The following sample exam for Private Pilot-Glider (PGL) is suitable study material for the Private Pilot-Glider Rating. These questions are a representation of questions that can be found on all Private Pilot-Glider Rating tests. The applicant must realize that these questions are to be used as a study guide, and are not necessarily actual test questions. The full PGL test contains 60 questions. The Application Identification, Information Verification and Authorization Requirements Matrix lists all FAA exams. It is available at: <a href="http://www.faa.gov/training-testing/airmen/media/testing-matrix.pdf">http://www.faa.gov/training-testing/airmen/media/testing-matrix.pdf</a>

The FAA testing system is supported by a series of supplement publications. These publications include the graphics, legends, and maps that are needed to successfully respond to certain test questions. FAA-CT-8080-2, Computer Testing Supplement for Recreational Pilot and Private Pilot is available at: <a href="http://www.faa.gov/training-testing/airmen/test-questions/media/FAA-CT-8080-2E.pdf">http://www.faa.gov/training-testing/airmen/test-questions/media/FAA-CT-8080-2E.pdf</a>

The Learning Statement Reference Guide for Airman Knowledge Testing contains listings of learning statements with their associated codes. Matching the learning statement codes with the codes listed on your Airman Knowledge Test Report assists in the evaluation of knowledge areas missed on your exam. It is available at: <a href="http://www.faa.gov/training\_testing/testing/airmen/media/LearningStatementReferenceGuide.pdf">http://www.faa.gov/training\_testing/testing/airmen/media/LearningStatementReferenceGuide.pdf</a>

### **SAMPLE PGL EXAM:**

#### 1. PLT245

A sailplane pilot can differentiate between a spin and a spiral dive because in a spiral dive,

- A) the speed remains constant.
- B) the G loads increase.
- C) there is a small loss of altitude in each rotation.

#### 2. PLT025

Which statement relates to Bernoulli's principle?

- A) For every action there is an equal and opposite reaction.
- B) An additional upward force is generated as the lower surface of the wing deflects air downward.
- C) Air traveling faster over the curved upper surface of an airfoil causes lower pressure on the top surface.

## 3. PLT124

(Refer to figure 8.) What is the effect of a temperature increase from 35 to 50 °F on the density altitude if the pressure altitude remains at 3,000 feet MSL?

- A) 1,000-foot increase.
- B) 1,100-foot decrease.
- C) 1,300-foot increase.

### 4. PLT402

When activated, an emergency locator transmitter (ELT) transmits on

- A) 118.0 and 118.8 MHz.
- B) 121.5 and 243.0 MHz.
- C) 123.0 and 119.0 MHz.

# 5. PLT497

When making routine transponder code changes, pilots should avoid inadvertent selection of which code?

- A) 7200.
- B) 7400.
- C) 7600.

#### 6. PLT088

(Refer to figure 4.) What is the caution range of the glider?

- A) 0 to 60 MPH.
- B) 100 to 165 MPH.
- C) 165 to 208 MPH.

(Refer to figure 4.) Which color identifies the normal flap operating range?

- A) The lower limit of the white arc to the upper limit of the green arc.
- B) The green arc.
- C) The white arc.

#### 8. PLT215

In the Northern Hemisphere, if a glider is accelerated or decelerated, the magnetic compass will normally indicate

- A) a turn toward north while decelerating on an east heading.
- B) correctly only when on a north or south heading.
- C) a turn toward south while accelerating on a west heading.

## 9. PLT088

(Refer to figure 4.) Which marking identifies the never-exceed speed?

- A) Upper limit of the green arc.
- B) Upper limit of the white arc.
- C) The red radial line.

### 10. PLT215

Deviation error of the magnetic compass is caused by

- A) northerly turning error.
- B) certain metals and electrical systems within the aircraft.
- C) the difference in location of true north and magnetic north.

### 11. PLT435

If a control tower and an FSS are located on the same airport, which function is provided by the FSS during those periods when the tower is closed?

- A) Automatic closing of the IFR flight plan.
- B) Approach control services.
- C) Airport Advisory Service.

