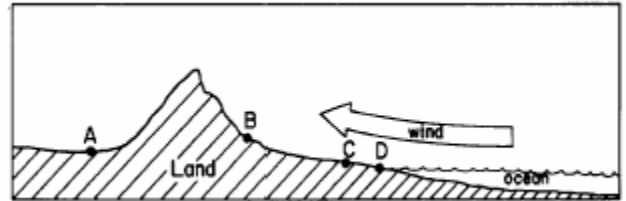


8. The curved path of planetary winds are caused by the Earth's
- | | |
|----------------|--------------------|
| (1) rotation | (3) magnetic field |
| (2) revolution | (4) gravity |

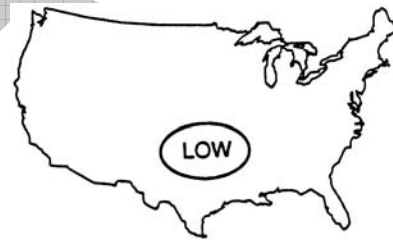
Base your answers to **questions 9 -10** on the diagram to the right. The diagram represents a coastal region with a wind direction as indicated

9. Which best explains the direction of the wind?
- (1) the land is cooling during a clear night
 - (2) more water vapor exists in the air over the ocean
 - (3) low pressure exists over the land and high pressure over the ocean
 - (4) warm currents exist in the ocean



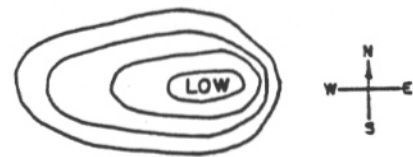
10. The wind indicated could best be named a
- | | |
|---------------------|-------------------|
| (1) mountain breeze | (3) westerly wind |
| (2) land breeze | (4) sea breeze |

11. The map to the right shows a low pressure system located over an area in the south-central part of the United States.



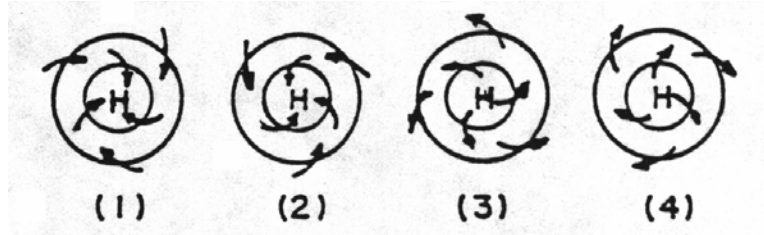
In the next few days, because of the prevailing winds, the air mass will probably move toward the

- | | |
|---------------|---------------|
| (1) southeast | (3) southwest |
| (2) northeast | (4) northwest |
12. The diagram below shows the isolines of air pressure around a low-pressure center. On which side of the low pressure center will the wind speed be the closest?
- | | |
|-----------|----------|
| (1) north | (3) east |
| (2) south | (4) west |



13. Which factor is most directly related to wind velocity?
- | | |
|-----------------------|-----------------------|
| (1) dewpoint | (3) cloud type |
| (2) relative humidity | (4) pressure gradient |

14. Which diagram best represents the air circulation as seen from above in a high pressure center (anticyclone) in the Northern Hemisphere?



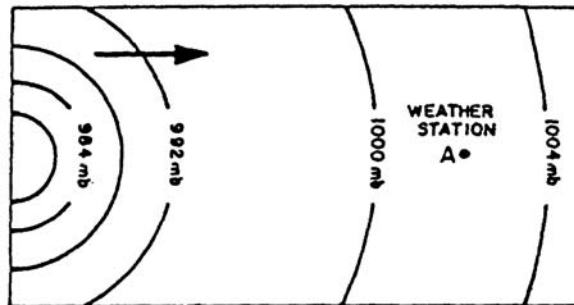
15. On a July afternoon in New York State, the barometric pressure is 29.85 inches and falling. This reading most likely indicates
- (1) an approaching storm
 - (2) rapidly clearing skies
 - (3) continuing fair weather
 - (4) gradually improving conditions

16. Wind is part of heat flow by
- (1) radiation
 - (2) conduction
 - (3) convection
 - (4) reflection

17. At which latitude are prevailing southeast winds most likely found?
- (1) 15°S
 - (2) 45°S
 - (3) 15°N
 - (4) 45°N

18. Which of the following statements best describes the planetary wind patterns at the Equator?
- (1) Winds converge from higher latitudes.
 - (2) Winds diverge from the Equator.
 - (3) Winds sink from higher altitudes.
 - (4) Winds flow as high altitude jet streams.

19. The diagram below represents weather station A in the path of a weather system.



Which of the following statements is true of the weather system approaching the weather station?

- (1) a low pressure system is approaching from the east
 - (2) a high pressure system is approaching from the west
 - (3) an anticyclone is approaching from the west
 - (4) a low pressure system is approaching from the west
20. Two weather stations are located near each other. The air pressure at each station is changing so that the difference between the pressures is increasing. The wind speed between these two locations will probably
- (1) decrease
 - (2) increase
 - (3) remain the same
21. Which weather instrument is used to measure wind speed?
- (1) anemometer
 - (2) wind vane
 - (3) psychrometer
 - (4) thermometer