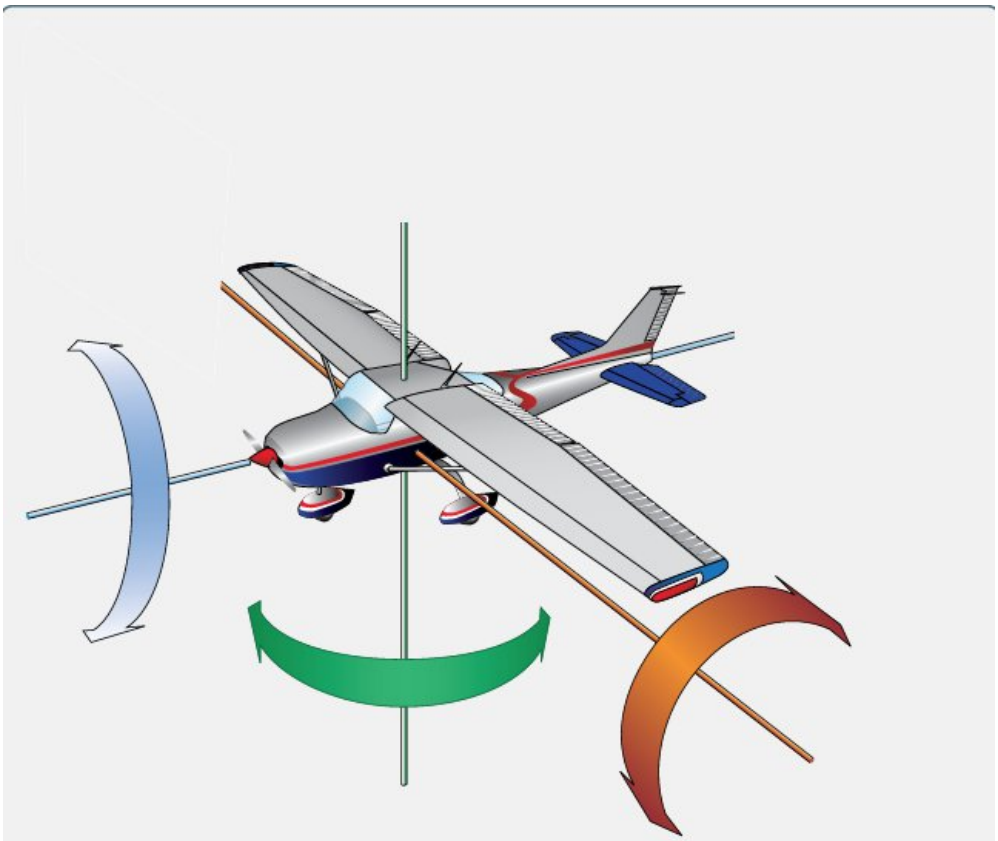
Question block created by wizard

This exam contains 140 questions.

1. Complete the numbered boxes.



Primary Control Surface	Airplane Movement	Axes of Rotation	Type of Stability
Aileron	1	Longitudinal	Lateral
Elevator/ Stabilator	2	Lateral	Longitudinal
Rudder	3	Vertical	Directional

- o (a) 1 Yaw; 2 Roll; 3 Pitch
- o (b) 1 Dive; 2 Climb; 3 Turn

- • (c) 1 Roll; 2 Pitch; 3 Yaw

If choice c is selected set score to 1.

2. What type of aerodynamic balance system is shown in the figure below?

- (a) Aerodynamic balance panel
- (b) Horn Balance
- (c) Inset Hinges

If choice b is selected set score to 1.

3. By high speed the elevons are a combination of....

- (a) ailerons and the rudder.
- (b) elevators and the trailing edge.
- (c) elevators and the ailerons.

If choice c is selected set score to 1.

4. What has the biggest effect on the speed of sound?

- (a) Temperature.
- (b) Humidity.
- (c) Pressure.

If choice a is selected set score to 1.

5. What type of wave is a "Bow Wave"?

- (a) Oblique shock wave.
- (b) Normal shock wave.

- (c) Turbulence

If choice b is selected set score to 1.

6. What is the main disadvantage of wing sweep back?

- (a) Wingtip stall before the wing roots.
- (b) Less lift than a straight wing.
- (c) Not useable on T-tailed aircraft.

If choice a is selected set score to 1.

7. What is the meaning of a "fail-safe structural design"?

- (a) It means that in case of partial structural failure the pilot will be informed by a caution warning.
- (b) It is just a fancy expression used as commercial argument.
- (c) It indicates that structural loads are shared over multiple parts.

If choice c is selected set score to 1.

8. What is the function of the Static dischargers?

- (a) They will protect the communication systems against a lightning strike.
- (b) In case of a static charge they lead the electrical energy off the aircraft.
- (c) They function as a communication antenna.

If choice b is selected set score to 1.

9. What is a cantilever wing?

- (a) A wing supported by struts and ties.
- (b) A wing attached in the middle.
- (c) A wing attached at one end only.

If choice c is selected set score to 1.

10. What is the most widely used assembly method in aircraft construction?

- (a) Bonding.
- (b) Solid rivets.
- (c) Blind rivets.

If choice b is selected set score to 1.

11. "DINITROL" and "LPS-3" are what kind of surface protection?

- o (a) Phosphate coating.
- o (b) Paint.
- • (c) Water displacing fluid.

If choice c is selected set score to 1.

12. Buckled skin and torn rivets are indicators of:

- • (a) Structural failure.
- o (b) Deviations in aircraft a-symmetry
- o (c) Bad construction.

If choice a is selected set score to 1.

