

**BA/B.Sc. GEOGRAPHY
THIRD SEMESTER
CLIMATOLOGY & OCEANOGRAPHY
BGE – 301 DMJ
[USE OMR FOR OBJECTIVE PART]**

**SET
A**

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

(Objective)

Marks: 20

Choose the correct answer from the following:

1 × 20 = 20

1. In which of the following layer of atmosphere all weather phenomena occurs?
 - a. Troposphere
 - b. Stratosphere
 - c. Mesosphere
 - d. Thermosphere
2. Which layer reflects the medium and high frequency radio waves back to the earth?
 - a. Stratosphere
 - b. Mesosphere
 - c. Ionosphere
 - d. Exosphere
3. The temperature increases with increasing altitude due to certain conditions is called
 - a. Normal Lapse Rate
 - b. Inversion of Temperature
 - c. Temperature Variation
 - d. Temperature Gradient
4. Which of the following belt is called "Doldrums"?
 - a. Equatorial low pressure belt
 - b. Sub-tropical high pressure belt
 - c. Sub-polar low pressure belt
 - d. Polar high pressure belt
5. The Coriolis effect is caused by
 - a. Earth Rotation
 - b. Earth Rotation and Revolution
 - c. Earth Revolution
 - d. Pressure Gradient
6. I.T.C.Z. Stands for
 - a. Islands Tropical Convergence Zone
 - b. Indian Tropical Convergence Zone
 - c. Inner Trade Convergence Zone
 - d. Inter Tropical Convergence Zone
7. The Westerlies and trade wind are example for following winds
 - a. Mesoscal
 - b. Toposcale
 - c. Macroscale
 - d. Microscale
8. The lines joining the places of equal pressure at sea level are called
 - a. Isobars
 - b. Isoline
 - c. Isohyte
 - d. Isohaline

9. The occluded front is formed
- | | |
|--|---|
| a. In cold front | b. In warm fronts |
| c. When both warm and cold fronts coalesce | d. When cold front overtakes warm front |
10. Which one of the following is not a factor to affect the atmospheric pressure?
- | | |
|----------------|-----------------------------|
| a. Altitude | b. Presence of water vapour |
| c. Temperature | d. Rainfall |
11. Where is New Moore Island located?
- | | |
|----------------------|---------------------|
| a. Bay of Bengal | b. the Indian Ocean |
| c. the Pacific Ocean | d. Arabian sea |
12. Which among the following seas is known for the highest salinity?
- | | |
|----------------|-----------------|
| a. Caspian sea | b. Red sea |
| c. Dead sea | d. Sargasso sea |
13. Which sea has the lowest salinity?
- | | |
|---------------|------------------|
| a. Baltic Sea | b. Sargasso sea |
| c. Red sea | d. None of these |
14. Gulf stream is
- | | |
|-------------------------------|-----------------------|
| a. a river in the gulf | b. an oceanic current |
| c. another name of Jet Stream | d. a surface wind |
15. Which of the following is not a cold ocean current?
- | | |
|-------------|-------------|
| a. Canaries | b. Humboldt |
| c. Oyashio | d. Agulhas |
16. The country benefiting the most out of the North Atlantic Drift is
- | | |
|-----------|-------------|
| a. Poland | b. Portugal |
| c. Norway | d. Nigera |
17. Which one of the following is a cold current of the South Atlantic Ocean?
- | | |
|--------------------|---------------------|
| a. Canary current | b. Benguela current |
| c. Agulhas current | d. Brazil current |
18. Which one of the following Oceanic currents is not associated with the Pacific Ocean?
- | | |
|---------------|-------------|
| a. Canaries | b. Kuroshio |
| c. California | d. Humboldt |
19. Which one of the following currents does not contribute to form a complete circle of currents in the South Atlantic Ocean?
- | | |
|-------------|--------------------|
| a. Benguela | b. Brazil |
| c. Canary | d. West wind drift |
20. Which of the following is cold ocean current?
- | | |
|--|---------------------|
| a. Peruvian Current (Humboldt Current) | b. Kuroshio Current |
| c. Gulf Stream | d. Brazil Current |

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(Descriptive)

Time : 2 hrs. 40 min.

Marks : 50

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

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| 1. Explain briefly the meaning and scope of climatology. Give an account on the structure and composition of the atmosphere | 5+5=10 |
| 2. Define atmospheric pressure. Give a brief account on the global atmospheric pressure belt. | 3+7= 10 |
| 3. What do you mean by airmass and fronts? Give a brief description on general circulation of monsoon and jet streams. | 4+6=10 |
| 4. Write Short notes on <i>(any two)</i>
a. Precipitation Types
b. Cyclones
c. Fog and Clouds
d. Stability and Instability | 5+5=10 |
| 5. 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 |
| 6. What do you mean by Oceanography? Discuss its scope. | 5+5=10 |
| 7. Write Short notes on <i>(any two)</i>
a. Ocean salinity
b. Ocean temperature
c. Ocean deposits | 5+5=10 |
| 8. Define ocean Currents and Tides. Briefly discuss various currents of the Atlantic Ocean | 2+2+6
=10 |

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