

CHESTER COUNTY

## Private Pilot - ASEL Certification Ground School Course PRACTICE Final Exam #1

- 1. An electrical system failure (battery and alternator) occurs during flight. In this situation, you would?
  - A. Experience avionics equipment failure.
  - B. Probably experience failure of the engine ignition system, fuel gauges, aircraft lighting system, and avionics equipment.
  - C. Probably experience engine failure due to the loss of the engine-driven fuel pump and experience failure of the radio equipment, lights, and all instruments that require alternating.
- 2. When operating an aircraft at cabin pressure altitudes above 12,500 feet MSL up to and including 14,000 feet MSL, supplemental oxygen shall be used during?
  - A. The entire flight time at those altitudes.
  - B. That flight time in excess of 10 minutes at those altitudes.
  - C. That flight time in excess of 30 minutes at those altitudes.
- 3. Completion of an annual inspection and the return of the aircraft to service should always be indicated by?
  - A. The relicensing date on the Registration Certificate.
  - B. An appropriate notation in the aircraft maintenance records.
  - C. An inspection sticker placed on the instrument panel that lists the annual inspection completion date.
- 4. To update a previous weather briefing, a pilot should request?
  - A. an abbreviated briefing.
  - B. a standard briefing.
  - C. an outlook briefing.

- 5. (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.
- 6. (Refer to Figure 17.) What wind is forecast for STL at 9,000 feet?
  A. 230° magnetic at 25 knots.
  B. 230° true at 32 knots.
  C. 230° true at 25 knots.
- 7. (Refer to Figure 8.) What is the effect of a temperature decrease and a pressure altitude increase on the density altitude from 90 °F and 1,250 feet pressure altitude to 55 °F and 1,750 feet pressure altitude?
  - A. 1,700-foot increase.
  - B. 1,700-foot decrease.
  - C. 1,300-foot decrease.
- 8. Should it become necessary to handprop an airplane engine, it is extremely important that a competent pilot
  - A. Call "contact" before touching the propeller.
  - B. Be at the controls in the cockpit.
  - C. Be in the cockpit and call out all commands.
- (Refer to Figure 49.) Select the proper traffic pattern and runway for landing.
   A. Left-hand traffic and Runway 18.
  - B. Right-hand traffic and Runway 18.
  - C. Left-hand traffic and Runway 22.

- 10. How many Global Positioning System (GPS) satellites are required to yield a three dimensional position (latitude, longitude, and altitude) and time solution?
  - A. 5.
  - B. 6.
  - C. 4.
- Susceptibility to carbon monoxide poisoning increases as A. altitude increases.
   B. altitude decreases.
  - C. air pressure increases.
- 12. (Refer to Figure 23, area 3.) What is the height of the lighted obstacle approximately 6 nautical miles southwest of Savannah International?
  A. 1,534 feet AGL.
  B. 1,549 feet MSL.
  - C. 1,500 feet MSL.
- 13. Except when necessary for takeoff or landing, what is the minimum safe altitude required for a pilot to operate an aircraft over congested areas?
  - A. An altitude of 1,000 feet above any person, vessel, vehicle, or structure.
  - B. An altitude of 500 feet above the highest obstacle within a horizontal radius of 1,000 feet of the aircraft.
  - C. An altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft.
- 14. The basic purpose of adjusting the fuel/air mixture at altitude is to?
  - A. decrease the amount of fuel in the mixture in order to compensate for increased air density.
  - B. decrease the fuel flow in order to compensate for decreased air density.
  - C. increase the amount of fuel in the mixture to compensate for the decrease in pressure and density of the air.

- 15. Why is frost considered hazardous to flight?
  - A. Frost changes the basic aerodynamic shape of the airfoils, thereby increasing lift.
  - B. Frost slows the airflow over the airfoils, thereby increasing control effectiveness.
  - C. Frost spoils the smooth flow of air over the wings, thereby decreasing lifting capability.
- 16. (Refer to Figure 34.) What is the maximum amount of fuel that may be aboard the airplane on takeoff if loaded as follows?

WEIGH	T (LB)	MOM/1000		
Empty weight	1,350	51.5		
Pilot/front passenger	340			
Rear passengers	310			
Baggage	45			
Oil, 8 qt				

- A. 24 gallons.
- B. 32 gallons.
- C. 40 gallons.
- 17. Hazardous attitudes occur to every pilot to some degree at some time. What are some of these hazardous attitudes?
  - A. Poor risk management and lack of stress management.
  - B. Antiauthority, impulsivity, macho, resignation, and invulnerability.
  - C. Poor situational awareness, snap judgments, and lack of a decision making process.
- 18. (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.

