ARROW COMPLEX AIRCRAFT CHECKOUT EXAM

1. Upon entering the airplane, you notice the landing gear lever is in the up position. If the master switch is turned on prior to placing the gear lever down, what will happen?

2. Prior to engine start on a cold day, priming] is accomplished by?

3. If the engine is flooded and will not start, what should you do?

4. The reason for cycling the propeller prior to flight is to?

5. Maximum RPM reduction during propeller cycling is _____.

6. After departure, the landing gear should remain down until _____, and should be _____ if takeoff is made from a wet or slushy runway during the winter months.

7. After departure you should go to climb power upon reaching _____ feet AGL or higher. Explain why.

8. For the following, choose the correct control movement sequence when adjusting power:

Full to Climb Power	**Low Cruise to High**
b. Prop., Mixture, Throttle.	a. Mixture, Prop., Throttle.
a. Mixture, throttle, Prop.	b. Throttle, Mixture, Prop.
c. Throttle, Prop., Mixture.	C. Throttle, Prop., Mixture.

9. Atmospheric pressure reduces by approximately 1" per 1,000 feet of altitude gain. How is this relevant to aircraft operations?

10. Provide the following:

VR (rotation speeds)	_____kts	
VX (best angle of climb)	_____kts gear down,	_____kts gear up
VY (best rate of climb)	_____kts gear down,	_____kts gear up
V_{LE} (max landing gear extended)	_____kts	
V_{LO} (max landing gear operating)	_____kts	
V_{FE} (max flap extension)	_____kts	
V_{SO} (stall speed)	_____kts	
V_S (stall speed)	_____kts	
V_A (maneuvering speeds)	_____kts	

11. _____ notches or ___ degrees of flaps are recommended for short and soft field takeoffs.

12. Three green lights indicate the landing gear is down and locked. What can you do if one or more of the lights will not illuminate?

13. Emergency extension of the landing gear is accomplished by?

14. How will the use of the panel or Nav lights effect the landing gear and locked lights during the day?

15. Where is the squat switch for the landing gear located? What is its purpose?

16. What effect would leaving the emergency gear lever partially engaged and/or not secured properly have on your flight as you return to the airport for landing?

17. If you are unable to restart the engine after failure, immediately trim for ____kts and move the propeller _____ pitch or _____RPM so as to obtain the maximum glide performance?

18. List the conditions where the landing gear unsafe warning will sound if you fail to lower the gear level.

19. Given the following, how far will the airplane glide:
    Cruise Pressure Altitude: 9,000'
    Cruise OAT: 0° Celsius
    Terrain Pressure Altitude: 1,000
    Terrain OAT: 20° Celsius

20. Given the following, find the landing distance over a 50 foot obstacle:
    Destination Pressure Altitude: 1,000'
    OAT: 59° Fahrenheit
    Weight: 2,750 lbs
    Wind: 315° @ 20 knots
    RWY: 27
    Approach Speed: 74 knots

21. Determine whether or not this airplane is loaded properly:
    Basic Empty Weight: 1,812.4 lbs, CG: 88.08 in
    Pilot & Front Passenger: 310 lbs (total)
    Rear Passenger(s): 115 lbs (total)
    Fuel (72 gal): 432 lbs
    Baggage: 120 lbs