

**MA/M.Sc. GEOGRAPHY**  
**SECOND SEMESTER**  
**CLIMATOLOGY AND OCEANOGRAPHY**  
**MGE-201**

Duration : 3 hrs.

Full Marks: 70

[ PART-A: Objective ]

Time : 20 min.

Marks : 20

Choose the correct answer from the following:

1X20=20

1. Consider the following statements and select the correct answer using the code given below:
  1. Gases are evenly distributed in the Homosphere
  2. The lower part of the atmosphere is known as Heterosphere
  3. Thermosphere is a part of the HeterosphereCode:
  - a. 1 and 2 are correct
  - b. 1 and 3 are correct
  - c. 2 and 3 are correct
  - d. 1, 2 and 3 are correct
2. Temperature range is worthless near the
  - a. Tropics
  - b. Equator
  - c. Temperate zones
  - d. Poles
3. The atmospheric pressure is maximum at \_\_\_\_\_
  - a. Coastal areas
  - b. Interior parts of the continent
  - c. Sea level
  - d. All of the above
4. Temperate cyclones are called as \_\_\_\_\_
  - a. Lows
  - b. Depressions
  - c. Troughs
  - d. All of the above
5. Which of the following is the characteristics of tropical cyclones?
  - a. They are found both on land and sea
  - b. They travel from west to east
  - c. They have steep pressure gradients
  - d. They have different temperatures in all the sectors
6. The zone of ..... winds are also known as Hadley cells.
  - a. Westerly
  - b. Easterly
  - c. Trade
  - d. None of the above
7. What does the phrase "anthropogenic CO<sub>2</sub> emissions" mean?
  - a. Human made CO<sub>2</sub> emissions
  - b. Industrial CO<sub>2</sub> emissions
  - c. Natural CO<sub>2</sub> emissions
  - d. All of the mentioned
8. Which of the following is (are) the anticipated effect(s) of Global warming?
  - a. Rising sea levels
  - b. Atmosphere change
  - c. Ecological change
  - d. None of the above

9. Why the term oscillation is accompanied with El Nino and La Nina?
- Because its fluctuations are perfectly periodic
  - Because its fluctuations are not perfectly periodic
  - Because they recur in the form of regular cycles in climate parameters
  - Because it is cool phase of ENSO with sea surface temperature in the eastern Pacific below average and air pressures high in the eastern and low in western Pacific.
10. The weather information for any future data is classified as \_\_\_\_\_
- Maritime forecast
  - Continental forecast
  - Ocean currents forecast
  - Weather forecast
11. In which of the following the direction of ocean currents are reversed with season?
- In the Pacific Ocean
  - In the Atlantic Ocean
  - In the Indian Ocean
  - None of them
12. The deepest Ocean of the world is
- Pacific Ocean
  - Atlantic Ocean
  - Indian Ocean
  - Arctic Ocean
13. Which one of the following is not the part of North Atlantic Ocean current system?
- Gulf Stream
  - Antilles Current
  - Canaries Current
  - Benguela Current
14. What is the proper sequence in coral reef formation?
- Atoll, Barrier reef, Fringing reef, Patch
  - Fringing reef, Barrier reef, Patch, Atoll
  - Barrier reef, Fringing reef, Patch, Atoll
  - Patch, Atoll, Barrier reef, Fringing reef
15. Most of the deep-sea sediments are deposited by
- Glaciers
  - Microscopic Organisms
  - Rivers
  - Ocean Currents
16. The Grand Canyon is located on the
- Niger River
  - Tapti River
  - Rhine River
  - Colorado River
17. Which of the following is a landlocked sea?
- Greenland Sea
  - Timor Sea
  - Aral Sea
  - Arafura Sea

18. Which of the following is NOT a marine resource?
- a. Oil
  - b. Tourism potential
  - c. Coal
  - d. Fish and seafood supplies
19. Which one of the following results takes place due to global warming?
- a. Maintaining steady temperature
  - b. Changes in the rainfall
  - c. Pleasant environment
  - d. Causing less pollution
20. Which of the following way is used to reduce the pollution load on marine water?
- a. Manual cleaning of pollutants
  - b. Damping the pollutants during winter
  - c. Introducing sewage treatment plants
  - d. Ban the license of industries which are near to the sea
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( PART-B : Descriptive )

Time: 2 HRS 40 MINS

Marks : 50

[ Answer question no.(1) & any four (4) from the rest ]

1. Define climatology and discuss why the study of climatology is important in geography. 2+8=10
  
2. Review in brief the basis and scheme of classification of world climates by Koppen. 3+7=10
  
3. Write short notes on: 5+5=10
  - a. Climate and human health
  - b. Urban heat island
  
4. Describe the causes and solution of global warming. 5+5=10
  
5. Discuss the submarine topography and configuration of Indian Ocean floor in detail with diagram. 8+2=10
  
6. What are the various conditions for the growth of Coral Reefs? Briefly discuss the types according to nature and mode of occurrence of the reefs? 5+5=10
  
7. What is the use of marine resources? Briefly discuss about the Conservation and sustainable use of marine resources. 2+4+4=10
  
8. Discuss the various types of marine pollution, with their effects. 5+5=10

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