# Question block created by wizard

**This exam contains 140 questions.**

**1.** When spoilers operate in ROLL mode, what happens to the spoiler panels?

- o (a) Only the spoiler panels are raised on the upward moving wing.
- • (b) Only the spoiler panels are raised on the downward moving wing.
- o (c) They all move UP the same amount.

*If choice b is selected set score to 1.*

**2.** Where are elevons installed?

- o (a) To each side of the aircraft on the leading edge of the wing.
- o (b) To one side of the aircraft on the trailing edge of the wing.
- • (c) To each side of the aircraft on the trailing edge of the wing.

*If choice c is selected set score to 1.*

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

- o (a) Aerodynamic balance panel

- (b) Inset Hinges
- (c) Horn Balance

*If choice c is selected set score to 1.*

**4.** How does the air act at low-speed aerodynamics?

- (a) as a solid.
- (b) as a fluid.
- (c) as a gas.

*If choice b is selected set score to 1.*

**5.** What happens when an aircraft reaches its critical Mach number?

- (a) The aircraft is flying supersonic from that point on.
- (b) A normal shock wave is formed on the wing.
- (c) The wing cannot produce any more lift and the aircraft stalls.

*If choice b is selected set score to 1.*

**6.** On a subsonic jet engine, what type of intake will be used?

- (a) Pilot intake.
- (b) Divergent duct-intake.
- (c) Three-shock intake.

*If choice b 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 main reason of having drains in the aircraft structure?

- (a) To avoid the extra weight. This can overload the structure.
- (b) The humidity caused by the fluid can influence the air-conditioning system.

- (c) Collecting fluids without draining could cause fire, corrosion or causing short cuts in the electrical system.

*If choice c is selected set score to 1.*

**9.** In which of the following construction methods does the skin take up ALL the stresses?

o (a) Semi-monocoque.

- (b) Monocoque.

o (c) Stressed skin construction.

*If choice b is selected set score to 1.*

**10.** A bonded metal-to-metal joint will be:

o (a) Weaker than a riveted joint.

- (b) Stronger than a riveted joint.

o (c) Just as strong as a riveted joint.

*If choice b is selected set score to 1.*

**11.** What is the most common used surface protection for aluminium alloy?

- (a) Cladding

o (b) Paint
o (c) Electroplating

*If choice a is selected set score to 1.*

**12.** To carry out a correct alignment check, the aircraft is jacked up. What must be done next?

- (a) Level the datum lines in the horizontal plane.

o (b) Start with the alignment check.
o (c) Level the datum lines in the flight position.

*If choice a is selected set score to 1.*

**13.** Which of the following compartments is usually unpressurized?

- (a) Rear fuselage area.

o (b) Avionics compartment.
o (c) Cargo compartment.

*If choice a is selected set score to 1.*

**14.** Why are non-magnetic bolts used on the front windshields?

- o (a) They are less likely to be hit by lightning.
- • (b) So they don't interfere with the standby compass.
- o (c) They are stronger than other bolts.

*If choice b is selected set score to 1.*

**15.** What is the most critical part of a wing as far as the production of lift is concerned?

- o (a) Trailing edge and bottom side of the wing.
- • (b) Front end or leading edge.
- o (c) Top and bottom side of the wing.

*If choice b is selected set score to 1.*

**16.** Integral fuel tanks are sealed by:

- o (a) Rubber O-rings and gaskets.
- • (b) Using sealant on all seams and rivets.
- o (c) Rubber bladder tanks.

*If choice b is selected set score to 1.*

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

- • (a) Vertical stabilizer.
- o (b) Horizontal stabilizer.
- o (c) Avionics bay.

*If choice a is selected set score to 1.*

**18.** On the vertical stabilizer, which fittings take up the most of the lateral loads?

- • (a) Aft fittings.
- o (b) Top fittings.
- o (c) Forward fittings.

*If choice a is selected set score to 1.*

**19.** The slats are supported by:

- o (a) Hinges.
- o (b) Straight tracks.
- • (c) Curved steel tracks.

*If choice c is selected set score to 1.*

**20.** What type of aircraft does not need mass balancing?

- o (a) Aircraft operated with control cables.
- • (b) Aircraft controlled with fly-by-wire.
- o (c) Aircraft equiped with aerodynamic balance tabs.

*If choice b is selected set score to 1.*

**21.** What is the purpose of a blow-out panel (inside a nacelle)?

- • (a) To allow excess pressure to escape from the nacelle in case of a bleed duct rupture.
- o (b) To allow pressure inside the nacelle to escape in case of fire.
- o (c) To allow the air-pressure to equalize if the pressure inside the nacelle becomes lower than outside.