- 19. Which VFR cruising altitude is appropriate when flying above 3,000 feet AGL on a magnetic course of 185°?
  A. 4,000 feet.
  B. 4,500 feet.
  - C. 5,000 feet.
- 20. The definition of nighttime is
  - A. Sunset to sunrise.
  - B. 1 hour after sunset to 1 hour before sunrise.
  - C. the time between the end of evening civil twilight and the beginning of morning civil twilight.
- 21. In weight and balance calculations, arm is
  - A. The distance between items.
  - B. The distance from the datum line to the item.
  - C. Weight times moment.
- 22. (Refer to Figure 50.) Which runway and traffic pattern should be used as indicated by the wind cone in the segmented circle?
  - A. Right-hand traffic on Runway 9.
  - B. Right-hand traffic on Runway 18.
  - C. Left-hand traffic on Runway 36.
- 23. (Refer to Figure 5.) A turn coordinator provides an indication of the
  - A. Movement of the aircraft about the yaw and roll axes.
  - B. Angle of bank up to but not exceeding 30°.
  - C. Attitude of the aircraft with reference to the longitudinal axis.
- 24. What is the definition of load factor?
  - A. Angle of bank relative to an increase in stall speed.
  - B. Angle of bank relative to the power-off stall speed in a specified configuration.
  - C. Additional weight carried by the wings divided by the weight of the aircraft.

- 25. An airplane said to be inherently stable will?
  - A. Be difficult to stall.
  - B. Require less effort to control.
  - C. Not spin.
- 26. (Refer to Figure 17.) What wind is forecast for STL at 12,000 feet?A. 230° true at 39 knots.
  - B. 230° magnetic at 56 knots.
  - C. 230° true at 56 knots.
- 27. Which type weather briefing should a pilot request, when departing within the hour, if no preliminary weather information has been received?
  - A. Outlook briefing.
  - B. Abbreviated briefing.
  - C. Standard briefing.
- 28. From whom should a departing VFR aircraft request radar traffic information during ground operations?
  - A. Clearance delivery.
  - B. Tower, just before takeoff.
  - C. Ground control, on initial contact.
- 29. When requesting weather information for the following morning, a pilot should request
  - A. an outlook briefing.
  - B. a standard briefing.
  - C. an abbreviated briefing.
- Maintenance records show the last transponder inspection was performed on September 1, 2014. The next inspection will be due no later than A. September 30, 2015.
  - B. September 1, 2016.
  - C. September 30, 2016.
- 31. (Refer to Figure 3.) Altimeter 1 indicates A. 500 feet.
  - B. 1,500 feet.
  - C. 10,500 feet.

- 32. (Refer to Figure 21, area 3.) What type military flight operations should a pilot expect along IR 644?
  - A. IFR training flights above 1,500 feet AGL at speeds in excess of 250 knots.
  - B. VFR training flights above 1,500 feet AGL at speeds less than 250 knots.
  - C. Instrument training flights below 1,500 feet AGL at speeds in excess of 150 knots.
- 33. What minimum visibility and clearance from clouds are required for VFR operations in Class G airspace at 700 feet AGL or below during daylight hours?
  - A. 1 mile visibility and clear of clouds.
  - B. 1 mile visibility, 500 feet below, 1,000 feet above, and 2,000 feet horizontal clearance from clouds.
  - C. 3 miles visibility and clear of clouds.
- 34. (Refer to Figure 48.) That portion of the runway identified by the letter A may be used for
  - A. landing.
  - B. taxiing and takeoff.
  - C. taxiing and landing.
- 35. When flying in a VFR corridor designated through Class B airspace, the maximum speed authorized is
  - A. 180 knots.
  - B. 200 knots.
  - C. 250 knots.
- 36. A nonfrontal, narrow band of active thunderstorms that often develop ahead of a cold front is a known as a
  - A. prefrontal system.
  - B. squall line.
  - C. dry line.
- 37. (Refer to Figure 15.) During the time period from 0600Z to 0800Z, what visibility is forecast for KOKC?
  - A. Possibly 6 statute miles.
  - B. Not forecasted.
  - C. Greater than 6 statute miles.

- 38. The wind at 5,000 feet AGL is southwesterly while the surface wind is southerly. This difference in direction is primarily due to
  - A. stronger pressure gradient at higher altitudes.
  - B. friction between the wind and the surface.
  - C. stronger Coriolis force at the surface.
- 39. During operations within controlled airspace at altitudes of less than 1,200 feet AGL, the minimum horizontal distance from clouds requirement for VFR flight is
  - A. 1,000 feet.
  - B. 1,500 feet.
  - C. 2,000 feet.
- 40. Which wind condition would be most critical when taxiing a nosewheel equipped high-wing airplane?A. Quartering tailwind.
  - B. Direct crosswind.
  - C. Quartering headwind.
- 41. Floating caused by the phenomenon of ground effect will be most realized during an approach to land when at
  - A. less than the length of the wingspan above the surface.
  - B. twice the length of the wingspan above the surface.
  - C. a higher-than-normal angle of attack.
- 42. Which basic flight maneuver increases the load factor on an airplane as compared to straight-and-level flight? A. Climbs.
  - B. Turns.
  - C. Stalls.

