The following sample exam for Private Pilot-Helicopter (PRH) is suitable study material for the Private Pilot-Helicopter Rating. These questions are a representation of questions that can be found on all Private Pilot-Helicopter 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 PRH test contains 60 questions. The Application Identification, Information Verification and Authorization Requirements Matrix lists all FAA exams. It is available at: http://www.faa.gov/training-testing/airmen/media/testing-matrix.pdf

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: http://www.faa.gov/training-testing/airmen/test-questions/media/FAA-CT-8080-2E.pdf

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: http://www.faa.gov/training_testing/airmen/media/LearningStatementReferenceGuide.pdf

SAMPLE PRH EXAM:

1 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.

2 PLT168

The term `angle of attack` is defined as the angle between the

- A) chord line of the wing and the relative wind.
- B) airplane's longitudinal axis and that of the air striking the airfoil.
- C) airplane's center line and the relative wind.

3 PLT242

The lift differential that exists between the advancing main rotor blade and the retreating main rotor blade is known as

- A) transverse flow effect.
- B) dissymmetry of lift.
- C) hunting tendency.

4 PLT204

Select the UNICOM frequencies normally assigned to stations at landing areas used exclusively as heliports.

- A) 122.75 and 123.65 MHz.
- B) 123.0 and 122.95 MHz.
- C) 123.05 and 123.075 MHz.

5 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.

6 PLT268

With calm wind conditions, which flight operation would require the most power?

- A) A right-hovering turn.
- B) A left-hovering turn.
- C) Hovering out of ground effect.

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.

8 PLT497

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

- A) 7200.
- B) 4000.
- C) 7500.

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 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.

11 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.

12 PLT147

(Refer to figure 48.) While on final approach to a runway equipped with a standard 2-bar VASI, the lights appear as shown by illustration D. This means that the aircraft is

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

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?

- À) A.
- B) C.
- C) E.

15 PLT141

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.

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.

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 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.

23 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.

24 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.

When the course deviation indicator (CDI) needle is centered during an omnireceiver check using a VOR test signal (VOT), the omnibearing selector (OBS) and the TO/FROM indicator should read

A) 180° FROM, only if the pilot is due north of the VOT.

- B) 0° TO or 180° FROM, regardless of the pilot's position from the VOT.
- C) 0° FROM or 180° TO, regardless of the pilot's position from the VOT.

26 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.

27 PLT064

(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.

28 PLT101

(Refer to figure 26, area 5.) The navigation facility at Dallas-Ft. Worth International (DFW) is a

- A) VOR.
- B) VORTAC.
- C) VOR/DME.

29 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.

30 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.

31 PLT078

(Refer to figure 53.) 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.

32 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.

33 PLT362

To use VHF/DF facilities for assistance in locating an aircraft's position, the aircraft must have a

- A) VHF transmitter and receiver.
- B) 4096-code transponder.
- C) VOR receiver and DME.

(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.

35 PLT147

Which approach and landing objective is assured when the pilot remains on the proper glidepath of the VASI?

- A) Continuation of course guidance after transition to VFR.
- B) Safe obstruction clearance in the approach area.
- C) Course guidance from the visual descent point to touchdown.

36 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.

37 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.

38 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.

39 PLT141

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.

40 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.

41 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.

42 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.

Which is appropriate for a helicopter approaching an airport for landing?

- A) Remain below the airplane traffic pattern altitude.
- B) Avoid the flow of fixed-wing traffic.
- C) Fly right-hand traffic.

44 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.

45 PLT366

The operator of an aircraft that has been involved in an accident is required to file an NTSB accident report within how many days?

A) 5.

B) 7.

C) 10.

46 PLT372

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-hour inspection due?

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

47 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.

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 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.

50 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.

51 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.

(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.

53 PLT514

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.

54 PLT511

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

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

55 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.

56 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.

57 PLT021

(Refer to figure 44.) Determine if the helicopter weight and balance is within limits.

,	WEIGHT	ARM	MOMENT
	(LB)	(IN)	(100)
Empty weight	1,495.0	101.4	1,515.93
Oil, 8 qt		100.5	
Fuel, 40 gal		96.0	
Pilot and copilot	300.0	64.0	

- A) CG 95.2 inches, within limits.
- B) CG 95.3 inches, weight and CG out of limits.
- C) CG 95.4 inches, within limits.

58 PLT003

(Refer to figure 35.) Determine the moment with the following data:

(1 1 1 3 1 1 1 , 1 1 1	WEIGHT (LB)	MOM/1000
Empty weight	1,350	51.5
Pilot and front passenger	340	
Fuel (std tanks)	Capacity	
Oil, 8 qt		

- A) 69.9 pound-inches.
- B) 74.9 pound-inches.
- C) 77.6 pound-inches.

(Refer to figure 35.) Determine the aircraft loaded moment and the aircraft category. WEIGHT (LB) MOM/1000

	WEIGHT (LB)	MON
Empty weight	1,350	51.5
Pilot and front passenger	380	
Fuel, 48 gal	288	
Oil, 8 qt		

A) 78.2, normal category. B) 79.2, normal category.

C) 80.4, utility category.

60 PLT021

(Refer to figure 44.) Calculate the weight and balance of the helicopter, and determine if the CG is within limits.

	WEIGHT	ARM	MOMENT
	(LB)	(IN)	(100)
Empty weight	1,495.0	101.4	1,515.93
Oil, 8 qt		100.5	
Fuel, 40 gal		96.0	
Pilot	160.0	64.0	

A) CG 90.48 inches, out of limits forward. B) CG 95.32 inches, within limits. C) CG 97.58 inches, within limits.