*If choice a is selected set score to 1.*

**22.** Which components are part of the firewall?

- o (a) Hinged cowlings but only when open.
- • (b) Hinged cowlings.
- o (c) Exhaust cowling.

*If choice b is selected set score to 1.*

**23.** Where is the ground air conditioning cart used for?

- • (a) Supplying the cabin with conditioned air, when only the cabin needs to be conditioned.
- o (b) Starting the engines.
- o (c) Running the de-icing system.

*If choice a is selected set score to 1.*

**24.** The RAM air supply is used....

- o (a) only on unpressurized aircraft.
- • (b) as an emergency air source on pressurized aircraft to ventilate the cockpit and the cabin.
- o (c) as an alternate source to power the air-conditioning packs.

*If choice b is selected set score to 1.*

**25.** Before the air from the air conditioning pack enters the cabin:

- o (a) Water is added to it to cool the air down.
- • (b) Hot air is added to it to obtain the desired cabin temperature.
- o (c) Cold air is added to it to obtain the desired cabin temperature.

*If choice b is selected set score to 1.*

**26.** The EASA requirement for air conditioning systems state that the cabin air must be exchanged:

- o (a) 3 to 5 times a minute.
- o (b) Once every hour.
- • (c) Every 3 to 5 minutes.

*If choice c is selected set score to 1.*

**27.** What are the 3 basic principles of an air cycle cooling system?

- o (a) Surface heat exchange - combustion - energy conversion
- o (b) Compression - expansion - condensation
- • (c) Surface heat exchange - expansion - energy conversion

*If choice c is selected set score to 1.*

**28.** What happens to the air temperature and air pressure when it leaves the compressor ACM (Air Cycle Machine)?

- • (a) Both will be higher than the air going into the compressor.
- o (b) Both will be lower than the air going into the compressor.
- o (c) The temperature will rise and the pressure will drop.

*If choice a is selected set score to 1.*

**29.** In an air-conditioning pack is an anti-ice valve installed. How does it work?

- o (a) Hot air will bypass the air cycle machine (ACM) and so the turbine will slow down in rpm.

- (b) When icing occurs in the water separator, hot air will bypass the air cycle machine (ACM) and will be used to heat up the water separator.

o (c) Hot air from the anti-ice valve will close as protection the pack flow valve.

*If choice b is selected set score to 1.*

**30.** What happens if an air conditioning pack overheats?

o (a) It goes into full cold mode.

- (b) It automatically shuts down.

o (c) I automatically slows down.

*If choice b is selected set score to 1.*

**31.** The outflow valve of a pressurized cabin system opens when the cabin pressure is....

o (a) too low.

- (b) too high.

o (c) too low or too high.

*If choice b is selected set score to 1.*

**32.** During take-off the outflow valve is selected to ....

o (a) fully closed.

- (b) fully open.

o (c) modulating mode.

*If choice b is selected set score to 1.*

**33.** What places the pressure controller in the depressurisation mode after landing?

o (a) Engines at idle.

- (b) Engines at idle and the landing gear compressed.

o (c) Landing gear compression.

*If choice b is selected set score to 1.*

**34.** How is the emergency pressure control valve operated if the automatic control system fails?

- (a) Manually

- o (b) Electrically
- o (c) Hydraulically

*If choice a is selected set score to 1.*

**35.** The emergency pressure control valve....

- o (a) is fitted to all pressurized aircraft.
- o (b) is electrically controlled.
- • (c) is not a very refined way of controlling.

*If choice c is selected set score to 1.*

**36.** Which of the following instruments is NOT an air data instrument?

- • (a) Attitude
- o (b) Vertical speed
- o (c) Airspeed

*If choice a is selected set score to 1.*

**37.** On which display can I find the glide slope and localizer indication?

- • (a) The attitude director indicator.
- o (b) The horizontal situation indicator.
- o (c) The I.L.S. indicator.

*If choice a is selected set score to 1.*

**38.** A flux valve is used for which type of instrument?

- • (a) A remote reading compass.
- o (b) An altitude director indicator.
- o (c) A direct reading magnetic compass.

*If choice a is selected set score to 1.*

**39.** The critical angle of attack is:

- o (a) Affected by angle of bank.
- o (b) Different at different stall speeds.
- • (c) Not affected by the aircraft weight.

*If choice c is selected set score to 1.*

**40.** When does the electronic attitude director indicator go automatically into composite display?

- o (a) When the engine indication and crew alerting system display fails.
- • (b) When the electronic horizontal situation indicator fails (EADI).
- o (c) When selected by the crew.

