

PILOT _____

INSTRUCTOR _____

DATE _____

Cessna T210N 6-month Quiz Tail: N9843Y

1. Date of current aircraft weight and balance computations _____
2. Aircraft empty weight: _____ lbs.
3. Maximum normal category takeoff gross weight: _____ lbs.
Maximum landing gross weight: _____ lbs.
4. Maximum baggage forward of wheel well: _____ lbs.
Maximum baggage on and aft of wheel well: _____ lbs.
5. Full fuel usable quantity: _____ gal.
Usable fuel quantity at fuel filler tab: _____ gal.
6. Maximum passenger and baggage weight with full fuel: _____ lbs.
Maximum passenger and baggage weight at fuel filler tab: _____ lbs.
7. If the aircraft is flown with only two persons in the front seat and full fuel, what is the maximum combined weight of the two persons? _____ pounds
8. Tire pressures are _____ psi for the nose tire and _____ for the main tires.
9. Minimum oil quantity is _____ qts. System oil capacity is _____ qts.
For local flights, oil would not be added above _____ qts.
10. The maximum fuel pressure/flow is:
_____ PSI
_____ PPH
_____ GPH
11. What is the maximum MP for cruise at an altitude of 20,000'? _____
12. What device controls the amount of exhaust going through the turbocharger? _____
13. How many fuel pumps are included in the fuel system? _____.
14. Under what conditions is the "start" fuel pump switch used?
 1. _____
 2. _____

15. Under what conditions is the “emergency” fuel pump switch used?
1. _____
16. The electrical system characteristics include:
 _____ voltage
 _____ number of alternators
 _____ number of alternator field switch(s)
 _____ number of battery(s)
 _____ capacity of alternator(s)
 _____ number of avionics switch(s)
 _____ number of electrical system related warning lights
17. The vacuum system contains _____ pump(s).
18. The wing de-ice system runs from the (select best answer):
 a. _____ only vacuum pump
 b. _____ left vacuum pump
 c. _____ right vacuum pump
 d. _____ turbocharger heated exhaust
 e. _____ right alternator
19. How many fuel system drains should be sampled during preflight? _____
 Where are these fuel system drains located? _____
20. The PIC must wear an Oxygen mask rather than a cannula at what altitude? _____
21. What is the duration of the oxygen system, if full at takeoff, for a pilot and three passengers each using masks? _____ hours
22. Where is the O2 filler port?

23. List the subsystems that must be fully operational for Flight Into Known Icing:
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____
 7. _____
 8. _____
 9. _____
 10. _____
24. In what level of icing is flight prohibited even with the approved equipment? _____
25. Below what outside air temperature must the engine be pre-heated before engine start? _____ °F

26. During Preflight, the Windshield Anti-Ice switch is turned on for what time: _____ seconds.
During Preflight, the Pitot Heat Switch is turn on for what time: _____ seconds.
27. During Preflight, the Fuel Tank Vents are checked. Where are they?

28. What action is taken with respect to the tail tie-down during preflight?

29. How is the engine primed for starting?
1. _____
2. _____
3. _____
4. _____
5. _____
30. After engine start, how should the mixture should be set?

31. During the Before Takeoff test of the boots, what should be observed after pressing the De-icing Switch?
1. _____
2. _____
3. _____
4. _____
5. _____
32. What oil temperature must be obtained before engine run-up is commenced? _____ °F
33. What minimum cylinder head temperature must be obtained on all cylinders before takeoff is commenced? _____ °F
34. What is the normal takeoff flap range? _____
35. If the aircraft will takeoff into potential icing conditions, what switches are turned on when crossing the hold short line?
1. _____
2. _____
3. _____
4. _____
36. For normal and short-field takeoff, what should be the time during which the throttle is being advanced between 50% power and takeoff power? _____ seconds.
37. For normal and short-field takeoff, what are the target values for:
MP: _____”
RPM: _____rpm
Fuel Flow: _____pph

38. On a normal takeoff, when are takeoff flaps retracted? _____
39. For a short-field takeoff, the airspeed to be maintained until over the object is ____ KIAS
40. For a short-field takeoff, when is the gear retracted? _____
41. Under what conditions are 20° flaps used for takeoff?

