CHESTER COUNTY AVIATION

Private Pilot - ASEL Certification Ground School Course
Practice Final Exam #2

Name: _____

Date: _____

1. Which combination of atmospheric conditions will reduce aircraft takeoff and climb performance?
    a. Low temperature, low relative humidity, and low density altitude.
    b. High temperature, low relative humidity, and low density altitude.
    c. High temperature, high relative humidity, and high density altitude.
2. What would decrease the stability of an air mass?
    a. Warming from below.
    b. Cooling from below.
    c. Decrease in water vapor.
3. Automatic Terminal Information Service (ATIS) is the continuous broadcast of recorded information concerning
    a. pilots of radar-identified aircraft whose aircraft is in dangerous proximity to terrain or to an obstruction.
    b. nonessential information to reduce frequency congestion.
    c. noncontrol information in selected high-activity terminal areas.
4. In the aeronautical decision making (ADM) process, what is the first step in neutralizing a hazardous attitude?
    a. Making a rational judgment.
    b. Recognizing hazardous thoughts.
    c. Recognizing the invulnerability of the situation.
5. In the Northern Hemisphere, the magnetic compass will normally indicate a turn toward the south when
    a. a left turn is entered from an east heading.
    b. a right turn is entered from a west heading.
    c. the aircraft is decelerated while on a west heading.
6. The numbers 9 and 27 on a runway indicate that the runway is oriented approximately
    a. 009° and 027° true.
    b. 090° and 270° true.
    c. 090° and 270° magnetic.
7. The responsibility for ensuring that an aircraft is maintained in an airworthy condition is primarily that of the
    a. pilot in command.
    b. owner or operator.
    c. mechanic who performs the work.
8. The most effective method of scanning for other aircraft for collision avoidance during nighttime hours is to use
    a. regularly spaced concentration on the 3-, 9-, and 12-o'clock positions.
    b. a series of short, regularly spaced eye movements to search each 30-degree sector.
    c. peripheral vision by scanning small sectors and utilizing off-center viewing.
9. True airspeed is
    a. the speed of the wind over the ground.
    b. the speed of the aircraft over the ground.
    c. the speed of the aircraft through the air.
10. (Refer to Figure 35.) Determine the approximate manifold pressure setting with 2,450 RPM to achieve 65 percent maximum continuous power at 6,500 feet with a temperature of 36 °F higher than standard.
    a. 19.8" Hg.
    b. 20.8" Hg.
    c. 21.0" Hg.

11. If a flight is made from an area of low pressure into an area of high pressure without the altimeter setting being adjusted, the altimeter will indicate
   a. the actual altitude above sea level.
   b. higher than the actual altitude above sea level.
   c. lower than the actual altitude above sea level.

12. If a recreational or private pilot had a flight review on August 8, this year, when is the next flight review required?
   a. August 8, next year.
   b. August 31, 1 year later.
   c. August 31, 2 years later.

13. (Refer to Figure 22, area 1.) The visibility and cloud clearance requirements to operate over Sandpoint Airport at night at less than 700 feet AGL are
   a. 3 miles and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from each cloud.
   b. 1 mile and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from each cloud.
   c. 3 miles and clear of clouds.

14. Which approach and landing objective is assured when the pilot remains on the proper glidepath of the VASI?
   a. Runway identification and course guidance.
   b. Safe obstruction clearance in the approach area.
   c. Lateral course guidance to the runway.

15. On the calculator side of the flight computer, distance in miles is always found on which scale?
   a. Outer.
   b. Inner.
   c. Far inner.

16. An aircraft had a 100-hour inspection when the tachometer read 1259.6. When is the next 100-hour inspection due?
   a. 1349.6 hours.
   b. 1359.6 hours.
   c. 1369.6 hours.

17. When would a pilot be required to submit a detailed report of an emergency which caused the pilot to deviate from an ATC clearance?
   a. Within 48 hours if requested by ATC.
   b. Immediately.
   c. Within 7 days.

18. The angular difference between true north and magnetic north is
   a. magnetic deviation.
   b. magnetic variation.
   c. compass acceleration error.

19. (Refer to Figure 4.) Which color identifies the power-off stalling speed in a specified configuration?
   a. Upper limit of the green arc.
   b. Upper limit of the white arc.
   c. Lower limit of the green arc.

20. The lateral dimensions of Class D airspace are based on
   a. the number of airports that lie within the Class D airspace.
   b. 5 statute miles from the geographical center of the primary airport.
   c. the instrument procedures for which the controlled airspace is established.

21. What are the minimum requirements for airplane operations under special VFR in Class D airspace at night?
   a. The airplane must be under radar surveillance at all times while in Class D airspace.
   b. The airplane must be equipped for IFR with an altitude reporting transponder.
   c. The pilot must be instrument rated, and the airplane must be IFR equipped.