## 12. PLT444

Who has final authority to accept or decline any land and hold short (LAHSO) clearance?

- A) Pilot in command.
- B) Air Traffic Controller.
- C) Second in command.

### 13. PLT077

(Refer to figure 49.) That portion of the runway identified by the letter A may be used for

- A) landing.
- B) taxiing and takeoff.
- C) taxiing and landing.

## 14. PLT141

(See Figure 65.) Which marking indicates a vehicle lane?

- A) A.
- B) C.
- C) E.

# 15. PLT141

The 'yellow demarcation bar' marking indicates

- A) runway with a displaced threshold that precedes the runway.
- B) a hold line from a taxiway to a runway.
- C) the beginning of available runway for landing on the approach side.

This sign is a visual clue that

- A) confirms the aircraft's location to be on taxiway "B."
- B) warns the pilot of approaching taxiway "B."
- C) indicates "B" holding area is ahead.

#### 17. PLT141

This sign confirms your position on

- A) runway 22.
- B) routing to runway 22.
- C) taxiway 22.

## 18. PLT141

From the cockpit, this marking confirms the aircraft to be

- A) on a taxiway, about to enter runway zone.
- B) on a runway, about to clear.
- C) near an instrument approach clearance zone.

## 19. PLT161

The radius of the procedural Outer Area of Class C airspace is normally

- A) 10 NM.
- B) 20 NM.
- C) 30 NM.

#### 20. PLT376

(Refer to figure 27, area 3.) When flying over Arrowwood National Wildlife Refuge, a pilot should fly no lower than A) 2.000 feet AGL.

- B) 2,500 feet AGL.
- C) 3,000 feet AGL.

#### 21. PLT393

What action should a pilot take when operating under VFR in a Military Operations Area (MOA)?

- A) Obtain a clearance from the controlling agency prior to entering the MOA.
- B) Operate only on the airways that transverse the MOA.
- C) Exercise extreme caution when military activity is being conducted.

## 22. PLT161

If your glider is equipped with 4096 code radar beacon transponder, the code utilized for normal operations is A) 1201.

- B) 1200.
- C) 7700.

# 23. PLT219

A pilot unintentionally enters a steep diving spiral to the left. What is the proper way to recover from this attitude without overstressing the glider?

- A) Apply up-elevator pressure to raise the nose.
- B) Apply more up-elevator pressure and then use right aileron pressure to control the overbanking tendency.
- C) Relax the back pressure and shallow the bank; then apply up-elevator pressure until the nose has been raised to the desired position.

#### 24. PLT221

The sailplane has become airborne and the towplane loses power before leaving the ground. The sailplane should release immediately,

- A) and maneuver to the right of the towplane.
- B) extend the spoilers, and land straight ahead.
- C) and maneuver to the left of the towplane.

What would be a proper action or procedure to use if the pilot is getting too low on a cross-country flight in a sailplane?

- A) Continue on course until descending to 1,000 feet above the ground and then plan the landing approach.
- B) Fly directly into the wind and make a straight-in approach at the end of the glide.
- C) Have a suitable landing area selected upon reaching 2,000 feet AGL, and a specific field chosen upon reaching 1,500 feet AGL.

#### 26. PLT006

A sailplane has a best glide ratio of 23:1. How many feet will the glider lose in 8 nautical miles?

- A) 1,840 feet.
- B) 2,100 feet.
- C) 2,750 feet.

### 27. PLT444

Pre-takeoff briefing of passengers for a flight is the responsibility of

- A) all passengers.
- B) the pilot.
- C) a crewmember.

#### 28. PLT103

What is the antidote when a pilot has a hazardous attitude, such as 'Impulsivity'?

- A) Do it quickly to get it over with.
- B) It could happen to me.
- C) Not so fast, think first.

#### 29. PLT271

The destination airport has one runway, 08-26, and the wind is calm. The normal approach in calm wind is a left hand pattern to runway 08. There is no other traffic at the airport. A thunderstorm about 6 miles west is beginning its mature stage, and rain is starting to reach the ground. The pilot decides to

- A) fly the pattern to runway 08 since the storm is too far away to affect the wind at the airport.
- B) fly the normal pattern to runway 08 since the storm is west and moving north and any unexpected wind will be from the east or southeast toward the storm.
- C) fly an approach to runway 26 since any unexpected wind due to the storm will be westerly.