13. Where would you find rapid depressurization panels?

- • (a) The wall linings of the cargo hold.
- o (b) The bottom of the passenger cabin side walls.
- o (c) In the pressure bulkheads.

If choice a is selected set score to 1.

14. The most common used floor material for passenger compartment floors are ....

- • (a) composite material.
- o (b) aluminium reinforced and steel bars.
- o (c) aluminium.

If choice a is selected set score to 1.

15. The upper wing surface is made of AL-7075 to withstand ....

- o (a) tension loads.
- • (b) compression loads.
- o (c) shear loads.

If choice b is selected set score to 1.

16. What are rigid fuel tanks usually made of?

- • (a) Light alloy

- (b) Stainless steel
- (c) Plastic

If choice a is selected set score to 1.

17. Radio antenna and HF equipment can typically be found on or in

- (a) Avionics bay.

- (b) Vertical stabilizer.

- (c) Horizontal stabilizer.

If choice b is selected set score to 1.

18. Where are the pivot points of the trimmable horizontal stabilizer located?

- (a) The trimable horizontal stabilizer does not have pivot points.
- (b) At the front of the tail cone-structure.

- (c) At the rear of the tail cone-structure.

If choice c is selected set score to 1.

19. Krueger flaps are a type of:

- (a) Lift dumping device.

- (b) Leading edge high lift device.

- (c) Trailing edge high lift device.

If choice b is selected set score to 1.

20. Flutter can be reduced by using?

- (a) Mass balancing.

- (b) Trim balance tabs.
- (c) A horn balance.

If choice a is selected set score to 1.

21. Where on a nacelle would you find acoustic panels?

- (a) Intake and turbine cowls.
- (b) Fan cowls and pylon.

- (c) Intake and exhaust.

If choice c is selected set score to 1.

22. Which of the following materials is NOT used for firewalls?

- o (a) Titanium.
- o (b) Thermoplastics.
- • (c) Aluminium alloy.

If choice c is selected set score to 1.

23. During normal stages of flight, the engine bleed air source comes from:

- • (a) The low pressure stage of the compressor.
- o (b) Ram air.
- o (c) The high pressure stage of the compressor.

If choice a is selected set score to 1.

24. Which of the following statements is **incorrect**?

A turbo compressor....

- o (a) can be switched on and off by the crew.
- • (b) is used on turbo-prop and piston engine.
- o (c) is used as a supplemental use source of bleed air.

If choice b is selected set score to 1.

25. What is the recommended amount of water vapour in the conditioned air supplied to the cabin?

- • (a) Between 30% and 40%
- o (b) More than 40%
- o (c) Zero

If choice a is selected set score to 1.

26. To compensate for the discomfort caused by the extraction of water from the air, what is sometimes used on long-haul aircraft?

- • (a) Humidifiers
- o (b) Water injection
- o (c) Water separation

If choice a is selected set score to 1.

27. Which of the following statements is correct?

- o (a) A vapour cycle machine cannot be used on piston engine aircraft.
- o (b) A vapour cycle machine can be used for pressurization.
- • (c) A vapour cycle machine is used if there is not enough bleed air available.

If choice c is selected set score to 1.

28. In a double heat exchanger system, which heat exchanger receives cooling first?

- • (a) The secondary main heat exchanger.
- o (b) The primary heat exchanger.
- o (c) They both receive cooling at the same time.

If choice a is selected set score to 1.

29. What is an advantage of using an recirculation system?

- o (a) It is possible to get more cold air.
- • (b) Less fuel consumption.
- o (c) It can detect a fire in the system.

If choice b is selected set score to 1.

30. What happens if an air conditioning pack overheats?

- o (a) I automatically slows down.
- • (b) It automatically shuts down.
- o (c) It goes into full cold mode.

If choice b is selected set score to 1.

31. Which of the following modes of pressurization places the highest load demands on the aircraft structure?

- o (a) Constant-differential pressure.
- o (b) Unpressurized.
- • (c) Isobaric mode.

If choice c is selected set score to 1.

32. What are the basic flight deck indications for pressurization?

- o (a) Cabin altitude, ambient temperature and pressure differential.

o (b) Aircraft altitude, rate of climb and atmospheric pressure.

• (c) Cabin altitude, cabin rate of climb and pressure differential.

If choice c is selected set score to 1.

33. When operating the outflow valve in manual/emergency mode, which motor is used?

• (a) The DC motor.

o (b) The AC motor.
o (c) Both AC and DC motors.

If choice a is selected set score to 1.

34. A ventilation fan has shut-down due to an overheat condition.

The crew can....

o (a) not restart the fan in flight. Ground crew must reset the system first.

• (b) restart the fan after it has cooled down.

o (c) restart the fan immediately by resetting the control switch to 'off' and 'on' again.

If choice b is selected set score to 1.

35. What protects the aircraft from over-pressurization?

• (a) The positive pressure relief valve.

o (b) Cabin pressure controller.
o (c) The outflow valve.

If choice a is selected set score to 1.

36. A bourdon tube is commonly used in which type of instrument?

• (a) Instruments which measure high pressure.

o (b) Differential pressure indicators.
o (c) Very sensitive low pressure instruments.

If choice a is selected set score to 1.

37. Which of the following instruments is NOT a gyroscopic instrument?

o (a) Altitude director indicator

• (b) Slip indicator

- (c) Turn co-ordinator

If choice b is selected set score to 1.

38. What is "compass swing"?

- (a) A mount for a magnetic compass to minimize the "swing" of the compass card.
- (b) A maintenance task to align a magnetic compass true north.

- (c) A maintenance task to reduce the deviation error of a magnetic compass.

If choice c is selected set score to 1.

