# Civil Air Patrol

Fullerton, CA

## Private Pilot Practice Test 60 Questions

1. What is the effect of temperature increase from 25 to 50° F on the density altitude if the pressure altitude remains at 5000 feet? (Figure 8)

A. 1,200 foot increase.
B. 1,400 foot increase.
C. 1650 foot increase.

2. Determine the total distance required for takeoff to clear a 50-obstical. (Figure 40)

- OAT = Std.
- Pressure altitude = 4,000 ft.
- Takeoff weight = 2800 lb.
- Headwind component = Calm.

3. Determine the magnetic course from Airpark east airport (Area 1) to Winnsboro Airport (area 2) magnetic variation is 6°30'E. (Figure 24)

A. 075°
B. 082°
C. 091°

4. With a reported wind south at 20 knots, which runway is appropriated for an airplane with a 13-knot maximum crosswind component? (Figure 36)

A. Runway 10.
B. Runway 14.
C. Runway 24.

5. If an aircraft is loaded 90 pounds over maximum certificated gross weight and a Fuel (gasoline) is drained to bring the aircraft weight within limits, how much fuel should be drained?

A. 10 gallons.
B. 12 gallons.
C. 15 gallons.

6. Which action can adjust the airplane's weight to maximum gross weight and the CG with limits for takeoff? (Figure 32 and Figure 33)

- Front seat occupants = 425 lb.
- Rear seat occupants – 300 lb.
- Fuel, main tanks = 44 gal

A. Drain 12 gallons of fuel.
B. Drain 9 gallons of fuel.
C. Transfer 12 Gallons of fuel from the main tanks to the auxiliary tanks.

7. What is true altitude?

A. The vertical distance of the aircraft above sea level.
B. The vertical distance of the aircraft above surface.
C. The height above the standard datum plane.

8. The airspace directly overlaying Fort Worth Meacham (area 4) is (Figure 25)

A. Class B airspace to 10.000 feet MSL.
B. Class C airspace to 5,000 feet MSL.
C. Class D airspace to 3,200 feet MSL.

9. Unless otherwise authorized, tow-way radio communication with Air Traffic Control are required for landing or takeoff at all towered airports.

A. regardless of weather conditions.
B. only when weather conditions are less than VFR.
C. within Class D airspace only when weather conditions are less than VFR.

10. Which of the reporting stations have VFR weather?




**Figure 12.** Aviation Routine Weather Reports (METAR).

A. All.
B. KINK, KBOI, and KJFK
C. KINK, KBOL, and KLAX.

11. If the terrain elevation is 1.295 feet MSL, what is the height above ground level of the base of the ceiling?




**Figure 14.** Pilot Weather Report.

A. 505 feet AGL.
B. 1,295 feet AGL.
C. 6,500 feet AGL.

12. Determine the approximate latitude and longitude of Currituck County Airport (area 3). Figure 20

A. 36°24'N – 76°01'W
B. 36°48'N – 76°01'W
C. 48°24'N – 75°58'W

13. The floor of Class B airspace at Dallas Executive Airport is (Figure 25)

A. at the surface.
B. 3,000 feet MSL
C. 3,100 feet MSL.

14. What is the height of the lighted obstacle approximately 6 nautical miles southwest of Savannah International? (Figure 23 Area 3)

A. 1,498 feet MSL
B. 1,531 feet AGL
C. 1,548 feet MSL

15. The control tower frequency for Addison Airport (area 2) is (Figure 25)

A. 122.95 MHz.
B. 126.0 MHz.
C. 133.4 MHz.

16. What is the recommended communication procedure when inbound to land at Cooperstown Airport? (Figure 26 area 2)

A. Broadcast intentions when 10 miles out on the CTAF/MULTICOM frequency. 122.9 MHz
B. Contact UNICOM when 10 miles out on 122.8 MHz
C. Circle the airport in a left turn prior to entering traffic.

TAF

KMEM 121720Z 1218/1324 20012KT 5SM HZ BKN030 PROB40 1220/1222 1SM TSRA OVC008CB
FM122200 33015G20KT P6SM BKN015 OVC025 PROB40 1220/1222 3SM SHRA
FM120200 35012KT OVC008 PROB40 1202/1205 2SM-RASN BECMG 1306/1308 02008KT BKN012
BECMG 1310/1312 00000KT 3SM BR SKC TEMPO 1212/1214 1/2SM FG
FM131600 VRB06KT P6SM SKC=

