Geography I Pre Test #1

1. The sun is a star in the ______ galaxy.
a) Orion b) Milky Way c) Proxima Centauri d) Alpha Centauri e) Betelgeuse

2. The response to earth's rotation is
a) an equatorial bulge b) polar bulge c) equatorial flattening d) Death Valley e) Mt. Everest

3. The Greenwich Meridian is also known as the ______.
   a) Perihelion b) Aphelion c) Prime Meridian d) Equator e) small circle

4. At the North Pole, one degree of longitude extends ______ kilometers on the ground.
   a) 10 b) 69 c) 0 d) 35 e) 50

5. The distance lights travels in a year is approximately ______ miles.
   a) 93 million b) 93 billion c) 6 trillion d) 6 billion e) 6 million

6. Of the following, which is truly a great circle?
   a) Tropic of Capricorn b) Tropic of Cancer c) Equator d) Arctic Circle e) Antarctic Circle

7. Our current calendar system, in Europe and North America, is known as the ______ calendar.
   a) Gregorian b) Metron c) Julian d) Meson e) Jovian

8. The maximum distance away from the sun occurs each year in July and its position is called ______.
   a) Coriolis b) aphelion c) sidereal d) ecliptic e) perihelion

9. The inner, or terrestrial, planets include Mercury, Venus, Earth, and ______.
   a) Uranus b) Jupiter c) Mars d) Neptune e) Pluto

10. The geographic grid line opposite the Prime Meridian is the ______.
    a) Tropic of Cancer b) 90° meridian c) 180° meridian d) 320° meridian e) Tropic of Capricorn

11. Any division of the Earth into two hemispheres is separated by a
    a) circle of illumination b) great circle c) small circle d) perihelion e) none of the above

12. Meridians are divided into multiples of ______ for the purpose of delimiting time zones.
    a) 10 b) 15 c) 25 d) 30 e) 34

13. The 0° Meridian is the same thing as the ______ Meridian.
    a) International Date Line b) Equator c) Perihelion d) Prime e) geographic grid
14. A spot on the Earth's surface moves the fastest at the ______.
a) Equator b) Tropic of Cancer
c) Arctic Circle d) Tropic of Capricorn
e) Antarctic Circle

15. The Milky Way is a galaxy some _____ light years in diameter.
a) 10 b) 100 c) 1,000 d) 10,000 e) 100,000

16. The outer planets are most likely composed of ______.
a) gas b) interstellar dust c) granite d) basalt e) water

17. The only parallel which is a great circle is the ______.
a) Arctic Circle b) Tropic of Cancer c) Equator d) International Date Line
e) Antarctic Circle

18. At the International Date Line, there is a change of ______.
a) season b) hour c) year d) day e) day and hour

19. The highest numerical measurement when calculating latitude is ______°.
a) 90 b) 100 c) 180 d) 360 e) 450

20. Meridians
a) are arcs of great circles b) are east-west lines c) diverge as they near the poles
d) are the same thing as parallels e) are numbered from 0-100 in three hemispheres

21. The most important effect of the earth's rotation is___________.
a) increased gravity b) seasonal change c) alternation of light and dark d) Daylight Saving Time e) all of the above

22. The size of the Universe is best described as
a) 100,000 light years across b) small
c) in terms of the width of 5 galaxies across
d) 1 astronomical unit across e) vast beyond comprehension

23. Which of the following rotates from west to east?
a) Mars b) Mercury c) Earth d) Jupiter e) all of the above

24. The best description of the actual shape of the earth is as a
a) circle b) sphere c) spheroid d) oblate spheroid e) centroid

25. The Earth rotates about its
a) great circle b) revolution c) inclination d) axis e) equator

26. Which of the following is NOT defined by latitude?
a) parallel b) Arctic Circle c) Antarctic Circle d) North Pole e) meridian
27. Which of the following best describes the latitude and longitude of North America?
   a) northern and southern hemispheres  b) eastern and western hemispheres  
   c) northern and eastern hemispheres  d) eastern and southern hemispheres  
   e) northern and western hemispheres

28. Which of the below takes the LONGEST time?
   a) the rotation of the Earth on its axis  b) a sidereal day  c) a solar day  
   d) a revolution of the Earth  e) they all take approximately the same time

29. The perihelion is during the month of
   a) January  b) March  c) July  d) September  e) December

**True or False**

30. The geographic grid is a natural phenomenon discovered by the Greeks.
31. The circle of illumination divides the earth into a light and a dark hemisphere.
32. The Equator is an example of a great circle in the geographic grid.
33. At the North Pole, the speed of rotation of the earth is 0 kilometers per hour.
34. The International Date Line and the 180th meridian are the same line.
35. Until about a century ago, most major nations had their own separate prime meridians for mapping purposes.
36. The International Date Line follows the Arctic/Antarctic Circle.
37. One rotation of the earth takes exactly 24 hours.
38. The earth has the shape of a true sphere.
39. The circle of illumination is a small circle.
40. The great circle route is displayed as a straight line on all maps.
41. The Prime Meridian is, by design, shorter than other meridians.
42. The adoption of Daylight Savings Time would be of little value for most nations in the Tropics.
43. The apparent motion of the sun, moon, and stars is actually an illusion created by the easterly spin of the earth.
44. The plane of the Equator and the plane of the Ecliptic are the same plane.
45. The orbits of the nine planets in our solar system are nearly all in the same plane.
46. Of seconds, degrees, and minutes of latitude, minutes are associated with the shortest distances.
47. The vertical rays of the sun migrate between 23.5° N and 23.5° S.
48. The sun makes up more than 90% of the total mass of the solar system.
49. An analemma is shaped like a figure 8.
50. __________ is the brightest object in the night sky.
    a) Venus  b) The sun  c) The moon  d) Mercury  e) Alpha Centauri

51. Of the following list, __________ is the planet without an atmosphere.
    a) Mars  b) Earth  c) Jupiter  d) Venus  e) Mercury

52. Literally, the term "a.m."
    a) is derived from classical Greek scholars  b) refers to standard time at Greenwich  
    c) is no longer used by most of the world  d) means "before noon"  e) "local solar noon"
53. Earth's axis is tilted ______ degrees from the plane of the ecliptic.

