Light Sport Pilot's Test Questions – Questions, Answers, and Explanations.
Text Book for Light Sport Pilot – First three pages of the text questions.
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Question 1. (Refer to figure 68.) The horizontal dashed line from point C to point E represents the

A) ultimate load factor.

B) positive limit load factor.

C) airspeed range for normal operations.

B. Figure 68 is a VG diagram. The line C to E represents the maximum load factor for the airplane. Flight beyond this may cause structural damage. PHAK Chapter 3 (Pg 30, 31)
A. Flight beyond the ultimate load factor causes structural failure. This limit is not shown on the diagram. PHAK Chapter 3 (Pg 30, 31)
C. Positive airspeed range for normal operations, is represented by the area bounded by the vertical lines A to J and D to G. PHAK Chapter 3 (Pg 30, 31)

Question 5. The angle of attack at which an airfoil stalls will

A) increase if the CG is moved forward.

B) remain the same regardless of gross weight.

C) change with an increase in gross weight.

B. An airplane stalls when the angle of attack, the angle between the chord line of the wing and the relative wind, exceeds 16 to 20 degrees depending on the design of the airplane. Neither the speed nor the weight of the airplane affects this. PHAK Chapter 2 & 3 (pg 3-20)
A. Moving the CG forward or rearward will not affect angle of attack at which the aircraft will stall. PHAK Chapter 3
C. Changing the gross weight of the airplane will not affect the angle of attack at which the aircraft will stall. PHAK Chapter 3

Question 6. Entries into traffic patterns while descending create specific collision hazards and

A) should be avoided.

B) should be used whenever possible.

C) are illegal.

A. Traffic pattern entries, while descending, create collision hazards and should be avoided. AIM 4-4-15 (old book 4-4-14)
B. It is dangerous to enter a traffic pattern while descending. AIM 4-4-15
C. There is no legal rule regarding a descent into a traffic pattern. AIM 4-4-15

Question 7. If faced with an emergency where Air Traffic Control (ATC) assistance is desired and not already in contact, which frequency can be used to establish communications?
A) 121.5 MHz.

B) 122.5 MHz.

C) 128.725 MHz.

A. Emergency frequencies are 121.5 MHz and 243.0 MHz. There is also an emergency frequency guarded by the U.S. Coast Guard on 2182 kHz. AIM 6-3-1
B. 122.5, is a FSS frequency. Other U.S. Frequency Allocation Chart
C. 128.725, is used as an ATIS or a Clearance Delivery frequency. Other U.S. Frequency Allocation Chart

Question 8. During departure, when visual separation is employed by Air Traffic Control (ATC), traffic is no longer a factor when
A) the other aircraft turns away or is on a diverging course.

B) visual contact with the other aircraft is lost.

C) the other aircraft is passed.

A. Traffic is no longer a factor when, during departure or en route, the other aircraft turns away or is on a diverging course. AIM 4-4-14
B. Traffic may still be a factor when visual contact has been lost. AIM 4-4-14
C. When pilots accept responsibility to maintain visual separation, they must maintain constant visual surveillance and not pass the other aircraft until it is no longer a factor. AIM 4-4-14

Question 10. What effect does an uphill runway slope have on takeoff performance?
A) Increases takeoff speed.

B) Increases takeoff distance.

C) Decreases takeoff distance.

B. An upsloping runway impedes acceleration and results in a longer ground run during takeoff. (Added – **However, takeoff speed remains the same.)** PHAK Chapter 9 (pg 9-14)
A. An upsloping runway would make it more difficult for the airplane to accelerate to takeoff speed. PHAK Chapter 9
C. The distance, in order to takeoff, is increased with an upsloping runway. PHAK Chapter 9

Question 28. An airport's rotating beacon operated during daylight hours indicates
A) there are obstructions on the airport.

B) that weather at the airport located in Class D airspace is below basic VFR weather minimums.

C) the Air Traffic Control tower is not in operation.

B. In Class B, C, D and E surface areas, an operating beacon during the hours of daylight often indicates that visibility is less than 3 miles and/or ceilings are less than 1,000 feet. AIM 2-1-8
A. Airport obstructions are not indicated by a rotating beacon. Check NOTAMs for airport obstructions. Other NOTAMs
C. Tower operation is not indicated by a rotating beacon. You can determine tower operation times by consulting the appropriate Airport/Facility Directory. Other A/FD

Question 31. When taxiing an airplane with strong quartering tailwinds, which aileron position should be used?
A) Neutral.

B) Aileron down on the side from which the wind is blowing.

C) Aileron up on the side from which the wind is blowing.

B. In a quartering tailwind, use down aileron and down elevator on the side from which the wind is blowing. AFH Chapter 2 (pg 2-9)
Replace with: B. When taxiing with a strong quartering tailwind, use down aileron on the side from which the wind is blowing to keep the wind from pushing under the wing, and flipping the airplane.
A. Use a neutral aileron in a quartering headwind. AFH Chapter 2
Replace with: A. Neutral ailerons would not keep the aircraft from tipping in a strong quartering tailwind.
C. Using an up aileron in a quartering tailwind could cause the wings to tip in the opposite direction. AFH Chapter 2

Question 34. What wind condition prolongs the hazards of wake turbulence on a landing runway for the longest period of time?

A) Light quartering headwind.

B) Direct tailwind.

C) Light quartering tailwind.

C. A tailwind can move the vortices of the preceding aircraft forward into the touchdown zone. Use maximum caution with a light quartering tailwind. AIM 7-3-4
A. A light quartering headwind tends to push the vortex out of the way sooner than a light quartering tailwind. AIM 7-3-4