



**DEPARTAMENTO “SEGURIDAD OPERACIONAL”
SUBDEPARTAMENTO “LICENCIAS”
SECCIÓN EVALUACIONES**

**EXAMEN POR MATERIAS PARA USO DE LOS POSTULANTES A LA
HABILITACIÓN DE TIPO EN MATERIAL BOEING B-732.**

APU

1 Failure of the APU starter motor to engage is indicated by:

- A) No indication on the DC ammeter.
- B) Illumination of the APU FAULT light.
- C) Master control automatically returning to OFF.
- D) Failure of the APU CRANK light to illuminate.

2 APU switch position:

- A) Start: Normal position with the APU running.
- B) Normal: Position with the APU running.
- C) ON: Normal position with the APU running.
- D) APU switch has only on and off positions.

3 Pulling the APU fire switch overrides all the other APU controls.

- A) True.
- B) False.

4 If the APU slow down below normal running speed:

- A) It will automatically shutdown and illuminate the OVERSPEED light.
- B) It will attempt to return to normal operating speed.
- C) It will disconnect the generator and return to the start cycle.

5 Which of the following malfunctions will cause an automatic shutdown of the APU:

- A) Overspeed.
- B) Low engine RPM.
- C) high oil quantity.
- D) High EGT.

6 The APU cannot be operated on the ground unless the Battery switch is ON.

- A) True.
- B) False.

7 The APU will automatically shutdown if it senses:

- A) Low oil quantity, low oil pressure or high EGT.
- B) Low oil pressure, high oil temperature or fire.
- C) Low oil quantity, overspeed or fire.
- D) Low oil pressure, low or high turbine speed.

8 What component of the APU maintains the proper generator frequency:

- A) The fuel control unit.
- B) A constant speed drive.
- C) The frequency regulator.

9 If the APU fails to reach normal running speed within the timer limit, the APU will automatically shutdown.

- A) True.
- B) False.

AUTOPILOT

1 Which following will cause the autopilot to disengage:

- A) Turning the yaw damper switch off.
- B) Loss of system B hydraulic pressure.
- C) The Vertical Gyro Signal is lost or transferred.
- D) All of the above.

2 The autopilot will maintain the altitude that:

- A) Is set on the pressurization controller.
- B) Is selected on the Capt. altimeter.
- C) The aircraft is at when the pitch mode selector is moved to ALT HOLD.

3 Can the autopilot be engaged with the yaw damper off?

- A) Yes.
- B) No.

4 Moving the system select switch from B to INOP will cause.

- A) Both autopilot channels to disengage.
- B) Yaw damper to disengage.
- C) Both of the above.

ELECTRIC

1 The standby DC bus is normally powered by:

- A) The battery bus.
- B) DC bus N°1.
- C) T/R N°3
- D) DC bus N°2

2 To check the static inverter operation the AC meters selector switch must be positioned to:

- A) Test.
- B) Stby pwr.
- C) Apu gen.
- D) any sport.

3 In flight, AC load may be supplied by:

- A) Engine driven generators.
- B) The APU generator.
- C) A long extension cord.
- D) The battery (through the static inverter for a short time).

4 DC power is required for systems cautions and navigation equipment following components?

- A) Transformer rectifier units.
- B) Voltage regulators.
- C) The battery.
- D) Static converters.

5 The function of the battery switch is power the battery bus.

- A) True.
- B) False.

6 The primary source of power to the battery bus is:

- A) TR3.
- B) Hot battery bus.
- C) Battery charger.

7 On the ground all the electrical busses may be supplied by:

- A) One engine driven generator.
- B) The APU generator.
- C) The battery (some AC loads through the static inverter).
- D) An external DC ground power source.

8 In flight, AC loads may be supplied by engine driven generators.

- A) True.
- B) False.

9 Regardless of the electrical power source on the airplane, the Battery switch must be positioned On to accomplish a satisfactory test of the static inverter operation.

- A) True.
- B) False.

10 Illumination of the CSD LOW OIL PRESSURE light requires the crew to:

- A) Trip the respective generator breaker.
- B) Check the drive temperature for both IN and RISE.
- C) Land as soon as possible.
- D) Disconnect the CSD.

11 An inflight loss of all generators requires the crew to immediately position the standby power switch to the bat position.

- A) True.
- B) False.

12 The standby AC bus is normally powered by:

- A) The essential bus.
- B) Generator bus N°1.
- C) Transfer AC bus N°1.
- D) The battery (through the static inverter).

13 You connect the APU to the N°2 bus with the GND power connected to electrical system. This will causes:

- A) An power the N°1 gen bus.
- B) Disconnection of the GND power source.
- C) Power the N°2 gen bus.
- D) All are correct.

14 On the ground the STANDBY PWR OFF light will normally extinguish when:

- A) The battery switch is positioned to ON.
- B) An external DC power cart is connected to replace the battery for APU start.
- C) Any AC power source is connected to either generator bus.

FLIGHT CONTROL

1 What is the correct flap setting for a jammed stabilizer landing?

- A) 1
- B) 10
- C) 15
- D) 25

2 During the cockpit safety inspection the flap lever position and indicator should be in agreements.

- A) True.
- B) False.