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42. For a maximum performance climb, what are the target values for:
 MP: _____”
 RPM: _____rpm
 Fuel Flow: _____pph
 Airspeed: _____KIAS
43. For normal climb, what are the target values for:
 MP: _____”
 RPM: _____rpm
 Fuel Flow: _____pph
 Airspeed: _____KIAS (to traffic pattern altitude)
 Airspeed: _____KIAS (enroute climb)
44. What are the KIAS values for the following V-speeds:
 Vs0 _____
 Vs _____
 Rotation _____
 Vx _____
 Best glide _____ (use max gross weight)
 Vy _____
 Vfe (<= 10°) _____
 Vfe (<= 20°) _____
 Vfe (<= 30°) _____
 Vle _____
 Vlo _____
 Va _____ (at maximum gross weight)
 Va _____ (at 2700 pounds)
 Vno _____
 Vne _____
 Landing _____ Final approach speed for normal landing (at max landing weight)
 Landing _____ Final approach speed for short field landing (at max landing weight)
45. What data applies for engine start, runup, taxi, and normal climb to 16,000’ on a day 7°C above standard?
 _____ Pounds Fuel
 _____ Minutes
 _____ Nautical miles

46. During cruise at 12,000' on a standard day at 75% BHP, the pilot should set and expect:
 _____ MP
 _____ RPM
 _____ KTAS
 _____ KIAS
 _____ PPH
 _____ GPH
47. What is the maximum continuous BHP that should be used at BEFA for cruise? _____ % BPH.
48. During cruise, the engine should be leaned to _____ °F [rich of peak / lean of peak] on the [first cylinder to peak / last cylinder to peak].
49. During cruise, the TIT should not exceed what temperature? _____ °F.
50. During cruise, the target range for CHT is _____ °F to _____ °F.
51. During descent, the maximum rate at which the MP may be reduced is _____ "MP per _____ minutes, and the maximum rate of Cylinder Head Temperature cooling is _____ °F per minute.
52. What adjustments to the mixture should be made during descent from the cruise configuration?

53. After landing, what is the required turbocharger cool down period before engine shutdown?
 _____ minutes
54. What are two autopilot limitations specified in the autopilot AFM supplement?
 1. _____
 2. _____
55. The maximum airspeed during autopilot operations is _____ KIAS, which is reduced by _____ KTS every 3,000' above FL 180.
56. The maximum flap deflection with the autopilot engaged is _____ °.
57. The maximum speed for Flap and Gear operations with the autopilot engaged in Altitude Hold Mode or Coupled Approach Modes is _____ KIAS.
58. What are three ways that the autopilot may be disengaged?
 1. _____
 2. _____
 3. _____
59. What is the ground roll distance and the total distance required to clear a 50 foot obstacle on takeoff for the following conditions using the POH numbers: Runway 9; Pressure altitude 4000 feet; temperature 30°C; Wind 090 (magnetic) at 10 knots; maximum gross weight; hard runway?
 _____ ground roll _____ to clear 50 foot obstacle

60. What is the ground roll distance and distance required to clear a 50 foot obstacle when landing for the following conditions using the POH numbers: Runway 9; Pressure altitude 4000 feet; temperature 30°C; Wind 090 (magnetic) at 10 knots; maximum gross weight; hard runway?
 _____ ground roll _____ to clear 50 foot obstacle
61. To act as PIC in the T210N, a BEFA member must complete a checkride with a BEFA CFI or have _____ hours and _____ Landings within _____ days in this aircraft.
62. Which Commercial/CFI maneuvers should not be practiced in the airplane?
 1. _____
 2. _____
63. List the initial “Memory” checklist items contain in the following emergency procedures:
- A. Engine Failure During Takeoff Roll
 1. _____
 2. _____
- B. Engine Failure Immediately After Takeoff
 1. _____
 2. _____
- C. Engine Failure Flight (RESTART)
 1. _____
 2. _____
 3. _____
- D. Engine Fire During Start On Ground
 1. _____
 2. _____
- E. Engine Fire In Flight
 1. _____
 2. _____
- F. Electrical Fire In Flight
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
- G. Cabin Fire
 1. _____
 2. _____
 3. _____

H. Wing Fire

1. _____
2. _____
3. _____

64. On the Garmin 340 Audio Panel, what knob and position controls the passenger intercom volume?

65. On the GNS 480 MAP1, MAP2, and MAP3 pages, what is the only thing that should be adjusted by BEFA members? _____
66. On the GNS 480 MAP1, MAP2, and MAP3 pages, what control is used to make the adjustment referenced in the previous question? _____
67. On the GNS 480, what is the first button to be pressed in order to define a hold?

68. On the GNS 480, the GPS will load an arrival or approach only at what airport(s)?

69. What are the following abbreviations?
GPSS: _____
WAAS: _____
LPV: _____
70. On the JPI Engine Monitor, what will be the first action required by the PIC after engine start?