# 30. PLT332

A pilot experiencing the effects of hyperventilation should be able to restore the proper carbon dioxide level in the body by

- A) slowing the breathing rate, breathing into a paper bag, or talking aloud.
- B) breathing spontaneously and deeply or gaining mental control of the situation.
- C) increasing the breathing rate in order to increase lung ventilation.

# 31. PLT334

A lack of orientation with regard to the position, attitude, or movement of the aircraft in space is defined as A) spatial disorientation.

- B) hyperventilation.
- C) hypoxia.

### 32. PLT012

How far will an aircraft travel in 7.5 minutes with a ground speed of 114 knots?

- A) 14.25 NM.
- B) 15.00 NM.
- C) 14.50 NM.

(Refer to figure 27, area 2.) The day VFR visibility and cloud clearance requirements to operate over the town of Cooperstown, after departing and climbing out of the Cooperstown Airport at or below 700 feet AGL are

- A) 1 mile and clear of clouds.
- B) 1 mile and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from clouds.
- C) 3 miles and clear of clouds.

#### 34. PLT078

(Refer to figure 53.) Where is Loup City Municipal located with relation to the city?

- A) Northeast approximately 3 miles.
- B) Northwest approximately 1 mile.
- C) East approximately 10 miles.

## 35. PLT078

(Refer to figure 53.) When approaching Lincoln Municipal from the west at noon for the purpose of landing, initial communications should be with

- A) Lincoln Approach Control on 124.0 MHz.
- B) Minneapolis Center on 128.75 MHz.
- C) Lincoln Tower on 118.5 MHz.

#### 36. PLT455

(Refer to figure 52.) What information should be entered in block 12 for a VFR day flight?

- A) The actual time enroute expressed in hours and minutes.
- B) The estimated time in enroute expressed in hours and minutes.
- C) The total amount of usable fuel onboard expressed in hours and minutes.

#### 37. PLT064

(Refer to figure 21, area 1.) The NALF Fentress (NFE) Airport is in what type of airspace?

- A) Class C.
- B) Class E.
- C) Class G.

# 38. PLT323

What information is contained in the Notices to Airman Publication (NTAP)?

- A) Current NOTAM (D) and FDC NOTAMs.
- B) All Current NOTAMs.
- C) Current NOTAM (L) and FDC NOTAMs.

### 39. PLT371

With respect to the certification of airmen, which is a category of aircraft?

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

#### 40. PLT162

The width of a Federal Airway from either side of the centerline is

- A) 4 nautical miles.
- B) 6 nautical miles.
- C) 8 nautical miles.

## 41. PLT434

Two-way radio communication must be established with the Air Traffic Control facility having jurisdiction over the area prior to entering which class airspace?

- A) Class C.
- B) Class E.
- C) Class G.

A flashing white light signal from the control tower to a taxiing aircraft is an indication to

- A) taxi at a faster speed.
- B) taxi only on taxiways and not cross runways.
- C) return to the starting point on the airport.

#### 43. PLT496

The minimum allowable strength of a towline used for an aerotow of a glider having a certificated gross weight of 700 pounds is

- A) 560 pounds.
- B) 700 pounds.
- C) 1,000 pounds.

#### 44. PLT496

When using a towline having a breaking strength more than twice the maximum certificated operating weight of the glider, an approved safety link must be installed at what point(s)?

- A) Only the point where the towline is attached to the glider.
- B) The point where the towline is attached to the glider and the point of attachment of the towline to the towplane.
- C) Only the point where the towline is attached to the towplane.

#### 45. PLT163

During operations outside controlled airspace at altitudes of more than 1,200 feet AGL, but less than 10,000 feet MSL, the minimum flight visibility for VFR flight at night is

- A) 1 mile.
- B) 3 miles.
- C) 5 miles.