39. The purpose of an AOA (Angle of Attack) indexer is?

- (a) To sense the actual AOA outside the aircraft.

- (b) To provide an AOA indication with coloured symbols during a landing approach.

- (c) To generate an audio AOA warning during normal flight.

If choice b is selected set score to 1.

40. The radio altimeter....

- (a) The radio altitude indication is operational above 25000ft.
- (b) gives full time altitude information on the altimeter.

- (c) The radio altitude indication is displayed on the EADI.

If choice c is selected set score to 1.

41. What is used to measure exhaust gas temperature?

- (a) Thermocouples.

- (b) Temperature bulbs.
- (c) Temperature switches.

If choice a is selected set score to 1.

42. In a Fail Passive System;

- (a) The crew is part of the monitoring when only one sensor of one kind is available.
- (b) The crew will disconnect a system before a dangerous situation occurs.

- (c) The system monitor will disconnect a system before a dangerous situation occurs.

If choice c is selected set score to 1.

43. What is pitot pressure?

- o (a) It is the total pressure inside the aircraft.
- o (b) It is the outside air pressure at the instant of measuring.
- • (c) It is the dynamic pressure of the air due to the forward motion of the aircraft.

If choice c is selected set score to 1.

44. The Cabin Interphone:

- o (a) enables recorded announcements and boarding music to be broadcast through the PA system.
- o (b) takes care of the communication among maintenance personnel during maintenance activities.
- • (c) allows the cabin crew to communicate with each other and with the flight deck crew.

If choice c is selected set score to 1.

45. The device that starts emitting its location in the event of a crash is called:

- • (a) an ELT
- o (b) a GPWS
- o (c) a Selcal

If choice a is selected set score to 1.

46. The system that determines the distance between the aircraft and the runway threshold is called:

- • (a) Marker Beacon system.
- o (b) ADF-system.
- o (c) VHF-navigation system.

If choice a is selected set score to 1.

47. The three critical measurements for the air data computer are:

- • (a) Airspeed, Altitude and temperature.
- o (b) Altitude, groundspeed and coordinates.
- o (c) Airspeed, radio altitude and temperature.

If choice a is selected set score to 1.

48. What is the nominal voltage of a NiCad battery cell?

- • (a) 1.2 volts.

- (b) 2 volts.
- (c) 24 volts.

If choice a is selected set score to 1.

49. The electrolyte in a NiCd battery is?

- (a) Lithium based.

- (b) Alkaline based.

- (c) Acid based.

If choice b is selected set score to 1.

50. What is the purpose of a rectifier?

- (a) Convert the DC output into AC.
- (b) Control the output voltage of a parallel wound generator.

- (c) Convert the AC output to DC.

If choice c is selected set score to 1.

51. What is the dis-advantage of series wound generators?

- (a) When the aircraft electrical load increases, the output voltage increases.

- (b) When the aircraft electrical load increases, the output voltage remains the same.
- (c) When the aircraft electrical load increases, the output current increases.

If choice a is selected set score to 1.

52. Which of the following systems does not use a constant speed drive?

- (a) Engine driven alternator.

- (b) APU alternator.

- (c) Integrated drive generator (IDG)

If choice b is selected set score to 1.

53. What type of generator / alternator is used in a variable speed constant frequency system?

- (a) Brushless alternator.

- (b) DC alternator.

- (c) DC generator.

If choice b is selected set score to 1.

54. In a constant speed motor generator, what powers the generator?

- (a) An electric motor powered by the battery.
- (b) An electric motor powered by the RAT generator.

- (c) A hydraulic motor powered by a hydraulic pump driven by the RAT.

If choice c is selected set score to 1.

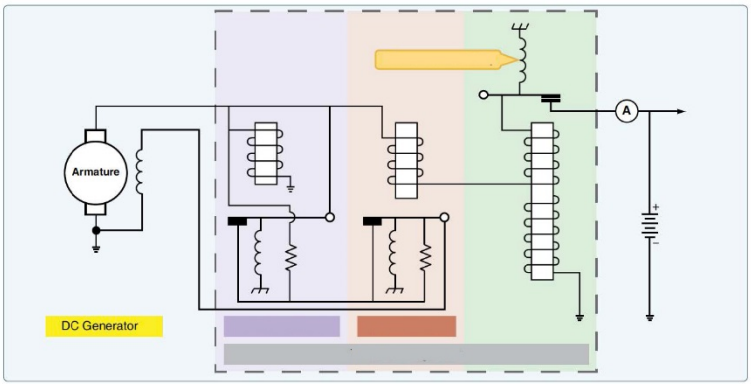
55. Which of the following statements about the ram air turbine is false?

- (a) The RAT can be deployed manually.
- (b) The RAT can sometimes also supply hydraulic power.

- (c) The RAT can deploy automatically on the ground.

If choice c is selected set score to 1.

56. What type of voltage regulator is shown in the figure below?

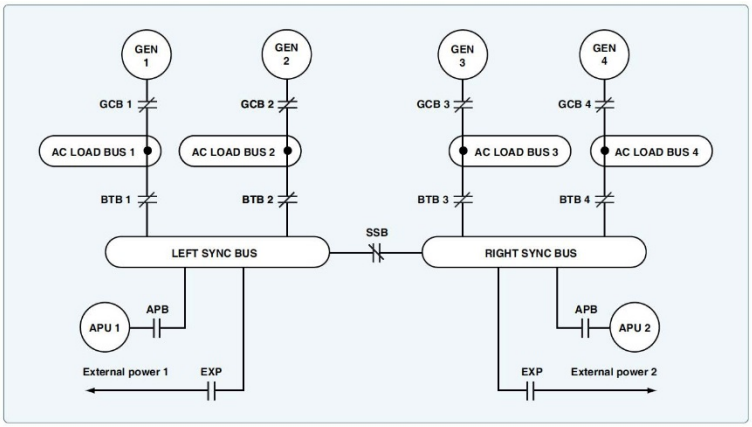


- (a) Carbon pile voltage regulator.
- (b) Reverse current delay.

