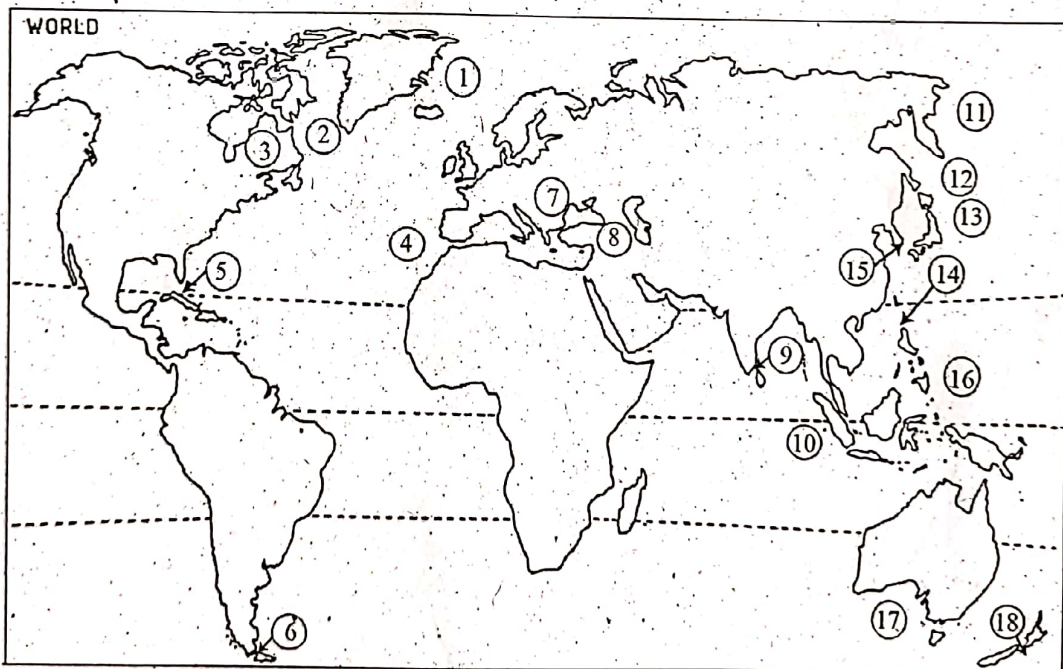
- | | | | |
|-----------------------------|----------------------|-------------------------|-------------------------|
| 1. Hawaii Islands | 2. Ester Islands | 3. Baffin Island | 4. Greenland |
| 5. Iceland | 6. British Islands | 7. New Foundland Island | 8. Azores Islands |
| 9. Canary Islands | 10. Bermuda Islands | 11. Cuba | 12. Trinidad Islands |
| 13. Tristan de Chunha | 14. Falkland Islands | 15. McDonald Islands | 16. Lakshadweep Islands |
| 17. Andaman Nicobar Islands | 18. Maldive Islands | 19. Sri Lanka | 20. Sumatra |
| 21. Java | 22. Seychelles | 23. Chagos | 24. Mauritius |
| 25. Madagascar | 26. Aleutian Islands | 27. Honshu (Japan). | 28. Hongkong |
| 29. Singapore | 30. Philippine | 31. Borneo | 32. New Guinea |
| 33. New Zealand | | | |

