Kirtland Flight Center  Mountain Flying Test

Please do not mark on the reference material.

Minimum passing score is 80%  Each question is worth 5 points.

Instructions: View the mountain flying video, read/review the information in the Mountain Flying notebook, and complete the following test using the answer sheet provided.

1. (High Mountain Flying - 95) Which type of aeronautical chart is best for mountain flying?
   a. Low-Enroute Chart  
   b. WAC Chart  
   c. Sectional

2. (High Mountain Flying - 95) Flying up the middle of a canyon is not recommended because
   a. You won’t see traffic above you.
   b. Navigation signals may be unreliable.
   c. It may be impossible to climb or turn around to avoid terrain.

3. (High Mountain Flying - 95) When approaching a mountain pass on windy days, you may want to increase terrain clearance to ________.
   a. 500 to 1,000’ AGL  
   b. 1,500 to 2,000 AGL  
   c. 2,500 to 3,000 AGL

4. (High Mountain Flying - 95) Approach mountain passes and ridges at a ________ angle to reduce the number of degrees of turn required to head toward lower terrain.
   a. 30  
   b. 45  
   c. 90

5. (High Mountain Flying - 95) What are the main factors affecting air density?
   a. Altitude  
   b. Temperature  
   c. Humidity  
   d. All affect air density.

6. (High Mountain Flying - 95) Aircraft CG is important in every phase of flight, but CG becomes even more critical when operating near the boundaries of the aircraft’s aerodynamic limits. How does a forward CG affect the stall speed of an airplane?
   a. The aircraft stalls at a higher indicated airspeed.
   b. The aircraft stalls at a lower indicated airspeed.
   c. CG does not affect stall speed.
7. (High Mountain Flying - 95) When flying an aircraft with a normally aspirated engine, is a full-rich mixture setting recommended for approach and landing at high density altitudes?
   a. Yes
   b. No

8. (High Mountain Flying - 95) With respect to density altitude, normally aspirated engines lose about _____ % of their horsepower for each 1,000 feet above sea level.
   a. 1
   b. 3
   c. 5

9. (High Mountain Flying - 95) Turbocharged reciprocating engines may produce full power at high density altitudes, but the aircraft performance is still affected in several ways. Which performance factors are adversely affected?
   a. Wing/Propeller efficiency
   b. Takeoff/landing distance
   c. Climb performance
   d. All are adversely affected

10. (High Mountain Flying - 95) The reading on your aircraft altimeter when you have 29.92 inches set while on the ground is _____.
    a. Density Altitude
    b. Pressure Altitude
    c. Absolute Altitude

11. (AOPA’s Guide to Mountain Flying) Density altitude is pressure altitude corrected for _____.
    a. Absolute altitude
    b. True altitude
    c. Non-standard temperature

12. (AOPA’s Guide to Mountain Flying) Many mountain runways have some slope, and usually, an uphill landing is preferred. What optical illusion occurs when landing uphill?
    a. You think you are too high.
    b. You think you are too low.

13. (AOPA’s Guide to Mountain Flying) The rule of thumb for high density altitude takeoffs is to abort if _____ % of takeoff speed is not achieved by _______ down the runway.
    a. 50, 50
    b. 70, 50
    c. 50, 70
   a. does not change
   b. increases
   c. decreases

15. (AOPA’s Guide to Mountain Flying) Best rate of climb airspeed _______ as altitude increases.
   a. does not change
   b. increases
   c. decreases

16. (AOPA’s Guide to Mountain Flying) In general, plan to cross at least ______ feet above the ridge line and be at that altitude at least ____ mile(s) before reaching the ridge line.
   a. 500, 1
   b. 1000, 1
   c. 1000, 3

17. (AOPA’s Guide to Mountain Flying) What types of clouds at or near the crest of a mountain which indicate the presence of turbulence.
   a. Stratus, Cirrus
   b. Rotor, Lenticular, Cap
   c. Cumulous, Nimbo Stratus

18. (AOPA’s Guide to Mountain Flying) Why is the use of oxygen recommended when flying above 5,000 feet at night?
   a. To prevent autokinesis.
   b. To prevent spatial disorientation
   c. To ensure adequate night visual acuity

19. (AOPA’s Guide to Mountain Flying) On which side of a mountain valley should you fly?
   a. Updraft side
   b. Downdraft side

20. (AOPA’s Guide to Mountain Flying and High Mountain Flying - 95) Most experienced mountain pilots will not fly when winds at mountain top level exceed ____ knots.
   a. 20 to 25
   b. 30 to 35
   c. 40 to 45