KOKC 051130Z 0512/0618 14008KT 5SM BR BKN030 TEMPO 0513/0516 1 1/2SM BR
FM051600 18010KT P6SM SKC BECMG 0522/0524 20013G20KT 4SM SHRA OVC020
PROB40 0600/0606 2SM TSRA OVC008CB BECMG 0606/0608 21015KT P6SM SCT040=

**Figure 15.** Terminal Aerodrome Forecasts (TAF).

17. The only cloud type forecast in TAF report is (Figure 15)

A. Nimbostratus.
B. Cumulonimbus.
C. Scattered cumulus.

18. What is the full flap operating range for the airplane? (Figure 4)

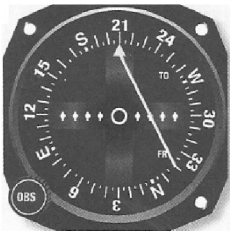
A. 55 to 100 kts.
B. 55 to 208 kts.
C. 55 to 165 kts.



Figure 4. Airspeed Indicator.

19. The VOR receiver has indication shown. What is the aircraft's positon relative to the station?

A. East
B. Southwest
C. West




20. What is the approximate position of the aircraft if the VOR receivers indicate the 245° radial of Sulphur Springs VOR-DME (Figure 24 area 5) and the 140° radial of Bonham VORTAC (Figure 24 area 3)?

A. Glenmar Airport.
B. Caddo Mills Airport.
C. Majors Airport.

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

A. Structural failure.
B. Mechanical malfunction.
C. Human error.

22. How should the flight controls be held while taxing a tailwheel airplane with a left quartering tailwind?

A. Left aileron up, elevator neutral.
B. Left aileron down, elevator neutral.
C. Left aileron down, elevator down.

23. Detonation occurs in a reciprocating aircraft engine when

A. the spark plugs are fouled or shorted out or the wiring is defective.
B. hot spots in the combustion chamber ignite the fuel/air mixture in advance of normal ignition
C. the unburned charge in the cylinders explodes instead of burning normally

24. During a night flight, you observe a steady red light and a flashing red light ahead at the same altitude. What is the general direction of movement of the other aircraft?

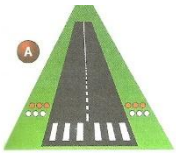
A. The other aircraft is crossing to the left.

B. The other aircraft is crossing to the right.
C. The other aircraft is approaching head-on.

25. What is the effect of advancing the throttle in flight?

A. Both aircraft groundspeed and angle of attack will increase.
B. Airspeed will remain relatively constant but the aircraft will climb.
C. The aircraft will accelerate, which will cause a turn to right.

26. Illustration A indicates that the aircraft is




A. below the glide slope.
B. on the glide slope.
C. above the glide slope.

27. What ATC facility should the pilot contact to receive a special VFR departure clearance in Class D airspace?

A. Automated Flight Service Station.
B. Air Traffic Control Tower.
C. Air Route Traffic Control Center.

28. 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.

29. Which condition would cause the altimeter to indicate a lower altitude than true altitude?

A. Air temperature lower than standard.
B. Atmospheric pressure lower than standard.
C. Air temperature warmer than standard.

30. Which condition is most favorable to the development of carburetor icing?

A. Any temperature below freezing and a relative humidity of less than 50 percent.
B. Temperature between 32° F and 50° F and low humidity.
C. Temperature between 20° F and 70° F and high humidity.

31. Prior to starting each maneuver, pilots should

A. check altitude, airspeed and heading indications.
B. visually scan the entire area for collision avoidance.
C. announce their intentions on the nearest CTAF.

32. Determine the magnetic heading for a flight from Fort Worth Meacham (Figure 25 Area 4) to Denton Mini (Figure 25 Area 1). The wind is from 330° at 25 knots, the true airspeed is 110 knots, and the magnetic variation is 7° E.

A. 003°.
B. 017°.
C. 023°.

33. What determines the longitudinal stability of an airplane?

A. The location of the CG with respect to the center of lift.
B. The effectiveness of the horizontal stabilizer, rudder, and rudder trim tab.
C. The relationship of thrust and lift to weight and drag.

34. 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.

35. VFR approach to land at night should be accomplished

A. at a higher airspeed.
B. with a steeper decent.
C. the same as during daylight.

36. Each pilot of an aircraft approaching to land served by a visual approach slope indicator (VASI) shall

A. maintain a $3^{o}$ glide to the runway.
B. maintain an altitude at or above the glide.
C. stay high until the runway can be reached in a power off landing.

37. When are the four forces that act on an airplane in equilibrium?

A. During an unaccelerated level flight.
B. When the aircraft is accelerating.
C. When the aircraft is at rest on the ground.