1.5 MAJOR GULFS



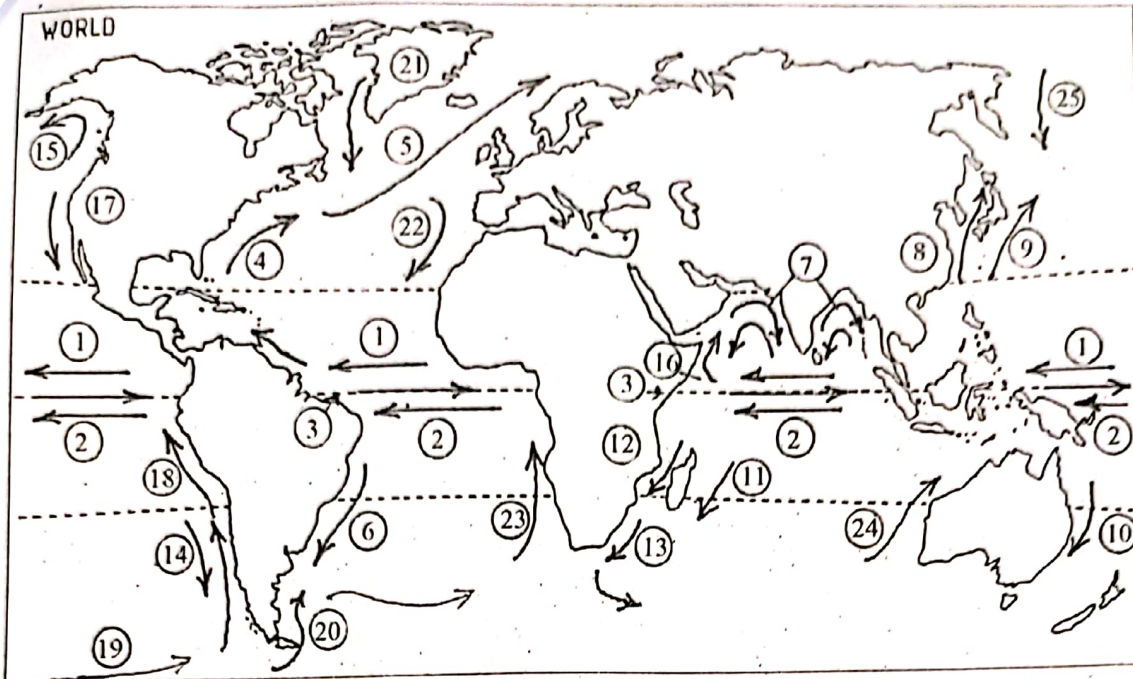
- | | | | |
|--------------------|-------------------------|---------------------|----------------------|
| 1. Gulf of Alaska | 2. Gulf of California | 3. Gulf of Mexico | 4. Gulf of Guayaquil |
| 5. Gulf of Panama | 6. Gulf of St. Lawrence | 7. Gulf of Honduras | 8. Gulf of Bothnia |
| 9. Gulf of Finland | 10. Gulf of Guinea | 11. Gulf of Aden | 12. Gulf of Khambhat |
| 13. Gulf of Persia | 14. Gulf of Oman | 15. Gulf of Tonkin | |

1.6 MAJOR STRAITS



- | | | | |
|--------------------|-----------------------|----------------------|--------------------------|
| 1. Denmark Strait | 2. Davis Strait | 3. Hirdson Strait | 4. Strait of Gibraltar |
| 5. Florida Strait | 6. Strait of Magellan | 7. Strait of Boporus | 8. Strait of Dardanelles |
| 9. Palk Strait | 10. Strait of Malacca | 11. Bering Strait | 12. Soya Strait |
| 13. Tsugaru Strait | 14. Taiwan Strait | 15. Korean Strait | 16. Strait of Makasar |
| 17. Bass Strait | 18. Cook Strait | | |