71. On the JPI Engine Monitor, what is the significance of a flashing data value?

72. On the SL30 NAV/COM, what button must be pushed to initiate each of the following functions?
1. Enter a COM frequency: _____
2. Enter a NAV frequency: _____
3. Identify a VOR: _____
4. Display the VOR bearing/radial _____
73. On the 330 Transponder, identify three timer functions:
1. _____
2. _____
3. _____
74. What does the 330 Transponder automatically do on Takeoff and Landing?

75. Nexrad weather displayed on the GMX200 and/or Garmin 396 could be as old as _____ minutes and should be used for [strategic / tactical] weather avoidance

76. Traffic identified by the Traffic Information System will be displayed on what avionics?
 1. _____
 2. _____
77. Identify several conditions when the Traffic Information System may be unable to display traffic that might be a collision/safety hazard:
 1. _____
 2. _____
 3. _____

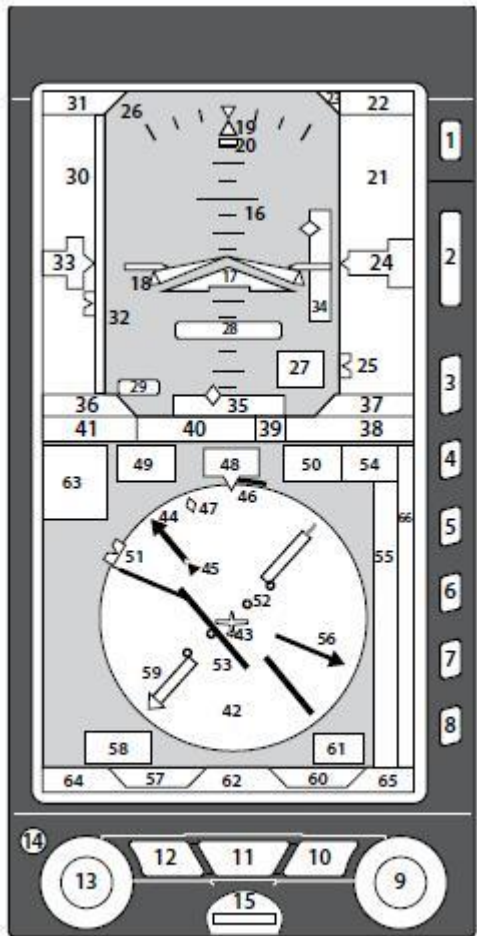


Figure 2-2 EFD1000 Display Elements

78. The button on the EFD1000 which controls the source of the CDI is _____
79. Circle the value that can be set by the Left Control Knob (13) and check the inactive home state
 1. IAS
 2. CRS
 3. ALT
 4. HDG
 5. VSI
 6. Minimums
 7. Baro
80. Circle the values that can be set by the Right Control Knob (9) and check the inactive home state
 1. IAS
 2. CRS
 3. ALT
 4. HDG
 5. VSI
 6. Minimums
 7. Baro
81. If the Left or Right Control Knobs have not been used for more than 10 seconds, what action is required before use? _____

82. Where is the state of the Left Control Knob displayed? _____
83. Where is the state of the Right Control Knob displayed? _____
84. Which button is pressed to toggle between GPSS and Heading guidance to the autopilot? _____
85. How will the pilot know that GPSS guidance is selected? _____

86. What values are shown in blocks 48, 49, and 50 respectively?
48. _____
49. _____
50. _____
87. In what block will the digital value of the selected IAS be displayed? _____
88. In what block will the digital value of the selected Altitude be displayed? _____
89. Where will the pilot look to maintain coordination with the rudder? _____
90. Select the best answer from the following:
1. The EFD1000 is powered from the avionics buss and should be OFF during engine start.
2. The EFD1000 is powered from the avionics buss and should be ON during engine start.
3. The EFD1000 is powered from the main battery buss and should be OFF during engine start.
4. The EFD1000 is powered from the main battery buss and should be ON during engine start.
91. How will the pilot know if the ERD1000 has determined that a function is invalid or failed and should not be used by the pilot? _____
92. What limitation applies to the Remote Sensor Module (RSM) GPS ? _____
93. What preflight checks are required by the pilot for the RSM?

94. If it is necessary to perform an in-flight restart of the AHRS, what actions are required by the pilot?
1. _____
2. _____
3. _____
4. _____
5. _____
95. When the GNS 480 manually or automatically switches from GPS to ILS/VLOC on an instrument approach, in addition to switching from Heading (GPSS mode) to NAV mode on the 400B autopilot, what action must the pilot take with respect to the EFIS?