3 The takeoff warning horn will sound if a takeoff is attempted with the speedbrake in the ARMED position.

- A) True.
- B) False.

4 With the alternate flap arm switch in ARM, moving the alternate flaps switch momentarily to down will cause the leading edge devices to move to the full extend position.

- A) True.
- B) False.

5 Assymetry protection (is not) available during alternate flap extension or retraction.

- A) True.
- B) False.

6 For a one engine inoperative landing, the correct flap setting is:

- A) 15
- B) 10
- C) 30
- D) 40

7 In the event hydraulic Systems A and B fail, the ailerons and elevators may be operated manually and the rudder may be operated with the standby hydraulic system.

- A) True.
- B) False.

8 The stabilizer trim is set:

- A) Anywhere in the green band is acceptable for takeoff.
- B) The maximum airplane nose up trim available.
- C) According to the CG of the airplane for each flight.

9 With the flaps set at 1 for takeoff which leading Edge devices annunciator light will be illuminated:

- A) LE FLAPS TRANSIT.
- B) LE FLAPS EXT.
- C) BOTH EXTINGUISHED.

10 The correct position for flaps on landing with a system B failure is:

- A) 1
- B) 15
- C) 30
- D) 40

FUEL

1 When crossfeed is open, fuel may be fed from any tank to:

- A) Any other tank.
- B) The center tank only.
- C) Either engine.

2 Under normal conditions, one center tank boost pump will feed the left engine and one the right engine, until the center tank is dry.

- A) True.
- B) False.

3 Fuel quantity indicators use AC power from standby bus during normal operation.

- A) True.
- B) False.

4 Normal fuel panel configuration for takeoff is: a) Boost Pumps all on ; b) Fuel Heat off ; c) Crossfeed closed ; d) Fuel Shutoff Valve closed.

- A) True.
- B) False.

5 A center tank fuel pump LOW PRESSURE light will illuminate when the fuel pump switch is OFF.

- A) True.
- B) False.

6 The aft boost pump in the N°1 tank is turned ON. Both LOW PRESSURE LIGHTS for tank N°1 extinguish, this is an indication that:

- A) The N°1 tank bypass valve is inoperative.
- B) The N°1 tank forward boost pump check valve is inoperative.
- C) The N°1 tank aft boost pump check valve is inoperative.

7 To close the crossfeed valve:

- A) Push the crossfeed valve switch.
- B) Pull the crossfeed valve switch to the "click stop".
- C) Rotate the crossfeed valve switch 90° counterclockwise.

HYDRAULIC

1 With a system B failure, the landing gear must be extended manually.

- A) True.
- B) False.

2 With a loss of system A pressure the system A pump are turned off. Under these conditions will the pump be lubricated and cooled.

- A) True.
- B) False.

3 To extend the landing gear manually, the landing gear lever should be:

- A) UP.
- B) OFF.
- C) DOWN.

4 The number 1 A hydraulic system pump switch when placed to the OFF position will disengage the number 1 hydraulic pump.

- A) True.
- B) False.

5 A 3.000 PSI reading on the system B brake pressure gage is a positive indication of good system B pressure.

- A) True.
- B) False.

6 The standby system LOW QUANTITY light could illuminate if the standby system is not armed.

- A) True.
- B) False.

7 The standby system is not used during normal hydraulic system operation.

- A) True.
- B) False.

8 With a loss of system B, the outboard flight spoilers and outboard brakes are inoperative.

- A) True.
- B) False.

9 The hydraulic brake pressure indicator reads zero.

- A) Check other hydraulic system for normal indications.
- B) The brakes are inoperative.
- C) Braking will be normal if system pressure is normal.
- D) The accumulator will supply pressure for the brakes.

10 With a loss of both system A and B, the elevator FEEL DIFF light will illuminate.

- A) True.
- B) False.

ICE AND RAIN PROTECTION

1 Wing heat should not be used when the total air temperature is above 10°C.

- A) True.
- B) False.

2 Rain repellent should not be used on a dry windshield.

- A) True.
- B) False.

3 The illumination of the window heat overheat light indicates a malfunction. In this case the green power ON light will also extinguish.

- A) True.
- B) False.

4 The green indicator lights on the Pitot Static module, when illuminated, indicate power is being supplied to the respective probe.

- A) True.
- B) False.

5 Wing heat may be used as either an anti-ice or de-ice system.

- A) True.
- B) False.

6 The ON position of the Wing Anti-ice switch will not open the valves on the ground.

- A) True.
- B) False.

7 When required, you are permitted to supply both packs from one engine's bleed air.

- A) True.
- B) False.

8 Verification of pack operation when the Pack switch is positioned ON is by observing:

- A) A drop in duct pressure.
- B) An increase in the pack operating temperature.
- C) A change in the cabin altitude reading.
- D) Illumination of an advisory operating light.

9 Whenever the air conditioning Pack switch is positioned OFF, its respective Air Mix Valve Position Indicator Should be:

- A) Mid range.
- B) Full hot.
- C) Full Cold.