1.7 MAJOR OCEAN CURRENTS



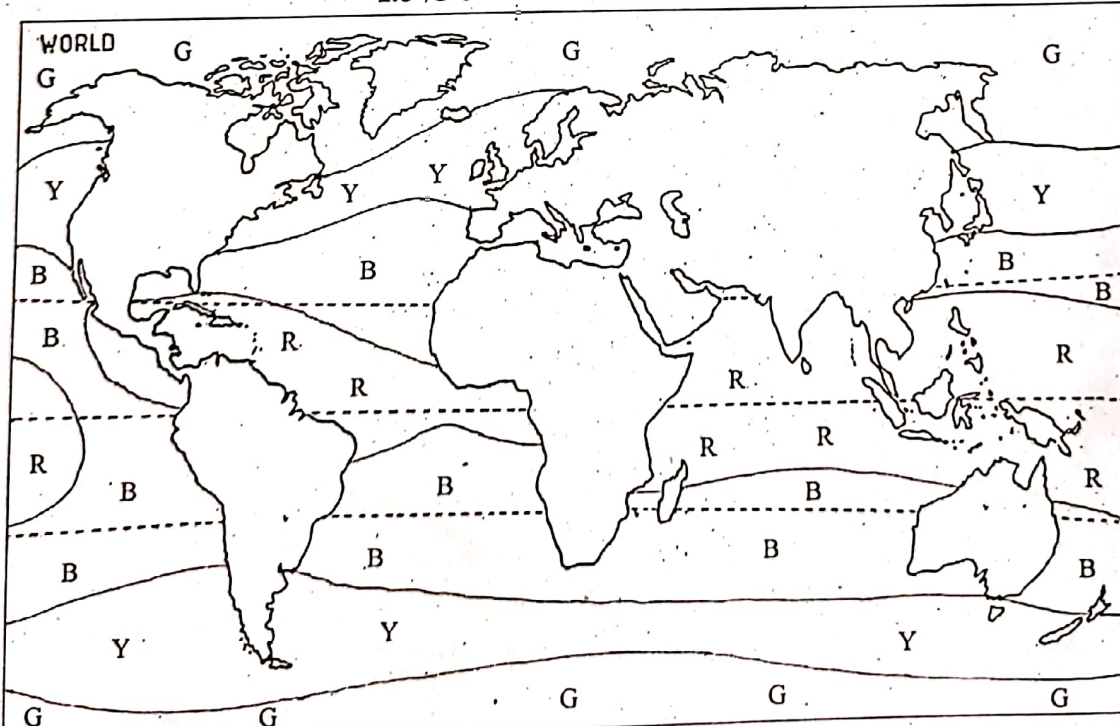
Warm Ocean Currents

- | | | |
|---------------------------------|-----------------------------|-------------------------------|
| 1. North Equatorial Current | 2. South Equatorial Current | 3. Equatorial Counter Current |
| 4. Gulf Stream | 5. North Atlantic drift | 6. Brazil current |
| 7. S.W. & N.E. Monsoon Currents | 8. Tsushima Current | 9. Kuroshio Current |
| 10. East Australian current | 11. Madagascar current | 12. Mozambique current |
| 13. Agulhase current | 14. El Nino Current | 15. Alaska Current |
| 16. Somali Current | | |

Cold Ocean Currents

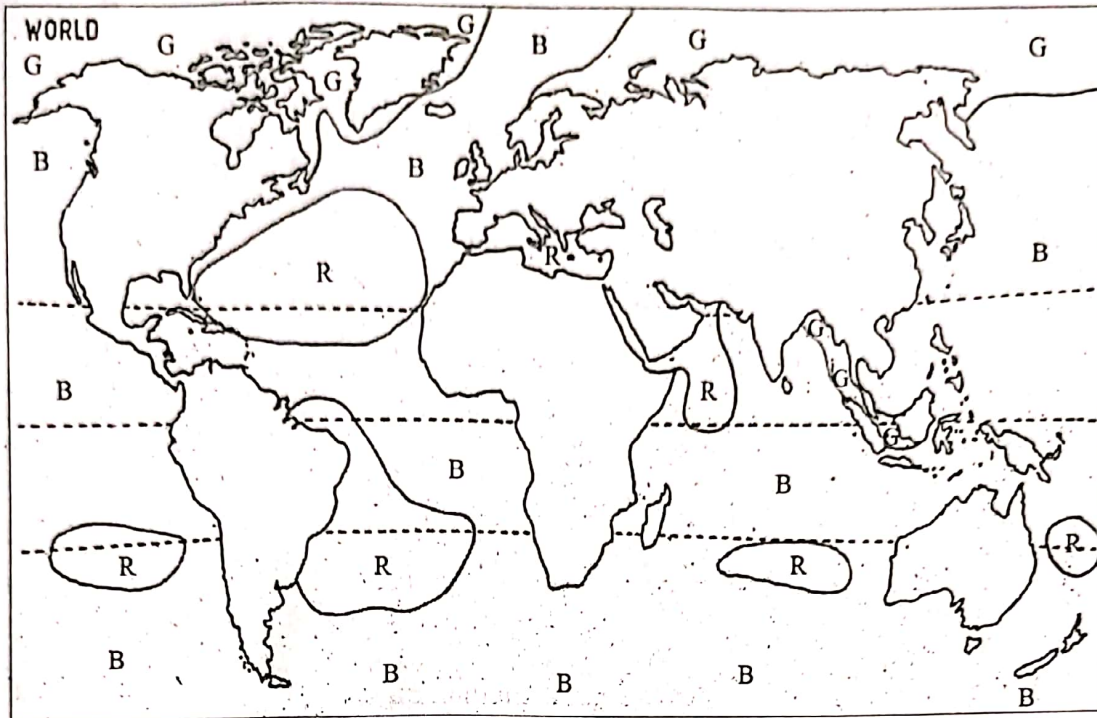
- | | | |
|------------------------|-----------------------------|---------------------------|
| 17. California Current | 18. Peruvian Current | 19. West wind drift |
| 20. Falkland Current | 21. Labrador Current | 22. Canaries Current |
| 23. Benguela Current | 24. West Australian Current | 25. Oyashio Kuril Current |