- (c) Three-unit voltage regulator.

If choice c is selected set score to 1.

57. What type of bus is show in the figure below?



- o (a) Parrallel bus
- • (b) Split Parallel Bus
- o (c) Mergency bus

If choice b is selected set score to 1.

58. Which of the following statements about current transformers is true?

- • (a) The secondary winding should never be left open when in operation.
- o (b) The primary winding should never be left open when in operation.
- o (c) Current transformers always have a square transformer core.

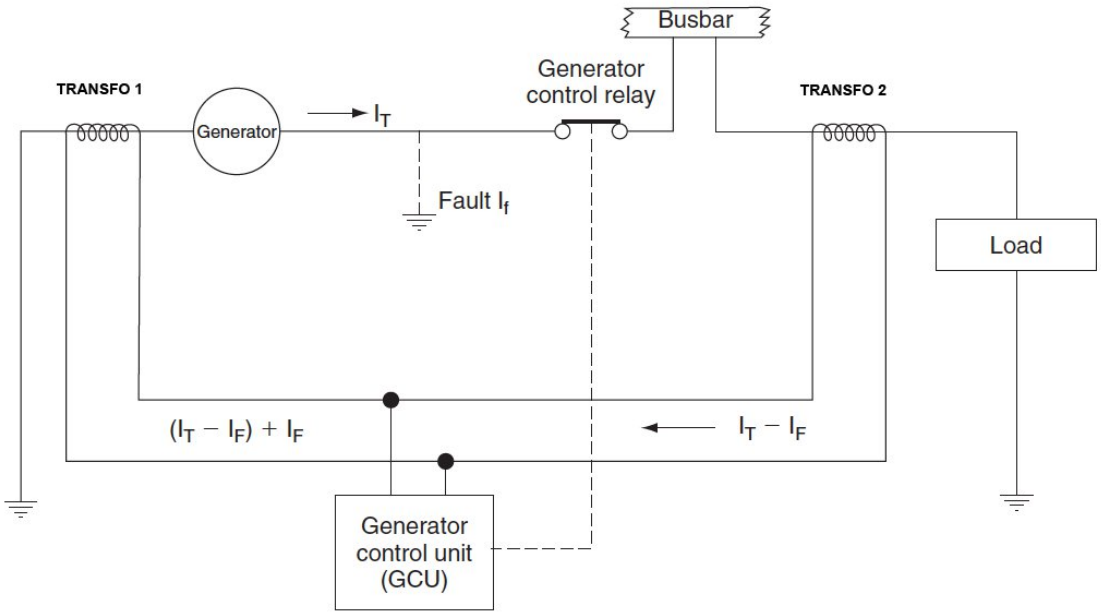
If choice a is selected set score to 1.

59. What is the primary function of a current transformer in an aircraft?

- o (a) Step-up the current in a circuit.
- o (b) Measure voltage in an electrical circuit.
- • (c) Measure current in an electrical circuit.

If choice c is selected set score to 1.

60. In the differential protections circuit in the figure below, what type of transformers would be TRANSFO 1 and TRANSFO 2?



- o (a) TRANSFO 1 is a current transformer, TRANSFO 2 is a voltage transformer
- • (b) Both are current transformers
- o (c) Both are voltage transformers

If choice b is selected set score to 1.

61. When connecting external power, what prevents the application of reverse polarity to a DC powered aircraft?

- • (a) A reverse polarity diode.
- o (b) An irreversible external power connector (fool proof).
- o (c) A reverse current switch.

If choice a is selected set score to 1.

62. On large aircraft (+44 seats), how is the maximum number of passengers certified?

- • (a) It is the number of evacuated persons (crew and passengers) during a simulated emergency evacuation.
- o (b) It is set by the number of seats possible to install in the cabin respecting the international approved minimum seat pitch of 28".
- o (c) It is the number of evacuated passengers (crew not included) during a simulated emergency evacuation.

If choice a is selected set score to 1.

63. What is the difference between an escape slide and an escape raft?

- o (a) An escape slide floating on the water, that remains pressurized for at least one hour is also called a raft.
- o (b) Industry and manufacturers terminology. There is no difference.
- • (c) An escape slide that is also designed to be used as a boat, is called an escape raft.

If choice c is selected set score to 1.

64. What type of gas is used in the inflation cylinder of a life vest?

- o (a) Argon (Ar)
- • (b) Carbon dioxide (CO_2)
- o (c) Nitrogen (N)

If choice b is selected set score to 1.

65. In case of electrical power loss, can the pilot still adjust his seat?

- o (a) No, without power the electrical functions, vertical and horizontal movement will be lost. Other functions such as recline and lumber support will remain since they have only manual control.
- o (b) No. The seat is completely blocked in his its last position.
- • (c) Yes, all the seat functions can always be operated manually.

If choice c is selected set score to 1.

66. How can passengers seats (spacing or pitch) be adjusted on installation?

- o (a) They are installed inside extrusion seat tracks with a 30-inch increment. This is the standard seat pitch requirement of ICAO. The seat itself can swivel 2 inch forward of aft on pivot points.
- • (b) Seats are installed inside seat tracks with a 1-inch increment.
- o (c) Seats are installed inside extrusion seat tracks with a 5-inch increment.

