T-41C

Normal Procedures Test

Rocky Mountain Flight Center

(Ref: T.O. 1T-41C-1 Flight Manual & FTC SOP)

Please do not mark on booklet

1. The T-41C has _____ gallons of usable fuel in all flight conditions, an additional _____ gallons in level flight only, for a total of _____ gallons usable fuel.

   a) 23, 2.5, 26
   b) 23, 5, 54
   c) 46, 5, 51
   d) 46, 1, 52

2. The oil sump capacity is _____ quarts. Do not operate the engine with less than _____ quarts.

   a) 10, 8
   b) 10, 6
   c) 8, 7
   d) 8, 6

3. Electrical energy for the aircraft is supplied by a _____ volt D.C. system powered by a _____ ampere engine driven alternator and a _____ volt battery.

   a) 14, 60, 12
   b) 12, 60, 14
   c) 28, 35, 24
   d) 24, 30, 28

4. To unlock the shoulder harness inertial reel after a sudden movement the control lever must be _____.

   a) Moved forward
   b) Moved back
   c) Moved back to “Automatic”, then forward to “Manual”
   d) Moved forward to “Manual”, then back to “Automatic”

5. During “Normal” engine starts, the Axillary fuel pump switch should be in the _____ position and the throttle advanced to obtain a fuel flow of _____ gallons/hour, then reduced to ¼ to ½ inch.

   a) High 8 – 10
   b) High 6 – 8
   c) Low 4 – 6
   d) Low 8 – 10

6. The oil pressure gage should show a positive indication within _____.

   a) 1 minute
   b) 45 seconds
   c) 30 seconds
   d) 15 seconds

7. During engine run-up at 1800 RPM, the magneto RPM drops should not exceed _____ RPM or an RPM differential of more than _____.

   a) 150, 25
   b) 150, 50
   c) 125, 50
   d) 125, 25

8. During a normal takeoff, the nose should be raised to takeoff attitude at _____ MPH.

   a) 45
   b) 50
   c) 50 – 60
   d) 70 – 80

9. Perform short field or soft field takeoffs with _____ flaps:

   a) 0 degrees
   b) 10 degrees
   c) 15 degrees
   d) 20 degrees

10. The best angle of climb (Vx) speed during short field takeoffs is _____ MPH.

    a) 85 MPH
    b) 80 MPH
    c) 75 MPH
    d) 70 MPH

11. Normal climb speed (flaps up) is _____ MPH.

    a) 80 MPH
    b) 85 MPH
    c) 90 MPH
    d) 95 MPH

12. The flaps my be extended at a maximum speed of _____ MPH.

    a) 100
    b) 105
    c) 110
    d) 115

13. Maneuvering speed, the maximum speed at which abrupt control inputs can be used, is_____ MPH.

    a) 182
    b) 145
    c) 127
    d) 100

14. The following maneuvers are prohibited in the T-41C:

    a) Spins, steep turns, and aerobatic maneuvers
    b) Spins, zero or negative “G”, slips with more than 30 degrees of flaps
    c) Stalls, steep turns, IMC flight.
    d) Spins, engine shutdown in flight, abrupt control inputs at 120 MPH.

15. The power off stall speed of this aircraft at gross weight for normal category, flaps up and 20 degrees of bank is _____.

    a) 55 MPH
    b) 58 MPH
    c) 60 MPH
    d) 66 MPH

16. Takeoff distance at maximum gross weight and 10 knots headwind, at 5,000 feet at 66 degrees Fahrenheit is _____ feet ground run and _____ feet to clear a 50 foot obstacle.

    a) 770, 1330
    b) 902, 1485
    c) 820, 1350
    d) 1135, 1765

17. Optimum cruise performance in this aircraft for 6,500 feet MSL is _____ RPM and _____MPH true air speed.

    a) 2750, 135
    b) 2500, 125
    c) 2800, 138
    d) 1135, 176

18. Maximum endurance at 7,500 feet MSL and 2,600 RPM (60% BPH) with one hour reserve is _____ hours.

    a) 3.6
    b) 4.6
    c) 4
    d) 5

19. The maximum gross weight landing distance at an airport with an elevation of 7,500 fee MSL, 32 degrees Fahrenheit, no obstacle and 10 knots of headwind would be _____ feet.

    a) 580
    b) 685
    c) 725
    d) 1560

20. Determine the weight and balance for the airplane for normal category operations using the graphs in the flight manual.

Basic empty weight	1492 lbs	Moment 53.7
46 gallons fuel		
2 Front seat pilots	420 lbs	
Baggage (100 lbs. Of it in rear area)	200 lbs	
(Assume oil included in A/C basic weight)		

    a) Within weight limits; Forward CG
    b) Within weight limits; Within the CG envelope
    c) Over max gross weight; Aft CG
    d) Over max gross weight; within the CG envelop

21. Is this aircraft authorized for flying in the mountains?

    a) Yes
    b) No