N20313 AIRCRAFT QUIZ

1. What is the total fuel capacity _____ How many tanks are there? _____
   Total Usable fuel capacity? _____

2. What is the reduced fuel level per tank when filled to the holes? _____
   Bottom of collar? _____ with _____ gallons total unusable.

3. Where are the fuel drains located? _____

4. What fuel octane rating is specified? _____ Color? _____

5. Can you use a lower or higher octane rating? _____

6. Describe operation of the fuel selector valve. _____

7. How can you shut off fuel to the engine? _____

8. What is the recommended grade of oil? _____

9. What is the minimum/maximum oil level? _____

10. What is the aircraft's Basic Empty Weight? _____

11. What is the useful load? _____

12. What is the aircraft's maximum gross weight? _____

13. With full fuel, how many pounds of people and baggage could you take (full fuel payload)? _____, at the holes _____, bottom of collar _____

14. Calculate w&b: front seats 390, rear seats empty, 30# bags, 43 gal fuel. Are you under G.W.? _____, in C.G. _____, if not, what could you do?

15. What is the make and horsepower of the engine? _____

16. Give the definition and the corresponding airspeed for the following V speeds:

V speed	Definition	KIAS
Vne		
Vno		
Va (max gross)		
Vfe		
Vx		
Vy		
Vso		
Vs1		
Vg max gross		
En route cruise climb		
Max window open		
Normal approach		

17. Describe normal take-off and climb-out, configuration and airspeeds.

18. Describe traffic pattern procedures.

19. Describe balk landing, go-around procedures.

20. Normal cruise RPM range is _____ to _____ RPM.

21. Manifold pressure (M.P.) should be kept in the _____ arc except for take-off and climb.

22. Maximum demonstrated X-wind component _____

23. Describe the indications and starting procedures for

Normal: _____

Flooded: _____

Warm Engine: _____

24. What is the starter motor duty cycle? _____ sec max with _____ sec cool-down. no more than _____ times and allow to cool _____ min.

25. When is the aux fuel pump used? _____

26. When should you lean the engine? _____

27. Describe leaning procedures.

28. What is the Graphic Engine Monitor (G.E.M.) used for?

29. How are CHT's indicated? _____, EGT _____, each bar represents _____°.

30. Where can you find operating procedures for the G.E.M.?

31. Describe leaning using the G.E.M.

32. When do you apply carb. heat?

33. What are the indications and procedures for carb. ice?

34. How do you determine cylinder head temperature, CHT?

35. What is considered high CHT and how do you lower it?

36. What is considered high oil temperature and how do you lower it?

37. What are the indications of an electrical malfunction and what would you do?

38. What is the power setting, fuel consumption and T.A.S. for 75% power, 7500 P.A., standard temperature:
M.P. _____ RPM _____ Fuel Consumption _____ TAS _____

39. Allowing for a 45 min reserve (fuel at the holes), what is the max flying time? _____

40. Calculate take-off and landing performance:

Max Gross Weight, no wind, 2500 PA, standard temp:
T/O _____ LDG _____ Climb Rate _____

Max Gross Weight, no wind, 2500 PA, 40 C:
T/O _____ LDG _____ Climb Rate _____

Max Gross Weight, 10kt headwind, 2500 PA, 43 C:

T/O _____ LDG _____ Climb Rate _____

41. Can you comply with FAR 91.103 when temps are above 40 C? _____

42. What category is this aircraft certified in and what maneuvers are acceptable?

43. What are the emergency procedures for engine fire on the ground?

Engine fire in-flight?

44. Does this aircraft have a fire extinguisher, describe operation.

45. Procedures for engine failure inflight and emergency landing w/o engine power.

46. Describe the fuel system:

47. Describe the electrical system:

48. What type autopilot is installed? _____

49.Where can you find operating procedures for the autopilot?

48. What are the operating modes?

49. What are the steps to engage the autopilot?

50. How do you disengage the autopilot?

51. What is the correct way to clean the windshield?

52. What should never be used on the windshield?

53. Do you need to switch the xponder from stby to alt before take-off?

54. Are you likely to get book performance from a 42-year-old airplane?