If choice b is selected set score to 1.

67. What kind of electrical equipment may we expect in a galley?

- o (a) Coffee makers and water heaters.
- • (b) Coffee makers, water heaters, fridge, ovens.
- o (c) Coffee makers, water heaters, micro wave oven, ice makers.

If choice b is selected set score to 1.

68. How are the cargo containers hold in place when loaded?

- o (a) They are locked to the cargo floor beams with straps and spanners.
- • (b) By special locks who will prevent movement.
- o (c) By special locks who will prevent side movement.

If choice b is selected set score to 1.

69. What type of smoke detector contains radioactive material?

- o (a) Carbon monoxide detectors.
- • (b) Ionizing smoke detectors.
- o (c) Photo-electric smoke detectors.

If choice b is selected set score to 1.

70. A carbon monoxide detector has to be replaced .....

- o (a) monthly.
- • (b) normally every 90 days.
- o (c) daily.

If choice b is selected set score to 1.

71. What type of fire detection system is a fenwal detection system?

- • (a) Continuous loop system.
- o (b) Spot system.
- o (c) Thermocouple system.

If choice a is selected set score to 1.

72. Why is there a strainer installed in the fire bottle discharge valve?

- o (a) To catch any fragment from the bottle.
- • (b) To catch any fragment from the frangible disk.
- o (c) To catch the yellow disk as an indication that the fire bottle is used.

If choice b is selected set score to 1.

73. Where is the lavatory waste bin fire extinguisher localized?

- (a) Is usually located above the waste bin.

o (b) There is no extinguisher in the lavatory.
o (c) In lavatory ceiling.

If choice a is selected set score to 1.

74. How is avionics smoke detected?

- (a) By sampling the air extracted from the avionics compartment racks.

o (b) By smoke detectors in the avionics boxes.
o (c) By carbon monoxide detectors in the avionics bay.

If choice a is selected set score to 1.

75. Pushing the fire test button does not test:

- (a) Squibs.

o (b) Indications and warnings.
o (c) Fire detectors.

If choice a is selected set score to 1.

76. When should you use water-type portable fire extinguishers?

o (a) Water-type portable extinguishers are perfect solid combustible materials even metal fires. (ex: brakes and magnesium wheels). Do not use them on flammable liquid fires.
o (b) Water-type portable extinguishers can be used for every fire.

- (c) Water-type portable extinguishers are best for solid combustible fires (paper, fabrics, wood etc.). Never use them on electrical or flammable liquid fire.

If choice c is selected set score to 1.

77. The elevators control the movement of the aircraft on the .....

- (a) lateral axis.

o (b) longitudinal axis.
o (c) vertical axis.

If choice a is selected set score to 1.

78. Which of the following control systems for the horizontal stabilizer trim has the highest priority?

o (a) Mach/speed trim

- (b) Manual trim

o (c) Autopilot trim

If choice b is selected set score to 1.

79. What logic would you expect from an hydraulic operated flight control system in auto pilot function?

- (a) Flight control computer - electrical input - hydraulic actuator - control surface.

o (b) Flight control computer - electrical wire - control column - electrical wire - hydraulic actuator - control surface.
o (c) Flight control computer - electrical wire - hydraulic motor - steel cable - control surface.

If choice a is selected set score to 1.

80. What are slat track doors?

o (a) They close the gap in the wing when the slats are retracted.

- (b) They close the gap in the wing leading edge when the slats are extended.

o (c) They can be opened to gain access to the slat tracks for maintenance.

If choice b is selected set score to 1.

81. To reduce turbulence, what do the spoilers do in speed brake motion?

- (a) The inboard spoiler panels raise less high than the outboards.

o (b) All the spoiler panels raise less high than when operated in ground spoilers mode.
o (c) The inboard spoiler panels remain flush with the wing.

If choice a is selected set score to 1.

82. In a manual operated control system the control surfaces are moved by ....

o (a) only pushrods.
o (b) only cables.

- (c) cables and pushrods.

If choice c is selected set score to 1.

83. Dutch roll stability can be artificially increased by a ...

o (a) pitch damper.
o (b) roll damper.

- (c) yaw damper.

If choice c is selected set score to 1.

84. For the basic rigging procedure the flight control in the cockpit should set in .....

- o (a) any position.
- • (b) neutral position and locked in this position.
- o (c) such a way that the rigging pin can be inserted.