1.8 OCEAN TEMPERATURE



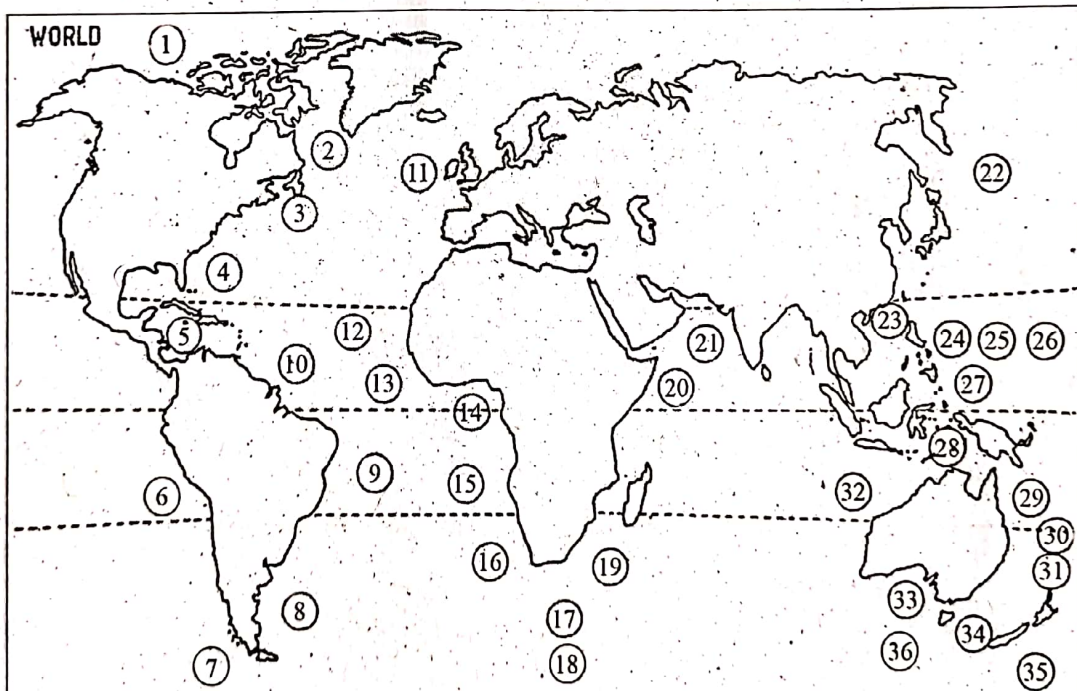
G <5°C Y 5°-15°C B 15°-25°C R >25°C G = Green, Y = Yellow B = Blue, R = Red
 Note : Use colour pencils to colour areas marked by the alphabets - G, B, R, Y.