*If choice b is selected set score to 1.*

**41.** Which type of fuel flow meter is commonly used in reciprocating engine aircraft?

- • (a) Vane type
- o (b) Motor less type
- o (c) Float type

*If choice a is selected set score to 1.*

**42.** In a Fail Passive System;

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

*If choice c is selected set score to 1.*

**43.** The Flight Director provides....

- o (a) thrust commands for the engine trims.
- • (b) computed steering commands to the command bars of the ADI and/or to an autopilot system.
- o (c) data for the air data computers.

*If choice b is selected set score to 1.*

**44.** The Cockpit Voice Recorder....

- • (a) allows a minimum of 30 minutes of recording.
- o (b) contains also all engine and systems parameters.
- o (c) records all voice information of the cabin crew and the passengers.

*If choice a is selected set score to 1.*

**45.** The Passenger Entertainment System PES:

- (a) provides Video, Music, Interactive Video Games and In-seat Telephone System.

o (b) provides attendant Call, Individual Reading Lights Control and No Smoking Light on/off.
o (c) provides primary the passenger with information on ambient aircraft flight data, times and aircraft position in the fight plan.

*If choice a is selected set score to 1.*

**46.** The DME Distance Measurement gives information about:

o (a) the attitude of the aircraft.
o (b) the ground distance from the aircraft to the selected ground station.

- (c) the slant range to the selected ground station.

*If choice c is selected set score to 1.*

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

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

- (c) Airspeed, Altitude and temperature.

*If choice c is selected set score to 1.*

**48.** Which type of battery can experience cell reversal and how can it be prevented?

o (a) NiCad battery. Prevented by always fully discharging the battery.

- (b) NiCad battery. Prevented by never fully discharging the battery.

o (c) Lead-acid battery. Prevented by fast charging battery.

*If choice b is selected set score to 1.*

**49.** What happens at the end of the charge of a NiCad battery?

- (a) The cell voltage drops.

o (b) The battery heats up.
o (c) CO2 is generated,

*If choice a is selected set score to 1.*

**50.** How do you call the component that completes the magnetic circuit between the poles in a DC generator?

o (a) The brushes.

- (b) The yoke.

o (c) The armature.

*If choice b is selected set score to 1.*

**51.** The output of a single coil generator is

o (a) a flat line.
o (b) a saw foot.

- (c) a sine-wave.

*If choice c is selected set score to 1.*

**52.** If the over-speed protection circuit in a CSD (Constant Speed Drive) has activated, reset is....

- (a) only possible in the workshop.

o (b) possible during Line Maintenance.
o (c) possible from the flight deck.

*If choice a is selected set score to 1.*

**53.** The output sine waves of a 3-phase alternator will be separated by:

o (a) 90 degrees
o (b) 60 degrees

- (c) 120 degrees

*If choice c is selected set score to 1.*

**54.** When will the hydraulic motor generator (HMG) supply power?

o (a) Manually, when the pilot switches it on after both main AC buses lose power.
o (b) Automatically when the main battery is discharged.

- (c) Automatically when both main AC buses lose power.

*If choice c is selected set score to 1.*

**55.** The ram air turbine will supply....

- (a) single phase AC power.

o (b) three phase DC power.
o (c) DC power.

*If choice a is selected set score to 1.*

**56.** How is voltage regulation achieved on DC generators?

By changing the....

- (a) field current.

o (b) generator speed.
o (c) field voltage.

*If choice a is selected set score to 1.*

**57.** In a parallel bus configuration the generators will:

o (a) Divide the load, with the strongest generators taking the biggest load.

- (b) Share the load equally among them.

o (c) Each supply their own AC bus.

*If choice b is selected set score to 1.*

**58.** Transformer rectifiers are used for:

o (a) Converting DC into AC.
o (b) Boosting the output voltage from 28V to 110V.

- (c) Converting AC into DC.

*If choice c is selected set score to 1.*

**59.** What provides overheat warning in a transformer rectifier unit?

- (a) Thermal switch.

o (b) Thermocouple.
o (c) Voltage sensor.

*If choice a is selected set score to 1.*

**60.** Which of the following circuit breakers CANNOT be reset while the fault exists?

o (a) Electromagnetic circuit breakers.

- (b) Trip free circuit breaker.

o (c) Automatic reset circuit breaker.

*If choice b is selected set score to 1.*

**61.** On a large commercial aircraft, which bus will be powered as soon as external power is connected?

- o (a) The external power bus.
- • (b) The ground handling bus.
- o (c) Battery bus.