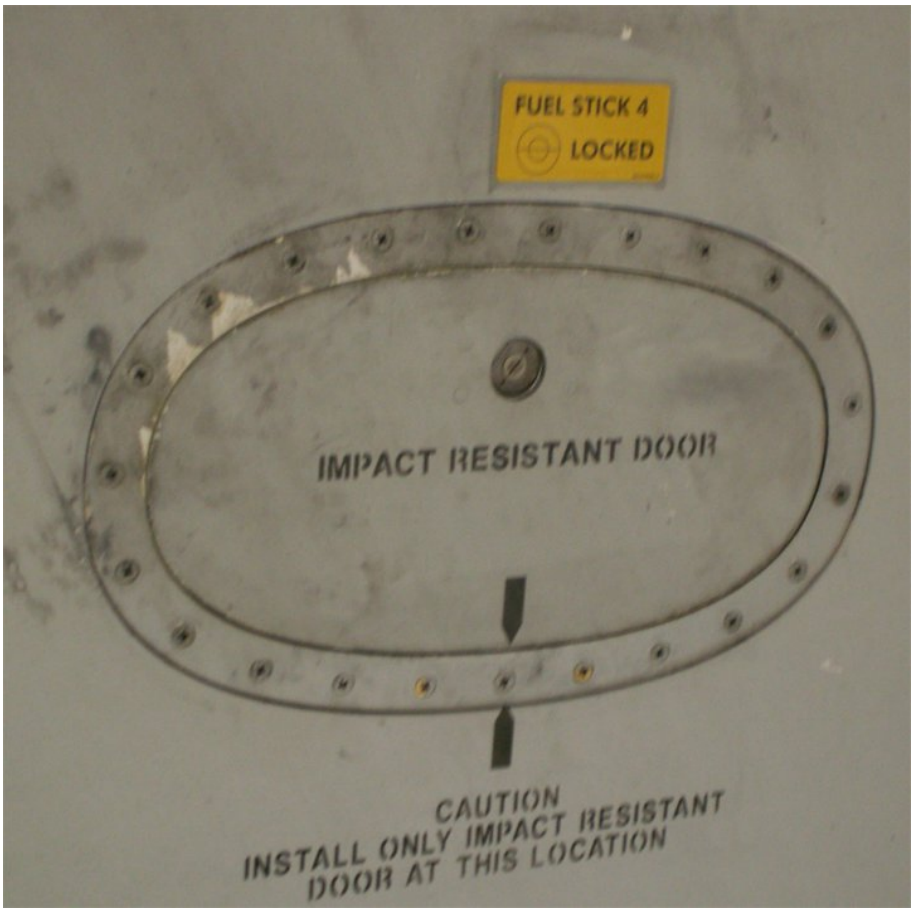
If choice b is selected set score to 1.

85. A stall warning system will activate:

- o (a) After the stall occurs.
- o (b) When the stall occurs.
- • (c) Before the stall occurs.

If choice c is selected set score to 1.

86. Where would you find the component shown in the figure below?



- o (a) Behind the engines on the lower wing surface.

- (b) On the lower wing surface.

o (c) On the wing leading edge.

If choice b is selected set score to 1.

87. What is the procedure called where the fuel tank is made leak free during construction?

o (a) A seal procedure.
o (b) A leak prevention plan.

- (c) A seal plan.

If choice c is selected set score to 1.

88. Which statement is true regarding jet pumps?

- (a) Jet pumps use fuel pressure from the booster pumps to operate.

o (b) Jet pumps are electrical pumps.
o (c) Jet pumps are used to pump fuel to the jet engines.

If choice a is selected set score to 1.

89. What is the purpose of fuel jettison?

- (a) To reduce the aircrafts landing weight.

o (b) To remove the fuel from the trim tanks quickly in case of a severe unbalance of the aircraft.
o (c) To remove all the fuel from the tanks before an emergency landing, to reduce the fire risk.

If choice a is selected set score to 1.

90. Why do aircraft have a fuel crossfeed system?

o (a) To ensure that in all flight phases; the Engine Nr1 receives fuel from RH wing tank and that Engine Nr2 receives fuel from the LH wing tank.
o (b) Only for ground refueling operations, to fuel the aircraft to both Left and Right tanks from 1 location.

- (c) To balance the fuel between the Left and Right tank.

If choice c is selected set score to 1.

91. What does a fuel density of 1.0 indicate?

o (a) The wrong type of fuel is in the tanks.

- (b) There is water in the fuel.

o (c) There is no water in the fuel.

If choice b is selected set score to 1.

92. Is it possible to refuel the aircraft if the refuel valve has an electrical failure?

- (a) Yes.

o (b) No.
o (c) Only after replacing the valve.

If choice a is selected set score to 1.

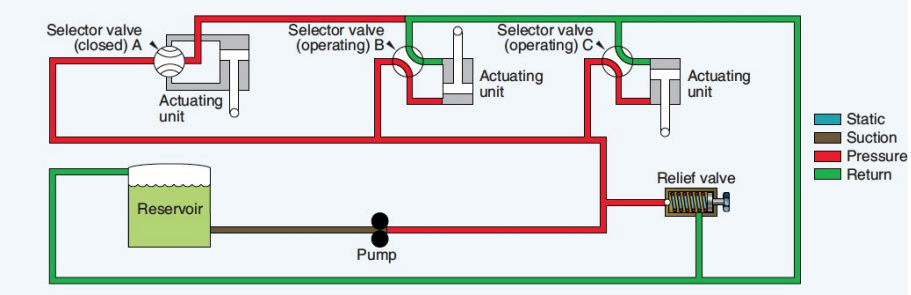
93. Where is also a fuel tank located on aircraft fitted with longitudinal balance fuel systems?

o (a) Wing tips.
o (b) Centre wing box.

- (c) Stabilizer.

If choice c is selected set score to 1.

94. Which type of hydraulic system is shown?



o (a) Open centre hydraulic system.
o (b) Multi pump hydraulic system.

- (c) Closed centre hydraulic system.

If choice c is selected set score to 1.

95. What is a function of a hydraulic accumulator?

o (a) Store (pressurized) hydraulic fluid in case of a leak.
o (b) To use hydraulic pressure to generate electrical power.

- (c) To absorb fluctuations in hydraulic pressure,

If choice c is selected set score to 1.

96. When does automatic deployment of the hydraulic ram air turbine occur?

- o (a) Both engines OFF - Aircraft in the air.
- • (b) Both engines OFF - Aircraft in the air - Airspeed more than 80 knots.
- o (c) Hydraulic system pressure at ZERO - Airspeed more than 200 knots.