### 46. PLT163

During operations outside controlled airspace at altitudes of more than 1,200 feet AGL, but less than 10,000 feet MSL, the minimum distance below clouds requirement for VFR flight at night is

- A) 500 feet.
- B) 1,000 feet.
- C) 1,500 feet.

## 47. PLT369

In which class of airspace is acrobatic flight prohibited?

- A) Class E airspace not designated for Federal Airways above 1,500 feet AGL.
- B) Class E airspace below 1.500 feet AGL.
- C) Class G airspace above 1,500 feet AGL.

#### 48. PLT081

(Refer to figure 16.) The Chicago FA forecast section is valid until the twenty-fifth at

- A) 0800Z.
- B) 1400Z.
- C) 1945Z.

## 49. PLT274

To determine the freezing level and areas of probable icing aloft, the pilot should refer to the

- A) Inflight Aviation Weather Advisories.
- B) Weather Depiction Chart.
- C) Area Forecast.

## 50. PLT076

(Refer to figure 17.) What wind is forecast for STL at 12,000 feet?

- A) 230° true at 56 knots.
- B) 230° true at 39 knots.
- C) 230° magnetic at 56 knots.

To best determine general forecast weather conditions covering a flight information region, the pilot should refer to

- A) Aviation Area Forecasts.
- B) Weather Depiction Charts.
- C) Satellite Maps.

## 52. PLT081

(Refer to figure 16.) What sky condition and type obstructions to vision are forecast for upper Michigan in the western portions from 0200Z until 0500Z?

- A) Ceiling becoming 1,000 feet overcast with visibility 3 to 5 statute miles in mist.
- B) Ceiling becoming 1,000 feet overcast with visibility 3 to 5 nautical miles in mist.
- C) Ceiling becoming 100 feet overcast with visibility 3 to 5 statue miles in mist.

### 53. PLT514

In addition to the standard briefing, what additional information should be asked of the weather briefer in order to evaluate soaring conditions?

- A) The upper soundings to determine the thermal index at all soaring levels.
- B) Dry adiabatic rate of cooling to determine the height of cloud bases.
- C) Moist adiabatic rate of cooling to determine the height of cloud tops.

## 54. PLT128

Why is frost considered hazardous to flight?

- A) Frost changes the basic aerodynamic shape of the airfoils, thereby decreasing 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.

## 55. PLT081

(Refer to figure 16.) What sky condition and visibility are forecast for upper Michigan in the eastern portions after 2300Z?

- A) Ceiling 1,000 feet overcast and 3 to 5 statute miles visibility.
- B) Ceiling 1,000 feet overcast and 3 to 5 nautical miles visibility.
- C) Ceiling 100 feet overcast and 3 to 5 statute miles visibility.

## 56. PLT081

(Refer to figure 16.) What is the outlook for the southern half of Indiana after 0700Z?

- A) Scattered clouds at 3,000 feet AGL.
- B) Scattered clouds at 10.000 feet.
- C) VFR.

#### 57. PLT511

The boundary between two different air masses is referred to as a

- A) frontolysis.
- B) frontogenesis.
- C) front.

## 58. PLT291

The section of the Area Forecast entitled 'VFR CLDS/ WX' contains a general description of

- A) cloudiness and weather significant to flight operations broken down by states or other geographical areas.
- B) forecast sky cover, cloud tops, visibility, and obstructions to vision along specific routes.
- C) clouds and weather which cover an area greater than 3,000 square miles and is significant to VFR flight operations.

# 59. PLT021

(Refer to figure 54.) What is the CG of the glider if the pilot and passenger each weigh 215 pounds?

- A) 74.69 inches aft of datum out of limits forward.
- B) 81.08 inches aft of datum within limits.
- C) 81.08 inches aft of datum over maximum gross weight.

(Refer to figure 54.) How is the CG affected if radio and oxygen equipment weighing 35 pounds is added at station 43.8? The glider weighs 945 pounds with a moment of 78,000.2 pound-inches prior to adding the equipment.

- A) CG shifts forward 0.79 inch out of limits forward.
- B) CG shifts forward 1.38 inches within limits.
- C) CG shifts aft 1.38 inches out of limits aft.