*If choice b is selected set score to 1.*

**62.** Comfortable seat cushions are often made of foam type materials. Is this authorized on an airplane?

- • (a) Yes, but the cushions are covered with a fire blocking material, this will slow down the burning of the material.
- o (b) Yes, but the cushions are made of a special foam, which cannot burn.
- o (c) No, aircraft cushions are made out of pressed cotton and goose feathers. These pure natural products don't give toxic gases when burning.

*If choice a is selected set score to 1.*

**63.** When does an aircraft needs to be equipped with slides, which can also be used as rafts?

- • (a) All exits with a door sill above 1,8 meter have to be equipped with slides.
- o (b) When the aircrafts flies longer than 90 minutes over water.
- o (c) All aircraft certified for more than 44 passengers need exits equipped with slides.

*If choice a is selected set score to 1.*

**64.** May a demonstration life vest be used in a real emergency?

- • (a) No, the cylinder is empty.
- o (b) Yes, but only if the life time is not expired.
- o (c) Yes, it is the personal life vest of the flight attendant and should be inspected after each demonstration by the flight attendant.

*If choice a is selected set score to 1.*

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

- o (a) No. The seat is completely blocked in his its last position.
- • (b) Yes, all the seat functions can always be operated manually.
- o (c) 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.

*If choice b is selected set score to 1.*

**66.** Has the observers seat the same functions as the pilot seat?

- (a) Yes

- (b) No, on large aircrafts the observer seat is usually very comfortable, but has not as many adjustment possibilities as the pilot seats.

- (c) Only on large aircraft (B777-B747-A330-A380) where the cockpit surface permits, an identical seat will be installed with all the same adjustments features.

*If choice b is selected set score to 1.*

**67.** How many cockpit seats do we find in a modern aircraft?

- (a) Mostly five. Captain, first officer, flight engineer, navigator, radio operator.
- (b) Mostly four. Captain, first officer, flight engineer and minimum one observer seat.

- (c) Mostly three. Captain, first officer and minimum one observer seat.

*If choice c is selected set score to 1.*

**68.** What is the best description for a "combi aircraft"?

- (a) This is an aircraft with a mixed configuration. This means that cargo also is loaded on the main deck passenger zone.

- (b) This just means that the aircraft transport passengers as well as cargo. Passengers in the upper lobe, cargo in the lower.
- (c) This is an aircraft with a mixed passenger configuration. This means that the aircraft has a mixed cabin lay out. (Ex. first/business/economy)

*If choice a is selected set score to 1.*

**69.** A carbon monoxide detector has to be replaced .....

- (a) monthly.

- (b) normally every 90 days.

- (c) daily.

*If choice b is selected set score to 1.*

**70.** What type of fire detection system is a fenwal detection system?

- (a) Continuous loop system.

- (b) Thermocouple system.

- o (c) Spot system.

*If choice a is selected set score to 1.*

**71.** A systron-Donner fire detection system uses .....

- o (a) air.
- • (b) helium gas.
- o (c) nitrogen gas.

*If choice b is selected set score to 1.*

**72.** Which Halon type doesn't use a pressurisation agent?

- o (a) Halon 1211.
- o (b) Halon 1001.
- • (c) Halon 1301.

*If choice c is selected set score to 1.*

**73.** What does the red indicator disk on the fuselage indicate?

- o (a) Indicates that the fire bottle has been fired.
- • (b) Indicates a thermal discharged of the fire bottle.
- o (c) Indicates that the fire bottle has not thermally discharged.

*If choice b is selected set score to 1.*

**74.** On a "Pull-and-turn" fire switch, when is the fire bottle discharged?

- • (a) By pulling the handle up and turning the handle to left or right.
- o (b) By pulling the handle up, turning it to one side and pressing the discharge button.
- o (c) By pulling the handle up.

*If choice a is selected set score to 1.*

**75.** What indicates the yellow disk of a fire bottle (if installed) when it is ruptured?

- • (a) That the bottle has been fired.
- o (b) That the fire bottle is due for inspection.
- o (c) That the pressure in the fire bottle was to high.

*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 can be used for every fire.
- o (b) 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.

- • (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.** Ground spoilers are used for ....

- o (a) slowing down the aircraft in flight.

- • (b) slowing down the aircraft on ground

- o (c) attitude control.

*If choice b is selected set score to 1.*

**78.** Why is there a balance tab installed?

- • (a) For reducing the effort to move the flight control.