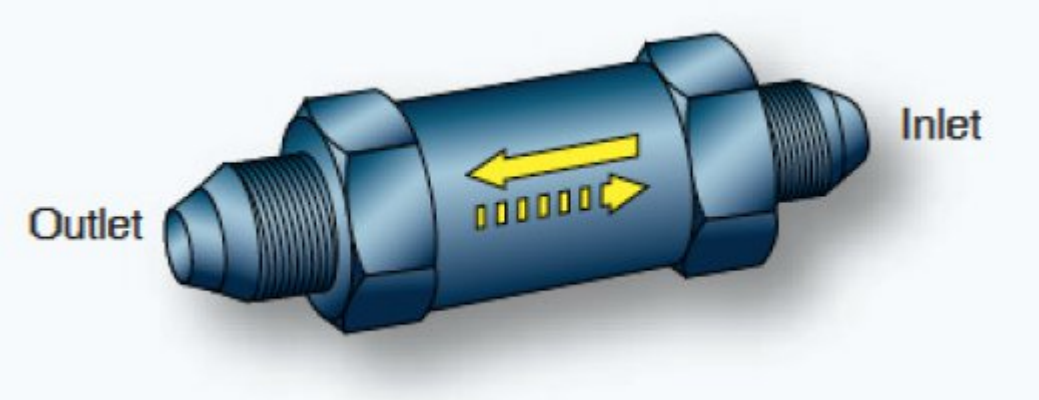
If choice b is selected set score to 1.

97. What is the function of a blockage indicator?

- • (a) It shows that the filter is blocked.
- o (b) It shows that the filter is bypassed.
- o (c) It shows that the filters is installed incorrectly.

If choice a is selected set score to 1.

98. What does the dotted arrow (the arrow pointing to the right) mean in the figure?



- • (a) The direction of restricted flow.
- o (b) The direction of free flow.
- o (c) The direction in which to install the valve (arrow pointing up).

If choice a is selected set score to 1.

99. Which component in a hydraulic system cannot be tested with a hydraulic cart (or Mule) ?

- o (a) Pressure sensors.
- • (b) Pumps.
- o (c) Landing gear.

If choice b is selected set score to 1.

100. The operation of the serrated rotor ice detector is based on which principle?

- (a) Increased torque load on the electric drive motor when covered with ice.

o (b) Ultrasonic vibration of the ice sensing element.
o (c) Blockage of small moves resulting a change in ram air pressure on a diaphragm.

If choice a is selected set score to 1.

101. Which system prevents ice formation?

o (a) Defogging system.
o (b) De-icing system.

- (c) Anti-ice system.

If choice c is selected set score to 1.

102. Which system removes ice formation?

- (a) De-icing system.

o (b) Defogging system.
o (c) Anti-ice system.

If choice a is selected set score to 1.

103. Rain repellant is normally used:

- (a) In combination with windscreen wipers at low airspeeds and heavy rain.

o (b) In combination with windscreen wipers at high altitudes and light rain.
o (c) Instead of windscreen wipers at low altitudes and heavy rain.

If choice a is selected set score to 1.

104. To prevent overheating from the drain lines on ground ....

o (a) drain lines should be covered with special protection covers.

- (b) the circuit breakers must be pulled.

o (c) drain lines electrical connector should be disconnected.

If choice b is selected set score to 1.

105. Why must you always wet the windscreen before operating the wipers?

- (a) To prevent damage to the windscreen.

- (b) To prevent unnecessary wear of the wiper blades.
- (c) To prevent wear on the drive mechanism of the wipers.

If choice a is selected set score to 1.

106. What is the function of the two safety bars indicated in the figure?

- o (a) They stop the wheels from spinning after gear retraction.
- o (b) They add strength to the door structure.

- (c) They allow the landing gear to force open the door in case of a hydraulic failure.

If choice c is selected set score to 1.

107. When the landing gear selector lever is in the off position all hydraulic components are .....

- (a) connected with the return line.

o (b) connected with the pressure line.
o (c) connected with the sump line.

If choice a is selected set score to 1.

108. In which way can sequence valves in a landing gear system be operated?

o (a) Electrical and mechanical.
o (b) Hydraulic and electrical.

- (c) Mechanical and hydraulic.

If choice c is selected set score to 1.

109. Which type of wheel rim uses tubeless tyres?

o (a) Well-based rim.

- (b) Split hub.

o (c) Loose and detachable flange rim.

If choice b is selected set score to 1.

110. Which of the tyres shown would require immediate replacement?

o (a) 

- (b) 

- (c) 

If choice b is selected set score to 1.

111. In a non-hydraulic shimmy damper, what is used to dampen the vibrations?

- (a) A spring.
- (b) Compressed air.
- (c) A rubber piston.

If choice c is selected set score to 1.

112. On aircraft with bogie beams (trucks), what is used to detect air/ground?

- (a) Truck tilt switches.
- (b) Weight-on-wheel switched.
- (c) Squat switches.

If choice a is selected set score to 1.

113. Lights fitted with a dual filament are used as:

- (a) Landing light and runway turn-off light.
- (b) Runway turn-off light and engine scan light.
- (c) Landing light and taxi light.

If choice c is selected set score to 1.

114. Who controls the 'no smoking' and 'fasten seat belts ' lights?

- (a) Flight attendant.
- (b) Pilot.

o (c) Passenger.

If choice b is selected set score to 1.

115. The external emergency lights are used for:

o (a) Illuminating the area around the aircraft to help rescue workers.
o (b) Identifying the entry doors to help rescue workers locate them.

- (c) Illuminating the escape slides.

If choice c is selected set score to 1.

116. Oxygen for the flight crew of commercial aircraft comes in which form?

- (a) Gaseous oxygen.

o (b) Chemical oxygen generators.
o (c) Liquid oxygen.

If choice a is selected set score to 1.

