

# PRE-SOLO BALLOON GROUND SCHOOL WRITTEN TEST

1. What documents(s) must be in your personal possession while operating as pilot in command of a balloon? \_\_\_\_\_
  - a. Certificates showing accomplishment of a checkout in the aircraft and a current biennial flight review.
  - b. A pilot certificate with an endorsement showing accomplishment of an annual flight review and a pilot logbook showing recency of experience.
  - c. An appropriate pilot certificate.
  
2. How long does the Airworthiness Certificate of an aircraft remain valid? \_\_\_\_\_
  - a. As long as the aircraft has a current Registration Certificate.
  - b. Indefinitely, unless the aircraft suffers major damage.
  - c. As long as the aircraft is maintained and operated as required by Federal Aviation Regulations.
  
3. What is the minimum age requirement for a person to be issued a Student Pilot Certificate limited to gliders or free balloons? \_\_\_\_\_
  - a. 14 years of age
  - b. 15 years of age
  - c. 16 years of age
  
4. What effect does haze have on the ability to see traffic or terrain features during flight? \_\_\_\_\_
  - a. Haze causes the eyes to focus at infinity.
  - b. The eyes tend to overwork in haze and do not detect relative movement easily.
  - c. All traffic or terrain features appear to be farther away than their actual distance.

5. Every physical process of weather is accompanied by, or is the result of, a \_\_\_\_\_
- a. Movement of air.
  - b. Pressure differential.
  - c. Heat exchange
6. What is meant by the term “*dewpoint*”? \_\_\_\_\_
- a. The temperature at which condensation and evaporation are equal.
  - b. The temperature at which dew will always form.
  - c. The temperature to which air must be cooled to become saturated.
7. What types of fog depend upon wind in order to exist? \_\_\_\_\_
- a. Radiation fog and ice fog.
  - b. Steam fog and ground fog.
  - c. Advection fog and upslope fog.
8. Low-level wind shear, which results in a sudden change of wind direction, may occur \_\_\_\_\_
- a. When surface winds are light and variable.
  - b. When there is a low-level temperature inversion with strong winds above the inversion.
  - c. When surface winds are above 15 knots and there is no change in wind direction and windspeed with height.
9. When telephoning a weather briefing facility for preflight weather information, pilots should state \_\_\_\_\_
- a. The aircraft identification or the pilot’s name.
  - b. True airspeed.
  - c. Fuel on board.

10. What is the weight of liquid propane per gal? \_\_\_\_\_  
a. 6.0 lbs.  
b. 4.2 lbs.  
c. 5.0 lbs.
11. What constitutes the payload of a balloon? \_\_\_\_\_  
a. Total gross weight.  
b. Total weight of passengers, cargo and fuel.  
c. Weight of the aircraft and equipment.
12. 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.
13. 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.
14. For VFR flight operations above 10,000 feet MSL and more than 1,200 feet AGL, the minimum horizontal distance from clouds required is \_\_\_\_\_  
a. 1,000 feet.  
b. 2,000 feet.  
c. 1 mile.

15. A balloon flight through a restricted area is \_\_\_\_\_  
a. Permitted at certain times, but only with prior permission by the appropriate authority.  
b. Permitted anytime, but caution should be exercised because of high-speed military aircraft.  
c. Never permitted.
16. Propane gas is heavier or lighter than air? \_\_\_\_\_  
a. Heavier than air  
b. Lighter than air  
c. The same weight as air.
17. 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.
18. The part of a balloon that bears the entire load is the \_\_\_\_\_  
a. Envelope material  
b. Envelope Seams  
c. Load tapes (or cords).
19. While in flight, ice begins forming on the outside of the fuel tank in use. This would most likely be caused by \_\_\_\_\_  
a. Water in the fuel.  
b. A leak in the fuel line.  
c. Vaporized fuel instead of liquid fuel being drawn from the tank into the main burner.

20. The windspeed is such that it is necessary to deflate the envelope as rapidly as possible during a landing. When should the deflation port (rip panel) be opened? \_\_\_\_\_
- The instant the gondola contacts the surface.
  - As the balloon skips off the surface the first time and the last of the ballast has been discharged.
  - Just prior to ground contact.
21. Which precaution should be exercised if confronted with the necessity of having to land a balloon when the air is turbulent? \_\_\_\_\_
- Land in any available lake close to the upwind shore.
  - Land in the center of the largest available field.
  - Land in the trees to absorb shock forces, thus cushioning the landing.