- o (b) For dynamic balancing of the flight control.
- o (c) Where the flight controls are found rather light during initial flight-testing.

*If choice a is selected set score to 1.*

**79.** What is the main advantage for commercial aircraft by using active load control?

- o (a) High manoeuvrability.

- • (b) Reduced structural loading or airframe stress.

- o (c) Increased aircraft speed.

*If choice b is selected set score to 1.*

**80.** What are slat track doors?

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

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

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

*If choice b is selected set score to 1.*

**81.** What happens when the pilot initiates a left turn, with spoiler augmentation?

- o (a) Only the ailerons are used to roll the aircraft.
- • (b) The LH aileron operate up and the spoilers on the left wing raise further up.
- o (c) The RH aileron operate down and the spoilers on the right wing raise further up..

*If choice b is selected set score to 1.*

**82.** A small input in a primary servo system of a hydraulic powered flying control system initiates ....

- o (a) the same power output as the input initiated.
- • (b) a large power output.
- o (c) a small power output.

*If choice b is selected set score to 1.*

**83.** What is Mach correction?

- o (a) The increasing of the feel force at high Mach numbers.
- • (b) The reduction of the feel force at high Mach numbers.
- o (c) The adjustment of the stabilizer position to compensate for the nose down tendency.

*If choice b is selected set score to 1.*

**84.** What type of aerodynamic balancing system is used on modern, powered flight control surfaces?

- • (a) None.
- o (b) Balance tabs.
- o (c) Servo tab.

*If choice a is selected set score to 1.*

**85.** Where is the stall warning sensor of an electric stall warning system located?

- o (a) On the fuselage below the cockpit windows.
- • (b) In the wing leading edge.
- o (c) On the fuselage above the cockpit window.

*If choice b is selected set score to 1.*

**86.** Where is the trim tank located?

- (a) In the tail section.

o (b) In the wing tips.
o (c) In the wing box.

*If choice a 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 leak prevention plan.

- (b) A seal plan.

o (c) A seal procedure.

*If choice b 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 an indirect drain valve used for?

o (a) To drain fuel from the highest point of the tank.

- (b) To drain fuel when the valve is not located at the lowest part of the tank.

o (c) To drain fuel when there is no drain valve installed.

*If choice b is selected set score to 1.*

**90.** What must be done to transfer fuel from one fuel tank to a fuel tank in the other wing?

o (a) Not possible.
o (b) All boost pumps must be on.

- (c) The crossfeed valve must be opened.

*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.** Which control switch would you never find on a refueling control panel?

o (a) Fuel valve switches.
o (b) Battery switch.

- (c) Fuel booster pump switches.

*If choice c is selected set score to 1.*

**93.** What is the purpose of longitudinal balance fuel systems?

- (a) Keep the centre of gravity as close as possible to the ideal position.

o (b) Carry more fuel.
o (c) Trim the aircraft so that there is no need for trimable horizontal stabilizers.

*If choice a is selected set score to 1.*

**94.** What is the advantage of a powerpack compared to a normal hydraulic system?

It is a....

o (a) more powerful system.
o (b) self-contained system that does not require electrical power from the main electrical system.

- (c) self-contained system requiring no supply from the main hydraulic system.

*If choice c is selected set score to 1.*

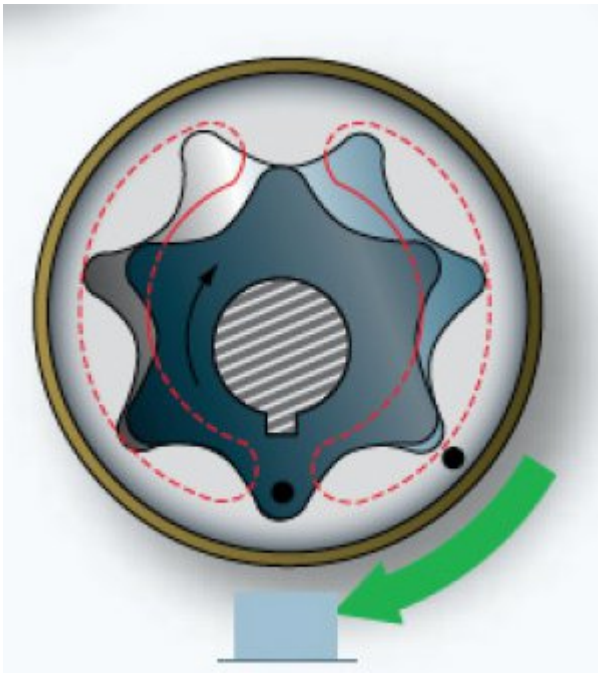
**95.** What defines a good hydraulic fluid?

