GACE Flying Club Aircraft Review Test, 2015
N5312S / N5928E

Included are additional questions related to N5928E. Answers relating to N5928E can be found on your checklist. Assume all questions are related to N5312S unless directed in the question.

Date: _____

Name: _____ GACE #: _____ Score: _____

Checked by: _____ CFI #: _____ Date: _____

1. What is the total fuel capacity? /Section: Page:

2. What is the fuel capacity if filled to the bottom of the filler indicator tab?
   /Section: Page:

3. What is the legal VFR endurance when leaving with 35 gallons of fuel and using a 9 GPH fuel burn? /Section: Page:

4. What is the maximum certificated takeoff weight in the normal Category _____ and utility category? _____ /Section Page:

5. What is the maximum allowable weight in the rear seats when operation in the utility category? /Section: Page:

6. Where on the airspeed indicator is the Maximum Structural Cruising speed located?
   /Section Page:

7. What is the Va (maneuvering speed) at 2550 lbs.? _____, 1900 lbs? _____

   Do not make _____or _____control movements above this speed.
   /Section: Page:

8. The maximum full flap extended speed is? /Section: Page:

9. What is the best rate of climb speed (sea level) for N5312S? _____
   /Section: Page:

10. What is the best angle of climb speed (sea level) for N5312S?_____
    /Section: Page:

11. What is the best rate of climb speed (sea level) for N5928E? _____
    /Section: Page:

12. What is the best angle of climb speed (sea level) for N5928E? _____
/Section: Page:

13. What color on the airspeed indicator denotes the full flap operating range? _____
/Section: Page:

14. Takeoff and landing should be accomplished with the fuel selector in _____position?
/Section: Page:

15. In N5928E the carburetor heat should be in the _____position before takeoff. Why?
/Section: Page:

16. In N5928E, you notice a loss of RPM in flight. What would be a good immediate action? _____
/Section: Page:

17. What is the maximum weight that can be loaded in the baggage compartment? ___
How much of that weight can be put aft of the baggage door latch? _____
/Section: Page:

18. What is the maximum allowable aft C.G. in the normal category? _____
/Section: Page:

19. What is the engine failure after takeoff speed without flaps? _____, with flaps?_____
/Section: Page:

20. What are the first two corrective actions if you experience engine failure during flight?
a._____, b. _____
/Section: Page:

21. What are the first two corrective actions to be taken if there is an engine fire in flight?
a._____, b. _____
/Section: Page:

22. How far could you expect to glide from 5000 AGL to the surface (no wind, use 9 to 1 ratio) ? _____ /Section Page

23. What are the first two corrective actions to be taken if the low voltage light illuminates in flight?
a. _____, b. _____
/Section: Page:

24. What is the corrective action if the fuel flow indicator drops to zero?
_____ /Section Page:

25. List the first three actions to be taken when executing a forced landing without engine power.
    1. _____
    2. _____
    3. _____

    /Section: Page:

26. N5312S has an automatic alternate air system. If the induction air inlet becomes clogged, then air is taken from inside the cowling. What is N5928E's alternate air system? _____. Is it automatic? _____

    /Section: Page:

27. List the first four actions to be taken if you experience and electrical fire in flight.
    1. _____
    2. _____
    3. _____
    4. _____

    /Section Page:

28. You notice erroneous readings with the altimeter and vertical speed indicator . You should suspect a _____, and put on the _____.

    /Section: Page:

29. What action should be taken if, while in flight, the oil pressure is low and the oil temperature is rising?

    _____
    _____
    _____.

    /Section: Page:

30. Excessive fuel vapor is most likely to be generated during ground operations when operating in unusually warm temperatures. Operation at or near idle RPM for extended periods will increase the chances of fuel vapor generation. Which gauge can be used to identify fuel vapor in the system? _____. What three actions should be taken if you suspect fuel vapor in flight?

    a. _____, b. _____, c. _____.

    /Section: Page:

31. You INADVERTENTLY ENCOUNTER ICING conditions. What are two systems you could turn on to help your situation. 1. _____, 2. _____.

    /Section: Page:

32. True or False: When landing with ice accumulation it is best to land with partial flaps? _____. /Section Page:

33. What is the maximum demonstrated crosswind velocity for takeoff or landing in both aircraft? _____. /Section: Page:

34. When executing a balked landing which sequence of actions is most appropriate?
    a. Full power, reduce flaps, pitch for airspeed
    b. Reduce flaps, full power, pitch for airspeed
    /Section: Page:

35. What airspeed should be achieved before retracting flaps to 10 degrees during a balked landing? _____ /Section: Page:

36. What is the recommended mixture setting when using the EGT gauge? _____
    a. 50 degrees lean of peak EGT
    b. Peak EGT
    c. 50 degrees rich of peak EGT
    d. None of the above
    /Section: Page:

37. What is the voltage of the alternator? _____. /Section: Page:

38. What is the voltage of the battery? _____. /Section: Page:

39. Which instrument in the panel does the auto pilot use for its indication of roll and yaw. _____. /Section: Page:

You are planning a cross country flight. You plan to fly at 5,500 feet and the temperature at the surface is -4 degrees Celsius. You want to use approx. 65% power to conserve on fuel. There is a normal lapse rate and tanks are full. Winds are reported 300 true @ 12 kts. Your magnetic course is 360 degrees.

There will be 200lbs in the pilot seat, 200lbs in the copilot seat, and 180lbs in the back seat. Both planes are available.

1. Which plane would you reserve N5312S or N5928E? _____Why? _____.
2. What cruise performance column would you use? _____
3. What is your TAS? _____.
4. What will be your GPH? _____
5. For planning, how long (time) can you fly and still be safe? _____.
6. For planning, how many miles can you travel and still be safe (VFR Day)? _____.
7. For planning, how long can you fly and still be safe (VFR Night)? _____.

Your destination has a runway that is 2300 feet long with a 200 foot displaced threshold. Field elevation is sea level. Temperature is -4 degrees Celsius. Winds are light and variable but there are obstacles on both ends. Your plan is to drop off a friend and return back to ISP.

1. True or False: It is good operating procedure to use the more conservative number when computing Fuel and Takeoff/Landing data using performance charts? _____
2. How much runway would you need to take off from this airport? _____
3. What flap setting is recommended for N5312S? _____
4. What flap setting is recommended for N5928E? _____
5. What is the Takeoff Distance with a 6 knot headwind? _____