Hanscom Flight Training Center
Warrior II Written Test

1. What is the recommended minimum octane fuel for use and its color?
   (A) 100LL – blue
   (B) 80LL – magenta
   (C) 100LL – magenta
   (D) none of the above

2. Usable fuel quantity is:
   (A) 48 gal fully fueled
   (B) 50 gal fully fueled
   (C) 38 gal if filled to the “tabs”
   (D) 36 gal if filled to the “tabs”

3. Oil capacity is:
   (A) 8 quarts
   (B) 7 quarts
   (C) 6 quarts
   (D) none of the above

4. V_A speed is:
   (A) rough air speed
   (B) the speed below which a sudden and full deflection of the flight controls will not result in airframe damage
   (C) minimum controllable airspeed
   (D) none of the above

5. V_A at maximum gross weight is:
   (A) 111 KIAS
   (B) 105 KIAS
   (C) neither A or B
   (D) must be calculated from performance charts

6. V_A speed is indicated on the airspeed indicator as:
   (A) top of the white arc
   (B) top of the yellow arc
   (C) top of the green arc)
   (D) V_A speed is not shown in the airspeed indicator

7. As gross weight of the aircraft decreases, the V_A speed:
   (A) increases
   (B) decreases
   (C) remains constant
   (D) varies depending upon the change of density altitude

8. V_{FE} is:
   (A) 103 KIAS
   (B) 111 KIAS
   (C) 44 KIAS
   (D) 126 KIAS

9. On the airspeed indicator, the bottom of the white arc is:
   (A) 44 kts
   (B) minimum steady flight speed in the landing configuration
   (C) neither A or B
   (D) both A and B

10. The Utility Category for the aircraft:
    (A) prohibits rear seat passengers
    (B) limits total weight of the aircraft to be no greater than 1975 lbs.
    (C) both A and B
    (D) neither A or B

11. The data reference point is located:
    (A) at the center of gravity for the aircraft
    (B) must be calculated from the weight and balance data located in the Operator's Handbook
    (C) at the tip of the propeller spinner
    (D) none of the above

12. The yellow arc on the airspeed indicator indicates:
    (A) Caution Range
    (B) Smooth Air Only
    (C) prohibits operation at an airspeed greater than 160 kts.
    (D) all of the above

13. For an engine fire in flight, the Information Manual recommends a descent airspeed at maximum gross weight of:
    (A) 73 kts. with 0° flap
    (B) 103 kts. with 0° flap
    (C) 160 kts. with 0° flap
    (D) no recommendation is made

14. For an electrical fire in flight, the Information Manual recommends:
    (A) master switch off
    (B) vents open
    (C) cabin heat off
    (D) all of the above

15. To close an open door in flight:
    (A) slow to no greater than 73 kts.
    (B) close the storm window
    (C) latch the side latch first then the top latch
    (D) all of the above

16. Starting the aircraft when the engine is flooded:
    (A) the throttle should be fully open
    (B) the throttle should be closed
    (C) the throttle should be ½ open
    (D) no recommendation is made in the Information Manual

17. Starting the engine with an external power source (if the aircraft is equipped with a Piper External Power option):
    (A) Master Switch may be on or off
    (B) all electric equipment off
    (C) after engine start, reduce power to lower RPM then disconnect the jumper cable
    (D) all of the above

18. Best glide speed of 73 kts.:
    (A) is calculated at maximum gross weight
    (B) provides greatest range
    (C) provides greatest time in the air
    (D) both A and B

19. Under normal conditions, the best take off speed is:
    (A) 45
    (B) 50
    (C) 55
    (D) the Information Manual makes no recommendation

20. Before attempting to set any circuit breaker, allow _____ cooling off period.
    (A) 2 to 5 minutes
    (B) 5 to 10 minutes
    (C) 10 minutes
    (D) the Information Manual makes no recommendation

21. At maximum gross weight, airspeed at best glide (73 kts.), wind milling propeller, pressure altitude at cruise approx. 6000 ft., terrain below at approx. 2000 MSL, and wind not a factor, one can expect glide range of appox.:
    (A) 5.5 nautical miles
    (B) 7.5 nautical miles
    (C) 11.25 nautical miles
    (D) more information is needed

22. In short field landing configuration with an approach speed of 63 KIAS, a headwind component of 10 kts., a 50 ft. barrier, and pressure altitude of 3000 ft. at the arrival airport, one can expect the landing distance to be approx.:
    (A) less than 1000 ft.
    (B) 1175 ft.
    (C) greater than 1400 ft.
    (D) more information is needed

23. What step(s) might a pilot take to prevent overheating in a climb?
    (A) climb at a higher airspeed
    (B) climb at a lower airspeed
    (C) lean the mixture
    (D) turn the fuel pump on

24. If during the magneto check there is no drop in RPM when switching from BOTH to RIGHT and the engine runs smoothly:
    (A) the magneto is operating at peak performance
    (B) there is likely a malfunction in the tachometer
    (C) the magneto is not grounded, which means that when the engine is shut down, moving the propeller by hand by hand may result in an unexpected engine start
    (D) none of the above

25. If after engine start, the ammeter shows a changing indicator (needle on the plus side, a pilot should:
    (A) shut down and consult a maintenance technician
    (B) monitor the charge and do not proceed further until the needle shows a neutral charge
    (C) turn the master off, wait 10 seconds, turn the master on and expect to see a neutral charge
    (D) proceed as this is a normal condition

Annual Reviews

Date _____ (CFI) _____

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Warrior II Written Test

Photo copies of this test are provided for your convenience so that you may take the test at home. Please use the multiple choice answer sheets that are also provided.