22. (Refer to Figure 64.) Which marking indicates a vehicle lane?
   a. Letter A.
   b. Letter C.
   c. Letter E.

23. The possibility of carburetor icing exists even when the ambient air temperature is as
   a. high as 70 °F and the relative humidity is high.
   b. high as 95 °F and there is visible moisture.
   c. low as 0 °F and the relative humidity is high.

24. (Refer to Figure 9, area C.) How should the flight controls be held while taxiing a tricycle-gear equipped airplane with a left quartering tailwind?

a. Left aileron up, elevator neutral.
b. Left aileron down, elevator down.
c. Left aileron up, elevator down.

25. The purpose of Military Training Routes, charted as VFR Military Training Routes (VR) and IFR Military Training Routes (IR) on sectional charts, is to ensure the greatest practical level of safety for all flight operations and to allow the military to conduct

a. low altitude, high-speed training.
b. radar instrument training.
c. air-to-air refueling training.

26. What exception, if any, permits a private pilot to act as pilot in command of an aircraft carrying passengers who pay for the flight?

a. If the passengers pay all the operating expenses.
b. If a donation is made to a charitable organization for the flight.
c. There is no exception.

27. (Refer to Figure 14.) The wind and temperature at 12,000 feet MSL as reported by a pilot are

a. 090° at 21 knots and -9 °C.
b. 090° at 21 MPH and -9 °F.
c. 080° at 21 knots and -7 °C.

28. Given the following;

Airport Elevation: 500 feet MSL
Temperature: 23 °C
Dewpoint: 15 °C
Lapse Rate: 2 °C per 1,000 feet

Find the approximate base of the cumulus clouds.

a. 4,000 feet MSL.
b. 4,500 feet MSL.
c. 2,300 feet MSL.

29. (Refer to Figures 32 and 33.) What effect does a 35-gallon fuel burn (main tanks) have on the weight and balance if the airplane weighed 2,890 pounds and the MOM/100 was 2,452 at takeoff?

a. Weight is reduced by 210 pounds and the CG is aft of limits.
b. Weight is reduced by 210 pounds and the CG is unaffected.
c. Weight is reduced to 2,680 pounds and the CG moves forward.

30. (Refer to Figure 14.) The intensity and type of icing reported by a pilot is

a. light to moderate.
b. light to moderate rime.
c. light to moderate clear.

31. A left turn at this intersection would place the aircraft

a. ready for a runway 26 intersection takeoff.
b. on the taxiway leading to runway 26.
c. ready for a runway 8 intersection takeoff.

32. (Refer to Figure 20, area 5.) The CAUTION box denotes what hazard to aircraft?

a. Unmarked balloon on cable to 3,008 feet MSL.
b. Unmarked balloon on cable to 3,008 feet AGL.
c. Unmarked blimp hangars at 300 feet MSL.

33. (Refer to Figure 20, area 3.) What is the recommended communications procedure for a landing at Currituck County Airport?

a. Transmit intentions on 122.9 MHz when 10 miles out and give position reports in the traffic pattern.
b. Contact Elizabeth City FSS for airport advisory service.
c. Contact New Bern FSS for area traffic information.

34. (Refer to Figure 12.) Which of the reporting stations have VFR weather?
   a. All.
   b. KINK, KBOI, and KJFK.
   c. KINK, KBOI, and KLAX.

35. Detonation may occur at high-power settings when
   a. The fuel mixture ignites instantaneously instead of burning progressively and evenly.
   b. an excessively rich fuel mixture causes an explosive gain in power.
   c. the fuel mixture is ignited too early by hot carbon deposits in the cylinder.

36. Which incident involving propellers is reportable to the NTSB under Part 830?
   a. A ground strike.
   b. Separation of a blade in flight.
   c. Loss of the propeller governor control.

37. (Refer to FAA-CT-8080-2G, Figure 75, west of area 6.) During preflight planning, your course is plotted to fly through R-2305. Where would you find additional information regarding this airspace?
   a. In the Aeronautical Information Manual.
   b. In the Chart Supplements U.S. (formerly Airport Facility Directory).
   c. On the Sectional Chart in the Special Use Airspace area.

38. How many satellites make up the Global Positioning System (GPS)?
   a. 25.
   b. 22.
   c. 24.

39. What is an important airspeed limitation that is not color coded on airspeed indicators?
   a. Never-exceed speed.
   b. Maximum structural cruising speed.
   c. Maneuvering speed.

40. Who is responsible for filing a Near Midair Collision (NMAC) Report?
   a. A passenger aboard the involved aircraft.
   b. Local law enforcement.
   c. Pilot and/or flight crew of aircraft involved in the incident.

41. (Refer to Figure 21, area 2.) Which airport is located at approximately 47°34'30"N latitude and 100°44'00"W longitude?
   a. Turtle Lake.
   b. Makeeff.
   c. Johnson.