- (a) A high fire point.

o (b) A high viscosity.
o (c) A low flash point.

*If choice a is selected set score to 1.*

**96.** What type of pump is shown in the figure below?



- o (a) Hand pump
- • (b) Ge-rotor pump
- o (c) Gear pump

*If choice b is selected set score to 1.*

**97.** What is the name of the hydraulic filter located in the pump supply line from the reservoir?

- • (a) A low pressure filter.
- o (b) A return filter.
- o (c) A micronic filter.

*If choice a is selected set score to 1.*

**98.** What monitors hydraulic pump pressure?

- o (a) Pressure sensors.
- • (b) Pressure switches.
- o (c) They are not monitored.

*If choice b is selected set score to 1.*

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

- (a) Pumps.

o (b) Pressure sensors.
o (c) Landing gear.

*If choice a is selected set score to 1.*

**100.** Which of the following is a visual ice detector?

o (a) Radioactive ice detector.

- (b) Hot rod ice detector.

o (c) Vibrating rod ice detector.

*If choice b is selected set score to 1.*

**101.** Engine anti-ice systems are powered by:

o (a) Electrical heating mats.

- (b) Bleed air extracted from the on-side engine.

o (c) Pneumatic bleed air.

*If choice b is selected set score to 1.*

**102.** Electrical ice protecting systems can be used for....

- (a) de-icing as well as anti-icing.

o (b) De-icing only.
o (c) Anti-icing only.

*If choice a is selected set score to 1.*

**103.** After inadvertently applying rain repellant, you must....

o (a) immediately operate the windscreen wipers.

- (b) immediately wash the windscreen.

o (c) the rain repellant dry before washing the windscreen.

*If choice b is selected set score to 1.*

**104.** Which of the following statements is true?

- o (a) Drainmasts heaters can be controlled from the flight deck.
- o (b) Drainmasts are NOT heated on the ground.
- (c) Drainmast heaters go to a higher setting when in flight.

*If choice c is selected set score to 1.*

**105.** How does a pneumatic rain removal system work?

- o (a) By using bleed air to operate pneumatic actuators to move the wiper blades.
- o (b) By heating the windscreen with hot bleed air.
- (c) By blowing high pressure bleed air over the windscreen.

*If choice c is selected set score to 1.*

**106.** What is "wheel track"?

- (a) The distance between left and right main landing gear.
- o (b) The horizontal distance between main and nose landing gear.
- o (c) The amount of degrees the aircraft deviates from the straight ahead track while taxing.

*If choice a is selected set score to 1.*

**107.** After an emergency landing gear extension the door will:

- o (a) Close.
- o (b) Close if hydraulic power is available.
- (c) Remain open.

*If choice c is selected set score to 1.*

**108.** A red light inside the landing gear selector lever is illuminated, this means:

- o (a) The landing is up and locked.
- o (b) The landing gear is down and locked.
- (c) The landing gear is not in selected position.

*If choice c is selected set score to 1.*

**109.** What is a fusible plug?

- o (a) A type of plug to quickly deflate the tyre before replacing it.
- o (b) A type of valve which opens when the tyre pressure gets too high.

- (c) A type of plug which melts when the tyre gets too hot.

*If choice c is selected set score to 1.*

**110.** What are creep indicators?

- (a) Shows how much a tyre has moved on the rim.

o (b) A warning light in the cockpit to show that the aircraft has moved on the ground.
o (c) Shows how much a tyre has moved compared to the inner tube.

*If choice a is selected set score to 1.*

**111.** During take-off and landing, the rudder pedals can give:

- (a) Limited nose wheel steering commands.

o (b) No nose wheel steering commands.
o (c) Full nose wheel steering commands.

*If choice a is selected set score to 1.*

**112.** What is the advantage that stress sensors have over other air/ground sensing systems?

- (a) Can measure aircraft weight.

o (b) Is easier to replace.
o (c) More reliable.

*If choice a is selected set score to 1.*

**113.** Which lights can be used to detect ice build-up?

o (a) Position lights.

- (b) Wing scan lights.

o (c) Runway turn-off lights.

*If choice b is selected set score to 1.*

**114.** What kind of light is used as cabin flood lighting?

- (a) Fluorescent tubes.

o (b) Spot lights
o (c) Incandescent lightbulbs.

*If choice a is selected set score to 1.*

**115.** Which statement is true?

- (a) When the internal emergency light switch is used both internal and external emergency light come on.

o (b) When operating the external emergency light switch both internal and external lights come on.
o (c) Operating the internal emergency light switch only turns on the internal emergency lights.

