

TRINIDAD TB-20

1. The engine's rated horsepower at sea level is _____.
 - a. 250
 - b. 200
 - c. 180
 - d. 275
2. The usable fuel capacity is _____ US gallons.
 - a. 86.2
 - b. 88.8
 - c. 52
 - d. 75.2
3. Maximum oil capacity and minimum safe quantity for the IO-540 engine is _____ quarts.
 - a. 8, 6
 - b. 6, 3
 - c. 10, 4
 - d. 12, 9
4. During preflight inspection the fuel tanks should be *visually* checked to insure the required amount of fuel for the planned flight is aboard:
 - a. True
 - b. False
5. When starting a flooded engine, the mixture control should be in what position?
 - a. Doesn't Matter
 - b. Full Rich
 - c. Idle Cut-Off
 - d. Half Lean
6. Check the magnetos during run-up at _____ RPM. Differential drop should not exceed _____ RPM while max drop on either magneto is _____ RPM.
 - a. 2000/50/50
 - b. 1700/75/125
 - c. 1800/50/150
 - d. 2000/50/175
7. The stall warning horn is typically activated at:
 - a. 10-20 knots above stall speed
 - b. Stall speed
 - c. 5-10 knots below stall speed
 - d. 5-10 knots above stall speed

8. With flaps and gear retracted, power at idle, and maximum gross weight, the aircraft should stall at _____ KIAS with 0° bank and _____ KIAS at 30°.
 - a. 70, 75
 - b. 80, 75
 - c. 65, 75
 - d. 55, 65
9. The mixture should always be leaned during cruise at 75% power or less
 - a. True
 - b. False
10. The procedure for flying in turbulent air is as follows:
 - a. Maintain fastest speed possible.
 - b. Slow to below maneuvering speed and maintain altitude.
 - c. Slow to below maneuvering speed and maintain level pitch attitude.
 - d. Don't fly in turbulent air.
11. Final approach speed is _____ KIAS.
 - a. 73 KIAS
 - b. 85 KIAS
 - c. 80 KIAS
 - d. 70 KIAS
12. The fuel selector should be on _____ fuel tank(s) prior to landing.
 - a. The Left
 - b. Both
 - c. The Fullest
 - d. The Right
13. For a normal takeoff, allow the aircraft to accelerate to _____ KIAS, then ease back on the control wheel to establish the approximate pitch attitude for climb at _____ KIAS.
 - a. 68/75
 - b. 50/60
 - c. 40/50
 - d. 65/73
14. The electric fuel pump should be "on" for the following operations:
 - a. Engine Starting Procedure
 - b. Takeoff
 - c. Landing
 - d. Switching of fuel tanks in-flight
 - e. All of the Above

15. Maximum gross weight and maximum baggage weights are _____ and _____, respectively.
- 2550/200
 - 3086/143
 - 2943/150
 - 2325/200
16. The flap positions are _____ for operation and _____ to be used as an entrance step.
- 10/20/30 and half down
 - 10/15/30 and full down
 - Take off (10°/Landing (40°), and not
 - 10/20/40 and makes no sense
17. The electrical system includes a _____ volt battery and a _____ volt, _____ amperes alternator.
- 24/28/70
 - 12/14/60
 - 28/28/70
 - 12/12/30
18. The Never Exceed speed, maximum structural cruising speed are:
- 187 KIAS 150 KIAS
 - 189 KIAS 130 KIAS
 - 151 KIAS 129 KIAS
 - 190 KIAS 175 KIAS
19. The maneuvering speed for a 3086 lb. aircraft is _____ KIAS.
- 125
 - 129
 - 132
 - 147
20. Gear extension and operating speeds are _____.
- The same, extension is 120 mph (CAS) and operating speed is 120 mph (CAS)
 - The same when the aircraft is at or above 2,000 feet.
 - Different, extended limit is 139 knots (KIAS) and operating speed is 129 knots (KIAS)
 - Equal to the Vne speed; high performance aircraft do not have gear speed restrictions.
21. Oil pressure limits are _____ PSI minimum and _____ PSI maximum.
- 12.5 and 29
 - 15.0 and 50
 - 45 and 80
 - 25.0 and 100

22. Fuel pressure operating range is _____ PSI.
- 0.1 to 8
 - 1.0 to 8
 - 1.0 to 6
 - 0.1 to 10
23. During ground handling, be certain **NOT** to _____ or _____.
- Turn the nose gear beyond its steering radius, tow when the controls are secured
 - Tow with ropes unless positioned low on the wheels; have a fully qualified pilot in the seat
 - Push on the inboard edges of the propeller blades, back the aircraft without a spotter
 - Pull forward by use of a tow bar alone, refuel before setting parking brake.
24. What cruise performance for best power is under the following conditions
- O.A.T.:** 40°F
- PWR:** 65%
- Pressure ALT:** 6000
- 140 TAS
 - 160 TAS
 - 150 TAS
 - 130 TAS
25. Find Center of Gravity from the following conditions:
- | | Weight | Arm | Moment |
|------------------|---------------|------------|---------------|
| Aircraft | 1903.37 | 38.96 | 74125.43 |
| Pilot/PAX | 350 lbs | 45.38 | |
| Rear PAX | 200 lbs | 80.00 | |
| Full Fuel | | 42.70 | |
| Baggage | 100 lbs | 102.54 | |
- 45.1
 - 41.4
 - 46.5
 - 43.5
26. Are touch and goes permissible in an Aero Club owned complex aircraft (See AFMAN34-232)?
- True
 - False