42. What is the antidote when a pilot has a hazardous attitude, such as "Impulsivity"?
   a. It could happen to me.
   b. Do it quickly to get it over with.
   c. Not so fast, think first.

43. Unless each occupant is provided with supplemental oxygen, no person may operate a civil aircraft of U.S. registry above a maximum cabin pressure altitude of
   a. 12,500 feet MSL.
   b. 14,000 feet MSL.
   c. 15,000 feet MSL.

44. (Refer to Figure 36.) What is the crosswind component for a landing on Runway 18 if the tower reports the wind as 220° at 30 knots?
   a. 19 knots.
   b. 23 knots.
   c. 30 knots.

45. The amount of water vapor which air can hold depends on the
   a. dewpoint.
   b. air temperature.
   c. stability of the air.

46. With respect to the certification of aircraft, which is a class of aircraft?
   a. Normal, utility, acrobatic, limited.
   b. Airplane, rotorcraft, glider, balloon.
   c. Transport, restricted, provisional.

47. What procedure is recommended when climbing or descending VFR on an airway?
   a. Execute gentle banks, left and right for continuous visual scanning of the airspace.
   b. Advise the nearest FSS outlet of the altitude changes.
   c. Fly away from the centerline of the airway before changing altitude.

48. GIVEN:

	WEIGHT (LB)	ARM (IN)	MOMENT (LB-IN)
Empty weight	1,495.0	101.4	151,593.0
Pilot and passengers	380.0	64.0	----
Fuel (30 gal usable no reserve)	-----	96.0	----

The CG is located how far aft of datum?

a. CG 92.44.
b. CG 94.01.
c. CG 119.8.

49. Cumulonimbus Mamma clouds are associated with

a. the dissipating stage of a thunderstorm.
b. violent thunderstorms and tornadoes.
c. the cumulus state of a thunderstorm.

50. To act as pilot in command of an aircraft carrying passengers, the pilot must have made three takeoffs and three landings within the preceding 90 days in an aircraft of the same

a. make and model.
b. category and class, but not type.
c. category, class, and type, if a type rating is required.

51. With regard to carburetor ice, float-type carburetor systems in comparison to fuel injection systems are generally considered to be

a. more susceptible to icing.
b. equally susceptible to icing.
c. less susceptible to icing.

52. During operations at altitudes of more than 1,200 feet AGL and at or above 10,000 feet MSL, the minimum distance above clouds requirement for VFR flight is

a. 500 feet.
b. 1,000 feet.
c. 1,500 feet.

53. (Refer to Figure 27.) An aircraft departs an airport in the central standard time zone at 0930 CST for a 2-hour flight to an airport located in the mountain standard time zone. The landing should be at what time?

a. 0930 MST.
b. 1030 MST.
c. 1130 MST.

54. What is the one common factor which affects most preventable accidents?

a. Structural failure.
b. Mechanical malfunction.
c. Human error.

55. (Refer to Figure 15.) What is the valid period for the TAF for KMEM?

a. 1200Z to 1200Z.
b. 1200Z to 1800Z.
c. 1800Z to 2400Z.

56. Unless otherwise specified, Federal Airways include that Class E airspace extending upward from

a. 700 feet above the surface up to and including 17,999 feet MSL.
b. 1,200 feet above the surface up to and including 17,999 feet MSL.
c. the surface up to and including 18,000 feet MSL.

57. Risk management, as part of the aeronautical decision making (ADM) process, relies on which features to reduce the risks associated with each flight?

a. Application of stress management and risk element procedures.
b. Situational awareness, problem recognition, and good judgment.
c. The mental process of analyzing all information in a particular situation and making a timely decision on what action to take.

58. If the engine oil temperature and cylinder head temperature gauges have exceeded their normal operating range, the pilot may have been operating with

a. the mixture set too rich.
b. higher-than-normal oil pressure.
c. too much power and with the mixture set too lean.

59. Each person operating an aircraft at a VFR cruising altitude shall maintain an odd-thousand plus 500-foot altitude while on a

a. magnetic heading of 0° through 179°.
b. magnetic course of 0° through 179°.
c. true course of 0° through 179°.

60. An airplane said to be inherently stable will

a. be difficult to stall.
b. require less effort to control.
c. not spin.

Private Pilot Practice Final Exam Practice Test #2 Answer Key

1. C
2. A
3. C
4. B
5. C
6. C
7. B
8. C
9. C
10. C
11. C
12. C
13. A
14. B
15. A
16. B
17. A
18. B
19. C
20. C
21. C
22. B
23. A
24. B
25. A
26. B
27. C
28. B
29. A
30. B
31. C
32. A
33. A
34. C
35. A
36. B
37. C
38. C
39. C
40. C
41. B
42. C
43. C
44. A
45. B
46. B
47. A
48. B
49. B
50. C
51. A
52. B
53. B
54. C
55. C
56. B
57. B
58. C
59. B
60. B