54. If the axis of the Earth was not tilted, Earth would not experience _______.

55. The phase of the moon which occurs about a week after the moon is completely dark is known as the _______.

56. Geography is
   a) a physical science b) a social science c) an art, not a science d) much the same as geology e) a combination of physical and social sciences

57. Which of the following is not contained within earth's system of latitude and longitude?
   a) A longitude of 5W° b) A longitude of 185°E c) A latitude of 0° d) A latitude of 89°N e) A latitude of 36°N

58. Using an analemma, one can readily figure the _____.
   a) amount of time taken by one rotation of the earth b) angle of the noon sun for any date and any place c) phases of the moon d) length of day at the Equator e) amount of time since the "big bang"

59. The most famous and, undoubtedly, most widely used of all the map projections is the ______.
   a) gnomonic b) Mercator's c) polyconic d) sinusoidal e) Mollweide's

60. The family of map projections designed with reference to a center point is ______.
   a) cylindrical b) elliptical c) azimuthal d) conic e) meridional

61. The relationship between the map distance and the corresponding distance on the ground is known as the ______.
   a) vector b) azimuth c) map quotient d) loxodrome e) scale

62. The scale of one inch equals one mile is fractionally represented as ______.
   a) 1/10,000 b) 1/63,360 c) 1/100,000 d) 1/1,000,000 e) 1/250,000

63. The characteristic of projections which portray accurate sizes but distort the shapes of land masses is called ______.
   a) conformality b) sinusoidal c) equivalence d) azimuthality e) polyconic

64. A true compass heading is referred to as a(n) ______.
   a) rhumb line b) equirectangular c) prime meridian d) photogrammetry e) gnomonic

65. Which of the following is considered a "perfect" map projection in terms of the amount of distortion associated with it?
   a) Mercator b) conic c) cylindrical d) any of the above e) none of the above

66. All map projections have this in common:
    a) small scale  b) no distortion c) correct location of latitude and longitude lines d) conformality e) all of the above
67. Conformal maps greatly distort ______ of continents in higher latitudes.
   a) shapes b) sizes  c) the number d) the latitude e) the longitude

68. The smallest scale of the following is:
   a) 1:100,000 b) 1:200,000 c) 1:500,000 d) 1:750,000 e) 1:900,000

69. The property of equivalence portrays accurate size although it ______.
   a) bends parallels b) renders the Poles as lines c) stretches the circle of tangency
d) distorts shapes e) all of the above

70. A loxodrome is another term for ______.
   a) rhumb line b) x-ray c) gnomon d) thermal scanner e) none of the above

71. A ______ scale remains correct even if the map is enlarged or reduced when
   reproduced.
   a) isogonic b) large c) graphic d) representative fraction e) color

72. Map essentials include all of the following EXCEPT ________
   a) direction b) legend c) scale d) conformality e) none of the above

73. A disadvantage of globes compared to maps is that globes are not
   a) conformal b) accurate c) suitable for use in class d) equivalent e) as portable

74. The original purpose of the Mercator projection was
   a) to produce an accurate, equal area map b) for the guidance of intercontinental missiles
c) for ocean navigation d) to make the first map of the world
e) to befuddle introductory physical geography students

75. In the Mercator projection, which piece of the Earth is portrayed ridiculously large in
   comparison to its actual size?
   a) low-latitude locations b) Greenland c) Brazil d) the continental U.S. e) none of the above

**True or False**

76. A globe maintains the properties of conformality and equivalence.
77. A globe is a better model of earth than any flat map can ever be.
78. All map projections have the basic property of equivalence.
79. Maps are inherently inaccurate because of their attempt to depict the curved earth on a flat surface.

80. Conformality and equivalence are, in general, mutually exclusive properties.

81. A loxodrome is
   a) line of constant compass bearing. b) a curved line on a Mercator projection.
c) the opposite of a rhumb line. d) a tracing of the exact great circle route. e) all of the
   above.
82. With a light bulb and paper, a Mercator projection is made by projecting the grid of the globe onto a(n) ______ made from the paper.
   a) flat surface b) cone  c) cylinder d) interrupted surface e) circle

83. There is no possible way to avoid distortion on a map projection.

84. Which of the following should contain a brief summary of the map's content or purpose?
   a) the title b) the legend c) the scale d) the area within the map boundaries e) none of the above

85. The explanations of symbols used on a map should be contained in
   a) the title b) the scale c) the legend d) the space under the north arrow e) any of the above

86. Geographic information system technology is a direct result of advances in
   a) surveying b) computer cartography c) spatial statistics d) remote sensing e) all of the above

87. To represent elevation on maps, cartographers use ______, which are a form of isoline.
   a) rhumb lines b) contour lines c) isoamplitudes d) meters e) isotherms

ANSWER KEY
41. False 42. True 43. True 44. False 45. True 46. False 47. True 48. True
49. True 50. c 51. e 52. d 53. 66.5 54. seasons 55. first quarter 56. e 57. b 58. b 59. b
60. c 61. e 62. b 63. c 64. a 65. e 66. c 67. b 68. e 69. d 70. a 71. c 72. d 73. e 74. c 75. b
76. True 77. True 78. False 79. True 80. True 81. a 82. c 83. True 84. a 85. c 86. e 87. b