1.9 SALINITY



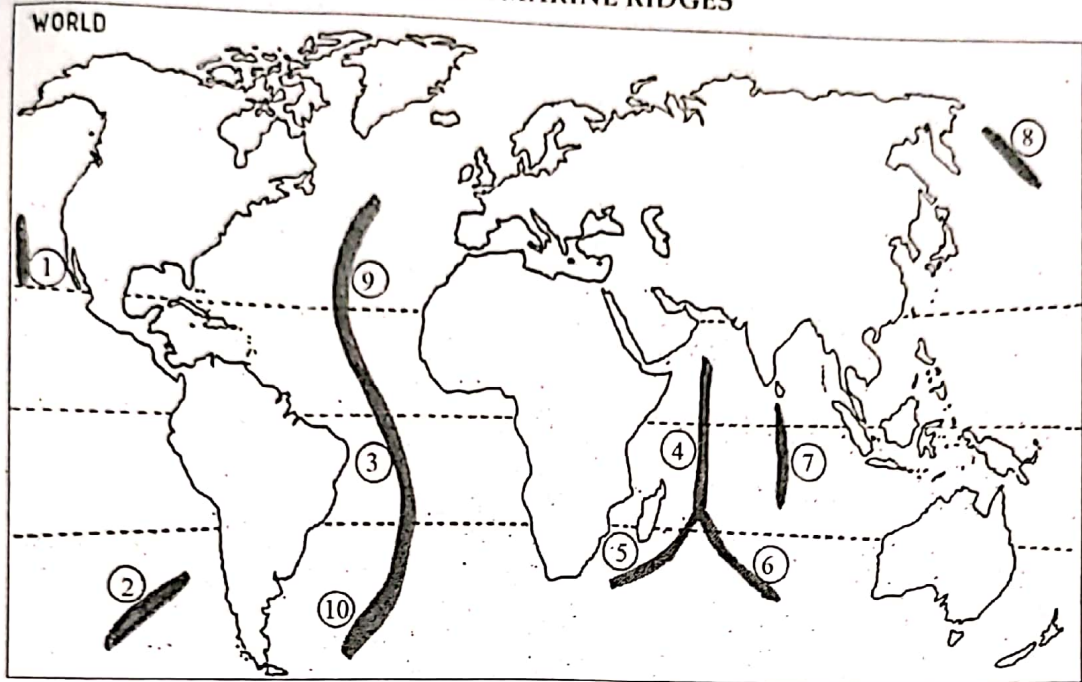
G <math>< 32\%</math> R > 36% B 32–36% G = Green, R = Red B = Blue,
 Note : Use colour pencils to colour areas marked by the alphabets – G, B & R.

1.10 OCEAN BASINS



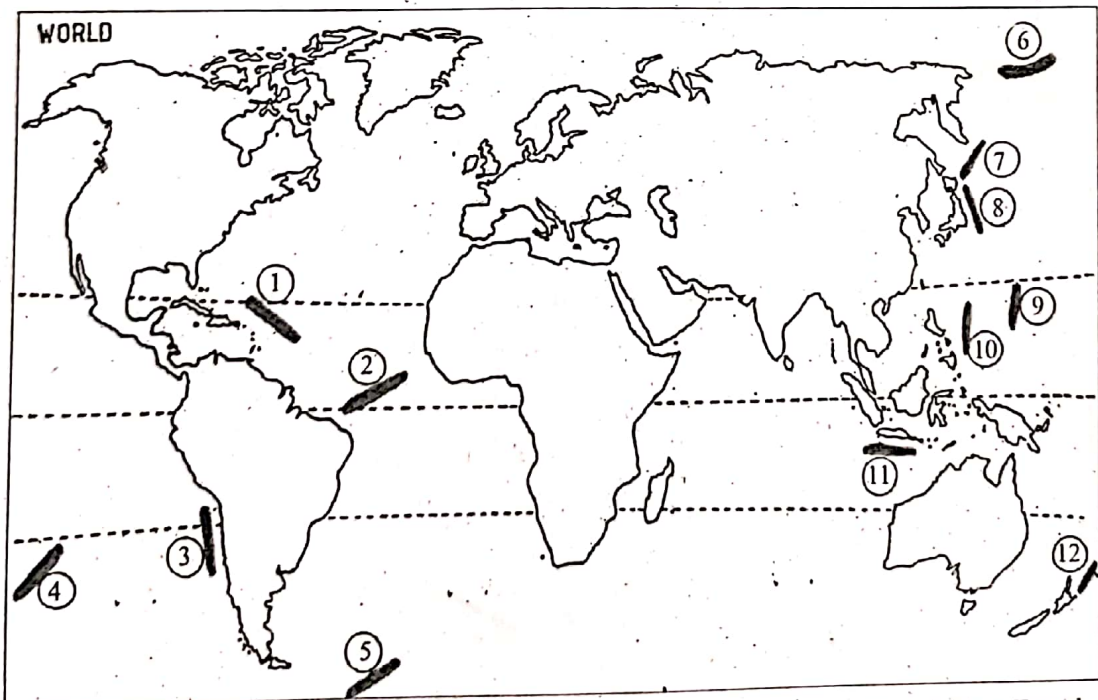
- | | | | |
|----------------------------|-----------------------------------------|-----------------------------|-------------------------------|
| 1. Canada basin | 2. Labrador basin | 3. New Found land basin | 4. North American basin |
| 5. Caribbean basin | 6. Peru basin | 7. Pacific – Atlantic basin | 8. Argentina basin |
| 9. Brazil basin | 10. Guyana basin | 11. West European basin | 12. Cape Verde basin |
| 13. Sierra Leone basin | 14. Guinea basin | 15. Angola basin | 16. Cape basin |
| 17. Agulhas basin | 18. Atlantic – Indian – Antarctic basin | 19. Madagascar basin | 20. Somali basin |
| 21. Arabian basin | 22. North Pacific basin | 23. South china basin | 24. Philippines basin |
| 25. Mariana basin | 26. Central Pacific basin | 27. Celebes basin | 28. Banda basin |
| 29. Coral basin | 30. New Hebrides basin | 31. Fiji basin | 32. Indian – Australian basin |
| 33. South Australian basin | 34. East Australian basin | 35. South Pacific basin | 36. Pacific – Antarctic basin |