38. What is an important airspeed limitation that is not color coded on airspeed indicator?

A. Never-exceed speed.
B. Maximum structural cruising speed.
C. Maneuvering speed.

39. Which in-flight advisory would contain information on severe icing not associated with thunderstorms?

A. Convective SIGMET.
B. SIGMET.
C. AIRMET.

40. The present of ice pellets on the surface is evidence that there

A. are thunderstorms in the area.
B. has been cold frontal passage.
C. is a temperature inversion with freezing rain at a higher altitude.

41. Which statement best defines hypoxia?

A. A state of oxygen deficiency in the body.
B. An abnormal increase in the volume of air breathed.
C. A condition of gas bubbles formation around the joints or muscles.

42. If the pitot tube and outside static vents become clogged, which instruments would be affected?

A. The altimeter, airspeed indicator, and turn-and-slip indicator.
B. The Altimeter, airspeed indicator, and vertical speed indicator.
C. The altimeter, attitude indicator, and turn-and-slip indicator.

43. What action can a pilot take to aid in cooling an engine that is overheating during a climb?

A. Reduce rate of climb and increase airspeed.
B. Reduce climb speed and increase RPM.
C. Increase climb speed and increase RPM.

44. Which incident requires an immediate notification to be made to nearest NTSB field office?

A. An overdue aircraft that is believed to be involved in an accident.
B. An in-flight radio communication failure.
C. An in-flight generator or alternator failure.

45. With respect to the certification of airman, which are categories of aircraft?

A. Gyroplane, helicopter, airship, free balloon.
B. Airplane, rotorcraft, glider, lighter-than-air.
C. Single-engine land and see, multiengine land and sea.

46. A 100-hour inspection was due at 3302.5 hours. The 100-hour inspection was actually done at 3309.5 hours. When is the next 100-hours inspection due?

A. 3312.5 hours.
B. 3402.5 hours.
C. 3395.5 hours.

47. Prior to takeoff, the altimeter should be set to which or altimeter setting?

A. The current local altimeter setting, if available, or the departure airport elevation.
B. The corrected density altitude of the departure airport.
C. The corrected pressure altitude for the departure airport.

48. When must a current pilot certificate be in the pilot's personal possession or readily accessible in the aircraft?

A. When acting as a crew chief during launch and recovery.
B. Only when passengers are carried.
C. Any time when acting as pilot in command or as a required crewmember.

49. An airplane and an airship are converging. If the airship is left of the airplane's position, which aircraft has the right-of-way?

A. The airship.
B. The airplane.
C. Each pilot should alter course to the right.

50. 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. 12,000 feet MSL.
B. 14,000 feet MSL.
C. 15,000 feet MSL.

51. The three takeoffs and landings that are required to act as pilot in command at night must be done during the time period from

A. sunset to sunrise.
B. 1 hour after sunset to 1 hour before sunrise.
C. the end of evening civil twilight to the beginning of morning civil twilight.

52. In regard to privileges and limitations, a private pilot

A. act as pilot in command of an aircraft carrying passengers for compensation, if the flight is in connection with a business or employment.
B. not pay unless the pro rate share of the operation expenses of a flight with passengers provide expenses involve only fuel oil, airport expenders, or rental fees.
C. Under no conditions.

53. Under what condition, if any, may a pilot allow a person who is obviously under influence of drugs to be carried aboard an aircraft?

A. In an emergency or if the person is a medical patient under proper care.
B. Only if the person does not have access to fight or pilot's compartment.
C. Under no conditions.

54. What is one purpose of wing flaps?

A. To enable the pilot to make steeper approaches to landing without increasing the airspeed.
B. To relieve the pilot of maintaining continuous pressure on the controls.
C. To decrease wing area to vary the lift.

55. Thunderstorms reach their greatest intensity during the

A. mature stage.
B. downdraft stage
C. cumulus stage.

56. Where can locations for VOR test facilities be found?

*A. Aeronautical Information Manual.*
B. Sectional charts.
C. Chart Supplement.

57. A stable air mass is most likely to have which characteristic?

A. Showery precipitation.
B. Turbulent air.
C. Poor surface visibility.

58. Every physical process of weather is accompanied by or the results of a

A. movement of air
B. pressure differential.
C. heat exchange.

59. Convective circulation pattern associated with sea breezes are caused by

A. warm, dense air moving inland from over the water.
B. water absorbing and radiating heat faster than the land.
C. cool dense air moving inland from over the water.

60. Where does wind shear occur?

A. Only at higher altitudes.
B. Only at lower altitudes.
C. At all altitudes, in all directions.