

Beale Aero Club

Aircraft Written Test

T41-C

(Required passing score: 80%)

THIS TEST IS NOT COMPLETE WITHOUT BOLDFACE/OPS LIMITS

1. The maximum gross weight for normal category operations is ____ lbs.
 - a. 2200
 - b. 2500
 - c. 2700

2. What is the maximum amount of time for operating the starter motor and the cooling time between starts?
 - a. 30 seconds and 3 minutes
 - b. 1 minute and 3 minutes
 - c. 2 minutes and 5 minutes

3. What type of hydroplaning is possible during light rain?
 - a. dynamic
 - b. viscous and reverted
 - c. reverted and dynamic

4. Should the oil pressure indications become abnormal in cold weather for no apparent reason, you should:
 - a. continue to destination and be watchful for other signs on engine problems
 - b. shut down the engine
 - c. declare an emergency and land as soon as practical

5. Except during emergency engine shutdowns, the fuel shut off valve should be left in the push ____ position.
 - a. on
 - b. off
 - c. does not matter

6. Should the aneroid in the engine driven fuel pump fail, it will fail in the ____ position.
 - a. full rich
 - b. full lean
 - c. present

7. Fuel quantity indicators are accurate only in:
 - a. stabilized straight and level flight
 - b. level flight below 2300 RPM
 - c. RPM settings below 1500

8. If no other electrical malfunctions exist, how many times may a circuit breaker be reset?
- 0
 - 1
 - 2
9. The stall warning horn is designed to activate ____ knots above stall?
- 3-5
 - 5-7
 - 5-10
10. To prevent burn injury to ground personnel, ensure the pitot heat is turned off:
- during ground operations
 - after pitot heat check
 - both a and b
11. In the event of an engine driven fuel pump failure, the best chance of regaining engine power is
- throttle position above 2100 RPM
 - aux fuel pump switch to LOW
 - both a and b
12. Do not use the cabin heating without:
- a source of fresh air
 - closing the cabin vents
 - selecting an RPM setting below 2300
13. Premature relaxation of the control inputs may ____ the recovery, resulting in additional altitude loss.
- expedite
 - inhibit
 - delay
14. The engine should start within 2 or 3 revolutions. If this does not occur, the probable cause is:
- excessive lean or rich mixture
 - vapor lock
 - both a and b
15. A throttle setting of ____ RPM while stopped on the ground will aid in engine cooling, lubrication and prevent spark plug fouling.
- 800
 - 1000
 - 1200

16. Excessive RPM during ground operation may result in FOD to:
- either stabilizer
 - propeller
 - both a and b
17. The engine oil pressure gauge should show a positive indication within ____ seconds.
- 30
 - 45
 - 60
18. If the magneto switch is accidentally turned to the OFF position during the magneto check, you should:
- turn back to both immediately
 - leave in the OFF position and retard the throttle to idle
 - return to the parking ramp for a maintenance check
19. During a short field take off, once safely airborne and clear of obstacles, raise the flaps at a minimum speed of ____ MPH.
- 75
 - 85
 - 95
20. If an ammeter deflection follows throttle movement, usually the cause is:
- engine over speed
 - throttle increased too rapidly
 - a faulty regulator
21. Using the licensed empty weight normal category (sample airplane) weight and moment, with full oil, full fuel, 1 pilot at 180lbs, 1 front passenger at 130lbs, a rear seat passenger at 160lbs, and a standard baggage compliment of 5lbs what is the total weight and moment of the aircraft?
- 2440 – 100.25
 - 2238 – 91.15
 - 2169 – 95.80
22. Using the data in question 21, if there was an additional rear passenger at 180lbs, would the aircraft still be inside the center of gravity and moment envelope?
- Yes
 - No

23. With the weight of 2200 lbs, 75°F, pressure altitude of 2,500, 10 kt headwind, the total to clear a 50 foot obstacle is:
- a. 890
 - b. 979
 - c. 780
24. At 7,500' pressure altitude, 2600 RPM, TAS will be _____ and fuel burn will be _____ gallons per hour.
- a. 126 MPH – 8.7
 - b. 138 MPH – 10.5
 - c. 128 MPH – 9.2
25. What is the landing distance (ground run and total to clear a 50' obstacle) for a max gross weight aircraft with 5 knots of headwind at 2,500' PA?
- a. 585 – 1,251
 - b. 715 – 1,529
 - c. 650 – 1,390