1.11 SUBMARINE RIDGES



- | | |
|---------------------------------|---------------------------------|
| 1. Hawaiian Ridge | 2. East Pacific Ridge |
| 3. Mid Atlantic Ridge | 4. Mid-Indian Ocean Ridge |
| 5. Southwest Indian Ocean Ridge | 6. Southeast Indian Ocean Ridge |
| 7. Ninety East Ridge | 8. Emperor Seamounts. |
| 9. Dolphin Ridge | 10. Challenger Ridge |

1.12 SUBMARINE TRENCHES



- | | | |
|------------------------|--------------------------|-------------------------------|
| 1. Puerto Rico Trench | 2. Romanche Deep/Trench | 3. Atacama Trench/Peru Trench |
| 4. Tonga Trench | 5. South Sandwich Trench | 6. Aleutian Trench |
| 7. Kurile Trench | 8. Japan Trench | 9. Mariana Trench |
| 10. Philippines Trench | 11. Sunda Trench | 12. Kermadec Trench |

SYBA-Geography
Semester III
Question Bank (2018-19)

UNIT I

1. Explain the northern mountain range of India
2. Explain the features and major divisions of northern great plain.
3. Describe the major divisions of peninsular India
4. Write the major physical divisions of India. Explain any two physical divisions in detail.
5. Discuss the origin or formations of India's major physical divisions.

UNIT II

1. Explain the major Himalayan river systems.
2. Describe the drainage pattern of Peninsular India.
3. Write a detail note on lakes of India
4. Give rainfall distribution of India.
5. Distinguish between Peninsular and Himalaya rivers.
6. Discuss the major drainage patterns of India.

UNIT III

1. Describe the major types of soils found in India.
2. Give classification of forest found in India
3. State the importance of forest with reference to India
4. Discuss the problems associated with soil degradation and suggest methods of soil conservation.
5. What are the causes of deforestation in India? suggest methods of forest conservation.

UNIT IV

1. Give distribution of metallic minerals found in India
2. Give distribution of non-metallic minerals found in India
3. Give distribution of power resources found in India
4. Define energy crises. State the causes and effects of energy crises and suggest methods of energy conservation.
5. State the causes of depletion of mineral resources and suggest measures to conserve mineral resources.

UNIT V-Practical

Map Questions;

1. Mountain range- Himalaya, Aravali, Vindhya, Western Ghat
2. Physical divisions-east coast, west coast, Andaman Nicobar Island, Lakshadweep,
3. Rivers-longest river of India, Longest peninsular river, longest west flowing river,
4. Lakes- Sambhar, Chikha, Lonar, Dal,
5. Rainfall-region receiving high rainfall, region receiving low rainfall
6. Soil -Black soil, Alluvial soil, Desert soil, laterite soil
7. Forest-evergreen forest, desert forest, alpine forest, mangroves forest.
8. Mineral distribution -bauxite, iron ore, magnesium
9. Distribution of power resources- coal, natural oil and Uranium.