*If choice a is selected set score to 1.*

**116.** Cabin chemical oxygen generators are located in?

- (a) The passenger service units.

o (b) The cargo hold.
o (c) The overhead bins.

*If choice a is selected set score to 1.*

**117.** What is the chemical used in chemical oxygen generators?

o (a) Sodium hydroxide

- (b) Sodium chlorate and iron

o (c) Ozone

*If choice b is selected set score to 1.*

**118.** The pressure regulator on an oxygen demand system regulates the pressure to:

o (a) 90 PSI

- (b) 70 PSI

o (c) 400 PSI

*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?

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

o (b) The oxygen bottle pressure is below operational limits.
o (c) The maximum pressure in the oxygen supply lines has been exceeded.

*If choice a is selected set score to 1.*

**120.** Compared to other power sources, what is the benefit of using pneumatic systems?

- o (a) Easier to detect leaks.
- • (b) Power to weight ratio is better.
- o (c) A fire can easily be put out by turn off the supply.

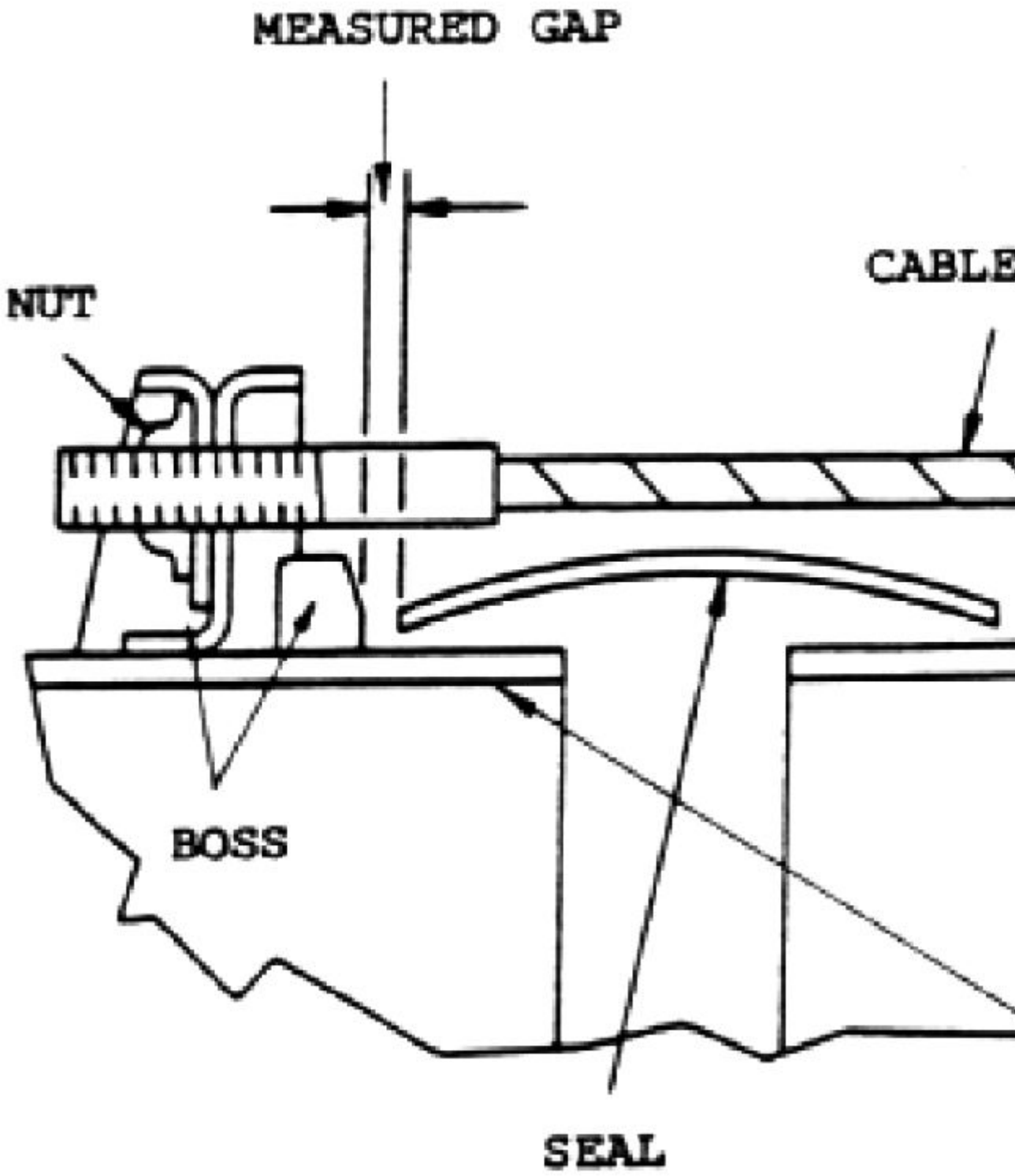
*If choice b is selected set score to 1.*