- 43. A pilot convicted for the violation of any Federal or State statute relating to the process, manufacture, transportation, distribution, or sale of narcotic drugs is grounds for
  - A. A written report to be filed with the FAA Civil Aviation Security Division (AMC-700) not later than 60 days after the conviction.
  - B. Notification of this conviction to the FAA Civil Aeromedical Institute (CAMI) within 60 days after the conviction.
  - C. Suspension or revocation of any certificate or rating, or authorization issued under 14 CFR Part 61.
- 44. (Refer to Figure 52.) What is the recommended communications procedure for landing at Lincoln Municipal during the hours when the tower is not in operation?
  - A. Monitor airport traffic and announce your position and intentions on 118.5 MHz.
  - B. Contact UNICOM on 122.95 MHz for traffic advisories.
  - C. Monitor ATIS for airport conditions, then announce your position on 122.95 MHz.
- 45. (Refer to Figure 4.) Which color identifies the power-off stalling speed with wing flaps and landing gear in the landing configuration?
  - A. Upper limit of the green arc.
  - B. Upper limit of the white arc.
  - C. Lower limit of the white arc.
- 46. (Refer to Figure 25, area 2.) The floor of Class B airspace at Air Park-Dallas Airport isA. at the surface.
  - B. 3,000 feet MSL.
  - C. 3,100 feet MSL.
- 47. What is one procedure to aid in cooling an engine that is overheating?
  - A. Enrichen the fuel mixture.
  - B. Increase the RPM.
  - C. Reduce the airspeed.

- 48. What are the standard temperature and pressure values for sea level?
  A. 15 °C and 29.92 inches Hg.
  B. 59 °C and 1013.2 millibars.
  - C. 59  $^\circ\text{F}$  and 29.92 millibars.
- 49. The angle of attack for a propeller is defined as
  - A. The angle between the propeller chord line and the relative wind.
  - B. The angle between the propeller chord line and the thrust vector.
  - C. The pitch angle of the blade to the propeller hub.
- 50. "Runway hold position" markings on the taxiway
  - A. identifies where aircraft hold short of the runway.
  - B. identifies area where aircraft are prohibited.
  - C. allows an aircraft permission onto the runway.
- 51. (Refer to Figure 14.) If the terrain elevation is 1,295 feet MSL, what is the height above ground level of the base of the ceiling?
  - A. 505 feet AGL.
  - B. 1,295 feet AGL.
  - C. 6,586 feet AGL.
- 52. If the outside air temperature (OAT) at a given altitude is warmer than standard, the density altitude is
  - A. equal to pressure altitude.
  - B. lower than pressure altitude.
  - C. higher than pressure altitude.

53. What should be the indication on the magnetic compass as you roll into a standard rate turn to the right from a south heading in the Northern Hemisphere?

- A. The compass will initially indicate a turn to the left.
- B. The compass will indicate a turn to the right, but at a faster rate than is actually occurring.
- C. The compass will remain on south for a short time, then gradually catch up to the magnetic heading of the airplane.
- 54. When are the four forces that act on an airplane in equilibrium?
  - A. During unaccelerated flight.
  - B. When the aircraft is accelerating.
  - C. When the aircraft is at rest on the ground.
- 55. (Refer to Figure 4.) The maximum speed at which the airplane can be operated in smooth air is
  - A. 100 KTS.
  - B. 165 KTS.
  - C. 208 KTS.

- 56. (Refer to Figure 22.) Determine the estimated time en route for a flight from Priest River Airport (area 1) to Shoshone County Airport (area 3). The wind is from 030 at 12 knots and the true airspeed is 95 knots. Add 2 minutes for climb-out.
  - A. 27 minutes.
  - B. 29 minutes. C. 31 minutes.
- 57. Most midair collision accidents occur during
  - A. hazy days.
  - B. clear days.
  - C. cloudy nights.
- 58. To act as pilot in command of an aircraft towing a glider, a pilot is required to have made within the preceding 12 months
  - A. at least three flights in a powered glider.
  - B. at least three flights as observer in a glider being towed by an aircraft.
  - C. at least three actual or simulated glider tows while accompanied by a qualified pilot.
- 59. 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
- 60. 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.

## Private Pilot Practice Final Exam Practice Test #1 Answer Key

A A A A C B A C C B C B C

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