Questions on scale

1. Convert following verbal scale into representative fraction
A-1 cm to 15 km b- 2 cm to 8 km c-1 cm to 6 m d-3 cm to 12 m
2. Convert following representative fraction to verbal scale.
1:5000, 1:30000, 1:125000, 1:1000000
3. Convert following verbal scale into graphical scale.
1cm to 80 m, 2cm to 50 m, 1 cm to 7 km, 1cm to 4 km
4. Convert following representative fraction into graphical scale.
1:3000, 1:100000, 1:250000, 1: 50000

घटक १

- १ भारताची उत्तरेकडील पर्वतीय रंग स्पष्ट करा.
- २ उत्तर मैदानी प्रदेशाचे प्रमुख विभाग आणि वैशिष्ट्ये स्पष्ट करा.
- ३ द्विकाल्पिय भारताचे प्रमुख विभाग वर्णन करा.
- ४ भारतातील प्रमुख प्राकृतिक विभाग लिहा. कोणतेही दोन प्राकृतिक विभाग सविस्तर स्पष्ट करा.
- ५ भारतातील प्रमुख प्राकृतिक विभागातील वृत्क्रांतीकव्हा निर्मिती चर्चा करा.

घटक २

- १ हिमालयातील प्रमुख नदी प्रणाली स्पष्ट करा.
- २ दक्खन च्या पाठरावावरीलजल प्रणाली वर्णन करा
- ३ भारतातील सरोवरांवर सविस्तर टीप लिहा.
- ४ भारतातील पर्जन्याचे वितरण घ्या.
- ५ द्विकाल्पिया नद्या व हिमालयातील नद्या यामधील फरक स्पष्ट करा.
- ६ भारतातील प्रमुख जल प्रणालीचे वर्णन करा.

घटक ३

१. भारतात आढळणाऱ्या मृदांचे प्रमुख प्रकार वर्णन करा
२. भारतात आढळणाऱ्या वनाचे वर्गीकरण करा.
३. भारताच्या संदर्भा सहित वनाचे महत्त्व सांगा
४. मृदेच्या रूहासाठी संबंधित चर्चा करा. आणि मृदा संवर्धनाच्या पद्धती सुचवा.
भारतातील वन तोडीची करणे काय आहेत? वन संवर्धनात पद्धती सुचवा

घटक ४

- १ भारतात आढळणाऱ्याधातूखनिज्यांचे वितरण या
- २ भारतात आढळणाऱ्याअधातूखनिज्यांचे वितरण या
- ३ भारतात आढळणाऱ्याउर्जास्त्रोतांचेवितरणया
- ४ उर्जा संकट हि संज्ञा स्पष्ट करा.उर्जा संकटाची कारणे आणि परिणाम सांगा आणि उर्जा संवर्धनाच्या पद्धती सांगा
- ५ खनिज साधन संपत्तीच्या रूहासाठी कारणे सांगा आणि खनिज संपत्तीच्या साधनाचे उपाय सुचवा

घटक ५ -प्रत्याशिक भूगोल

नकाशा वरील प्रश्न

- १ पर्वतरांग - हिमालय,अरावली,विंध्य, पश्चिम घाट
- २ प्राकृतिक विभाग - पूर्व किनार पट्टी , पश्चिम किनार पट्टी, अंदमान निकोबार द्वीप , लक्षद्वीप
- ३ नद्या - भारतातील सर्वात लांब नदी, दक्खन च्या पठारावरील सर्वात लांब नदी, पश्चिम वाहिनी सर्वात लांब नदी
- ४ सरोवरे- सांबर, चिल्खा, लोणार, दाल
- ५ पर्जन्य- सर्वाधिक पर्जन्याच्या चा प्रदेश, सर्वात कमी पर्जन्याचा प्रदेश
- ६ मृदा- काळी मृदा, गाळाची मृदा, वालुकामय मृदा,जांभी मृदा
- ७ वने- सदाहरित वने, काटेरी वने,अल्पाईन वने, खारफुटी वने
- ८ खनिज वितरण- लोह खनिज,मँगनीजबाँ
- ९ उर्जा स्रोतांचे वितरण- कोळसा, नैसर्गिक तेल,युरेनेइउम