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

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

*If choice b is selected set score to 1.*

**122.** When are cable attachment type of duct fitting joints used?




- (a) Ducts where large temperature changes exist.

o (b) Ducts where high pressure changes exist.
o (c) Large diameter ducts.

*If choice a is selected set score to 1.*

**123.** At low altitudes, what creates the vacuum for the water and waste system?

- (a) A vacuum pump.

o (b) The pneumatic system using ventures.
o (c) The pressure differential between the waste tank and the outside of the aircraft.

*If choice a is selected set score to 1.*

**124.** What is the reason that some large aircraft have 2 servicing panels for the water?

o (a) To service 1 tank but from two locations.

- (b) To be able to drain the system completely.

o (c) To service 2 tanks.

*If choice b is selected set score to 1.*

**125.** What is the toilet drain plug flapper valve used for?

- (a) Prevents the draining of toilet waste of tank when the cap is open.

o (b) Prevents the waste tank from emptying in flight.
o (c) Allows the tank servicing to be done via the drain hose.

*If choice a is selected set score to 1.*

**126.** Which bite test is initiated by the engineer?

o (a) Continuous bite
o (b) Start-up bite

- (c) Interruptive bite.

*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?

- (a) Navigational database.

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

*If choice a is selected set score to 1.*

**128.** What type of data link is used by the electronic library system to communicate with ground operations?

- (a) Bidirectional gate link

o (b) Arinc 429
o (c) Mono-directional Ethernet link

*If choice a is selected set score to 1.*

**129.** Besides speed, temperature and pressure, what else is the engine monitored for?

- (a) Vibration

o (b) Load
o (c) Thrust

*If choice a is selected set score to 1.*

**130.** In an aircraft which has Integrated Modular Avionics....

o (a) all sensors submit information to the flight deck, using WIFI.
o (b) each passenger seat is equipped with an independent IMA unit, which can be used for In Flight Entertainment.

- (c) Flight Critical Information is processed by the IMA system.

*If choice c is selected set score to 1.*

**131.** Functions integrated in IMA are:

o (a) Only for electrical powered systems.
o (b) Only for hydraulic powered systems.

- (c) Basically for all aircraft systems.

*If choice c is selected set score to 1.*

**132.** The Boeing common computing resource (CCR) consists of:

o (a) 2 General processor modules
o (b) 16 General processor modules

- (c) 8 General processor modules

*If choice c is selected set score to 1.*

**133.** Airborne electrical AFDX cables are connected with:

- (a) 4-pins quadrax connections

- (b) 8-pins RJ-45 connections
- (c) Fibre-optic couplings.

*If choice a is selected set score to 1.*

**134.** Where is a passenger control unit used for?

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

*If choice c is selected set score to 1.*

**135.** Typical location of the Passenger Control Unit (PCU) is, in the:

- (a) Overhead Bin, above the passenger.
- (b) Passenger seat.
- (c) Avionics bay.

*If choice b is selected set score to 1.*

**136.** Where can the passenger data base be found?

- (a) Loaded in the cabin network server unit.
- (b) Only on a paper list in the cockpit for security.
- (c) Only at the airport of departure.

*If choice a is selected set score to 1.*

**137.** The Cabin Video monitoring system is used....

- (a) to assist pilots in case of emergencies in determining the structural condition of the cabin/fuselage.
- (b) to detect unruly passengers.
- (c) to record behaviour of passengers and cabin crew, and can be used as evidence in legal proceeding.

*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 isolated data network.

- (c) The In Flight Entertainment system, only.

*If choice a is selected set score to 1.*

**139.** The Electronic Flight Bag (EFB) can be used for?

- (a) Weight and Balance calculations.

- (b) Both answers are correct.

- (c) Determining the maintenance history of the aircraft.

*If choice b is selected set score to 1.*

**140.** A dedicated maintenance laptop using WIFI can be used for?

- (a) Installing newly released navigation software.
- (b) Accessing to see and delete data from the Aircraft File Server.

- (c) Accessing aircraft fault data.

*If choice c is selected set score to 1.*

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