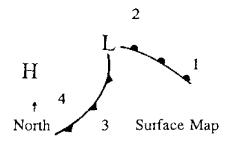
NATS101 (44) S05 Sample Quiz 4

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question and fill in the corresponding "bubble" on the attached sheet. There are two Extra Credit questions on every quiz.

- 1. The world's deserts are found at 30° latitude because
 - a. the intertropical convergence zone is located there. b. of sinking air found near the polar front. c. of the convergence of the prevailing westerlies and the Northeast Trades. d. of the sinking air of the subtropical highs.
- 2. Along a north-south oriented coastline in the Southern Hemisphere, upwelling would occur when winds blow from the
 - a. north. b. south. c. east. d. west.
- 3. Record breaking low temperatures are associated with which air mass?
 - a. mT b. mP c. cP d. cT

Surface Weather Map



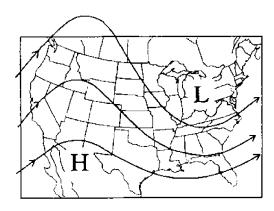
- 4. Refer to the Surface Weather Map. The winds at point 3 would most likely be from the a. southwest. b. northwest. c. northeast. d. southeast.
- 5. The intertropical convergence zone (ITCZ) is a region where
 a. the polar front meets the subtropical high. b. northeast trades meet the southeast trades. c. northeast trades converge with the subtropical high. d. the Ferrel cell converges with the Hadley cell. e. polar easterlies converge with the air at the doldrums.
 - 6. In the three-cell model of the general circulation, areas of surface low pressure should be found at a. the equator and the poles. b. the equator and 30° latitude. c. the equator and 60° latitude. d. 30° latitude and 60° latitude. e. 30° latitude and the poles.
 - 7. In Honolulu, Hawaii (latitude 21° N), you would most likely experience winds blowing from the a. northeast. b. south. c. southwest. d. northwest.
- 8. At Barrow, Alaska (latitude 70° N), you would expect the prevailing wind to be a. northerly. b. easterly. c. southerly. d. westerly.
- 9. The large semi-permanent surface anticyclone that is normally positioned over the ocean, west of California, is called the
 - a. Hawaiian high. b. Aleutian high. c. California high. d. Baja high. e. Pacific high.

- _____ 10. The majority of the United States lies within a ______ wind belt.
 a. westerly b. easterly c. northerly d. southerly
- 11. On a weather map of the Northern Hemisphere, the trade winds would be observed a. north of the polar front. b. between the polar front and the subtropical highs. c. south of the subtropical highs. d. between the subpolar lows and the subtropical highs.
- ____ 12. The ocean current that flows southward parallel to the west coast of North America is the a. Aleutian current. b. California current. c. Gulf Stream. d. Baja Drift.
 - ____ 13. In the Northern Hemisphere, ocean currents in the Atlantic and the Pacific move in a generally circular pattern. The direction of this motion is _____ in the Atlantic and _____ in the Pacific.

 a. clockwise, counterclockwise b. counterclockwise, counterclockwise c. clockwise, clockwise
- ____ 14. During a major El Niño event

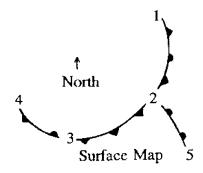
d. counterclockwise, clockwise

- a. Peruvian fishermen harvest a record amount of fish near Christmas time. b. extensive ocean warming occurs over the eastern tropical Pacific. c. the Northeast trade winds increase in strength. d. California experiences severe drought conditions.
- 15. The upper air flow on the map below would bring _____ air masses into the Pacific Northwest and ____ air masses into the eastern United States.



a. mT, mP b. mP, cP c. mT, cP d. mP, cT

Exhibit 8-1



_ 16. Refer to Exhibit 8-1. A cold front is positioned between points a. 1 and 2. b. 2 and 3. c. 2 and 5. d. 3 and 4.

Name:	ID: A
17.	Refer to Exhibit 8-1. A warm front is positioned between points a. 1 and 2. b. 2 and 3. c. 2 and 5. d. 3 and 4.
18.	For a surface storm system to intensify, the upper-level low (or trough) should be located to the of the surface low. a. north b. south c. east d. west
19.	Before the passage of a cold front the pressure normally, and after the passage of a cold front the pressure normally a. drops, drops b. drops, rises c. rises, rises d. rises, drops
20.	In the general circulation of the atmosphere, one would find the region called the doldrums a. near 30° latitude. b. at the equator. c. at the poles. d. near 60° latitude.
21.	EXTRA CREDIT The jet stream blows a. directly from west to east. b. directly from east to west. c. from the equator towards the poles. d. in a wavy pattern from west to east.
22.	EXTRA CREDIT

Average winter temperatures in Great Britain and Norway would probably be much colder if it were not for

a

- a. Labrador current. b. North Atlantic Drift. c. Canary current. d. North Equatorial current.
- e. Greenland current.

NATS101 (44) S05 Sample Quiz 4 Answer Section

MULTIPLE CHOICE

- 1. D
- 2. B
- 3. C
- 4. A
- 5. B
- 6. C
- 7. A
- 8. B
- 9. E
- 10. A
- 11. C
- 12. B
- 13. C
- 14. B
- 15. C
- 16. B
- 17. C
- 18. D
- 19. B
- 20. B
- 21. D
- 22. B