117. In which type of aircraft is liquid oxygen used?

o (a) Most large passenger aircraft.

- (b) Military aircraft.

o (c) Aircraft flying at very high altitudes.

If choice b is selected set score to 1.

118. Is it possible to regulate the amount of oxygen from a chemical oxygen generator?

o (a) Only the crew.

- (b) No.

o (c) Yes.

If choice b is selected set score to 1.

119. A green disk on the side of the fuselage is missing, what does this indicate?

o (a) The maximum pressure in the oxygen supply lines has been exceeded.

- (b) The maximum pressure in the oxygen cylinder has been exceeded.

o (c) The oxygen bottle pressure is below operational limits.

If choice b is selected set score to 1.

120. What is a low pressure pneumatic system used for?

- o (a) Power the landing gear.
- o (b) Power the flaps.
- • (c) Power the gyro instruments.

If choice c is selected set score to 1.

121. The bleed air from the APU can be used:

- o (a) At all altitudes.
- o (b) Up to 18.000m
- • (c) Up to 18.000ft

If choice c is selected set score to 1.

122. Which systems are NOT used for duct leak detection?

- o (a) Thermal switches.
- • (b) Thermocouples.
- o (c) Manifold failure loops.

If choice b is selected set score to 1.

123. Which probe is heated by hot bleed air?

- o (a) Ice detection probe.
- o (b) Angle of attack probe.
- • (c) Total air temperature probe.

If choice c is selected set score to 1.

124. An aircraft fitted with 2 potable water pumps will use the pumps as follows:

- o (a) Both pumps work together.
- • (b) One pump is active, the other standby.
- o (c) One pump services the forward cabin, the other the aft cabin.

If choice b is selected set score to 1.

125. Which of the following statements is true:

o (a) Fumes from toilet waste tanks do not affect the structure .

• (b) Composite materials are used to reduce the chance of corrosion damage.

o (c) Toilet waste does not pose a danger to the aircraft structure.

If choice b is selected set score to 1.

126. In a 3-channel system, what happens if the command channels fail?

o (a) The complete system shut-down.
o (b) The monitor channel takes over.

• (c) The stand-by channel takeover.

If choice c is selected set score to 1.

127. Besides data for the central maintenance system, what else can be uploaded via the data loading system?

o (a) Entertainment data.
o (b) GPS database.

• (c) Navigational database.

If choice c is selected set score to 1.

128. Who can use the flight deck printer?
(1) Pilots; (2) Ground engineers; (3) Cabin crew

o (a) 1 + 2 + 3
o (b) 1 + 3

• (c) 1 + 2

If choice c is selected set score to 1.

129. During hard landing, what determines the degree of how hard the landing was?

o (a) The aircraft speed on touch down.

• (b) How much "Gs" were encountered.

o (c) The weight of the aircraft.

If choice b is selected set score to 1.

130. In an aircraft which has Integrated Modular Avionics.

- o (a) One "Black" box cover one functionality.
- o (b) Each functionality is split in two dedicated 'black' boxes for redundancy
- • (c) One "black" box hosts multiple application / functionalities.

If choice c is selected set score to 1.

131. One of the main advantages of Integrated Modular Avionics (IMA) is?

- o (a) More computers on board, which result in more system automation.
- • (b) Less computers with more applications on board, which result in weight savings.
- o (c) More computers on board, which result in faster data communication.

If choice b is selected set score to 1.

132. Three major elements of the common core system are:

- o (a) Computing Resource Cabinet, RJ45 connector network, remote data concentrators.
- o (b) Computing Resource Cabinet, Arinc 429 Network, Remote Data concentrators.
- • (c) Computing Resource Cabinet Arinc 664 network, Remote data concentrators.

If choice c is selected set score to 1.

133. Airborne electrical AFDX cables are connected with:

- o (a) Fibre-optic couplings.
- o (b) 8-pins RJ-45 connections
- • (c) 4-pins quadrax connections

If choice c is selected set score to 1.

134. Where is a passenger control unit used for?

- • (a) Selecting audio channels and reading lights.
- o (b) Communication between passengers and flight crew.
- o (c) Control the area lighting.

If choice a is selected set score to 1.

135. Cabin surveillance and cabin video monitoring can be displayed in the cockpit on the....

- • (a) electronic flight bag.

- (b) electronic flight instruments system.
- (c) multipurpose control display unit.

If choice a is selected set score to 1.

136. When a modern aircraft is on the ground and parked at a gate. The InFlight Entertainment (IFE) system can receive and transmit data, using?

- (a) An AFDX cable connection

- (b) WIFI

- (c) HF Radio

If choice b is selected set score to 1.

137. The Cockpit Door Surveillance System is?

- (a) used to assist the air-bridge operator to align the air-bridge with the cockpit door.

- (b) a system to assist the flight crew to identify a person requesting access to the flight-deck.

- (c) A synoptic page, indicating if all doors are closed, meaning ready for flight.

If choice b is selected set score to 1.

138. The satellite communication (SATCOM) system is connected to?

- (a) The open data network.

- (b) The In Flight Entertainment system, only.
- (c) The isolated data network.

If choice a is selected set score to 1.

139. Where is the cockpit electronic flight bag used for?

- (a) To keep navigational charts and airport diagrams.
- (b) To keep the flight crew operating manual.

- (c) Top keep both, navigational charts and airport diagrams and the flight crew operating manual.

If choice c is selected set score to 1.

140. Wireless fidelity (wifi) is used for:

- (a) aircraft non-critical data

- (b) flight critical data
- (c) only for maintenance purposes

If choice a is selected set score to 1.

If assessment score is 75% to 100% Pass
If assessment score is 0% to 74% Fail