Airplane Pre-solo Questionnaire

1) Approved fuel grades and colors are:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_;\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2) Location and capacity of each fuel tank is:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_;\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

3) Total usable fuel under all flight conditions is \_\_\_\_\_\_\_\_\_\_\_ gallons.

4) Endurance at cruise flight, 2,500 feet, with a 45 minute reserve is:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

5) Oil capacity is \_\_\_\_\_\_\_\_ quarts. Min oil is \_\_\_\_\_\_\_\_ quarts and maximum oil is \_\_\_\_\_\_\_ quarts.

6) What make and grade oil is used?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_;\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

7) Minimum oil pressure is \_\_\_\_\_\_\_ psi. Maximum oil pressure is \_\_\_\_\_\_\_\_psi.

8) Minimum oil temperature is \_\_\_\_\_\_\_\_\_ degrees. Maximum oil temperature is \_\_\_\_\_\_\_\_\_ degrees.

9) Magnetos are checked at \_\_\_\_\_\_\_ RPM. Maximum drop should be approximately \_\_\_\_\_\_\_\_ RPM not to exceed \_\_\_\_\_\_\_\_ RPM with no more than \_\_\_\_\_\_\_ RPM between each magneto.

10) Maximum take-off weight is \_\_\_\_\_\_\_\_ lbs. Maximum landing weight is \_\_\_\_\_\_\_\_ lbs.

11) What are the CG ranges at maximum gross weight?\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_\_ inches.

12) What is the maxiumum weight that one can place in the baggage compartment?\_\_\_\_\_\_\_\_\_\_\_\_ lbs.

13) Give the IAS for the following.

 a. Va \_\_\_\_\_\_\_\_\_ e. Vx \_\_\_\_\_\_\_\_\_

 b. VSO \_\_\_\_\_\_\_\_\_ f. Best Glide \_\_\_\_\_\_\_\_\_

 c. VS1 \_\_\_\_\_\_\_\_\_ g. Vr \_\_\_\_\_\_\_\_\_

 d. Vy \_\_\_\_\_\_\_\_\_

14) Give the immediate action/memory items for each emergency procedure:

 a. Engine failure immediately after take-off (below 500-feet).

 b. Fire during cranking and engine fails to start.

 c. Engine fire in flight coming from engine compartment.

 d. Engine fire in flight coming from the cockpit.

 e. Engine failure in flight.

15) Normal takeoff flap setting is \_\_\_\_\_\_\_\_, short field takeoff setting is \_\_\_\_\_\_\_, and soft field takeoff flap setting is \_\_\_\_\_\_\_\_.

16) Maximum demonstrated takeoff/landing crosswind component is \_\_\_\_\_\_\_\_\_ knots.

17) Given: PA = 4000 feet; Temp = 95-degees F; Runway 35; Wind 08020; runway is paved, level and dry and aircraft is at maximum gross takeoff weight. What is the take-off distance to clear a 50-foot obstacle?\_\_\_\_\_\_\_\_\_\_\_

18) Given: PA = 6000 feet; Temp = 95-degees F; Runway 35; Wind 08020; runway is paved, level and dry and aircraft is at maximum gross landing weight. What is the landing distance to clear a 50-foot obstacle?\_\_\_\_\_\_\_\_\_\_\_

19) Landing runway 35; wind 06018 gusting 30 knots; What is the crosswind component?\_\_\_\_\_\_\_\_\_\_\_\_.