10 As the airplane descends, an erratic EPR is noticed and ice observed on the windshield wiper arm bolt:

- A) Gravel Protect - Switch should be positioned to ANTI ICE/TEST.
- B) Expect an engine flameout.
- C) Engine anti-ice should be turned on.
- D) Wing anti-ice should be turned on.

11 What is the cockpit indication when an engine anti-ice valve fails to open?

- A) Blue VALVE OPEN light illuminates bright only.
- B) Blue VALVE OPEN light remains extinguished.
- C) Engine instruments show erratic EPR reading.
- D) Illumination of the ANTI-ICE annunciator light.

12 Anytime engine anti-ice is needed, the wing anti-ice system must also be turned on.

- A) True.
- B) False.

13 If a wing anti-ice valve fails to open, the crew should:

- A) Declare an emergency, if in icing conditions.
- B) Initiate an immediate climb or descent.
- C) Avoid extended flight in icing conditions.
- D) Turn on engine ignition to prevent flameout.

14 Engine anti-ice should be used when the temperature is 10 °C or below and moisture visible.

- A) True.
- B) False.

15 Wing heat may be used as either an anti-ice or de-ice system.

- A) True.
- B) False.

16 The angle airflow sensor is anti-iced by independent 115 V AC heating element, activated by a switch in the overhead panel.

- A) True.
- B) False.

INSTRUMENTS

1 If the GLIDE SLOPE light is amber.

- A) The command bars will indicate a descent.
- B) The command bars will indicate a climb or descent depending upon the position of the PITCH selector.
- C) The command bars will indicate a command toward the glide slope.

2 The flight director does not indicate a flare maneuver.

- A) True.
- B) False.

3 The pitot static system includes alternate source for normal Captain and F/O pitot inputs.

- A) True.
- B) False.

4 The TAT indication is only valid in-flight.

- A) True.
- B) False.

5 The contour function of the radar is used:

- A) To identify the highest precipitation areas of the storm cells.
- B) To enhance the land-water contrast.
- C) To allow turbulence to be displayed.

6 With the compass switch in normal:

- A) All RMI's are connected to compass system N⁰¹.
- B) Both HSI's are connected to compass system N⁰¹.
- C) Both HSI's are connected to compass system N⁰².
- D) None is correct.

7 The VHF radios may be operated:

- A) Simultaneously.
- B) One transmitter/receiver only may be activated at a time.
- C) Listen to both simultaneously and transmit one at a time.

8 A ground crewman is connected at the flight Interphone jack of the external power panel. For him to talk to the flight crew, the Service Interphone Switch on the aft overhead panel must be ON.

- A) True.
- B) False.

9 More than one communication facility may be selected for transmission at one time on one audio selector panel.

- A) True.
- B) False.

LANDING GEAR

1 Placing the autobrake selector to OFF is the only method to deactivate the autobrake system.

- A) True.
- B) False.

2 The ANTI SKID INOP light should be _____ when the parking brake is set.

- A) Off.
- B) On.

3 With either system A or B failed, automatic brakes should not be used on landing.

- A) True.
- B) False.

4 The landing gear is normally extended and retracted by system (s).

- A) A
- B) B
- C) STANDBY hydraulic pressure.

7 During landing with auto brake system armed, the brake will be automatically applied after thrust levers are idle, wheels spin up.

- A) True.
- B) False.

8 The landing gear is normally extended and retracted by system "B" hydraulic pressure.

- A) True.
- B) False.

9 Hydraulic pressure is released from all landing gear line and actuators when the gear lever is in the position:

- A) UP.
- B) OFF.
- C) DOWN.

10 In the event system A fails and the landing gear is up, each gear may be extended by:

- A) System B.
- B) Standby system.
- C) Manual Extension.
- D) None.

11 When the landing gear is up and locked all lights will be extinguished when the gear lever is:

- A) Up.
- B) Off.
- C) Down.

12 Red gear light will illuminate when either or both throttle lever are returned to idle range and landing gear is down and locked.

- A) True.
- B) False.

OXYGEN

1 The passenger oxygen system is activated when:

- A) Cabin altitude reaches 14.000 feet.
- B) Passenger oxygen switch is moved to ON.
- C) Manual actuation and reset handle pull on.
- D) All are correct.

2 The crew and passenger oxygen system use the same oxygen bottles.

- A) True.
- B) False.

3 The oxygen provided to the passengers mask is diluted by cabin air in variation with cabin altitude.

- A) True.
- B) False.

PNEUMATIC AC AND PRESSURIZATION

1 If the FLT/GRD switch on the overhead panel is moved to FLT while the airplane is on the ground, the airplane will:

- A) Remain depressurized.
- B) Pressurize to the selected cabin altitude.
- C) Pressurize the cabin altitude to 0.125 psi.

2 The Dual Bleed light will illuminate whenever the APU bleed valve and an engine bleed valve are open and interconnected.

- A) True.
- B) False.

3 While in cruise, you experience a failure of both the AUTO and STBY mode. To make the cabin descend, you should:

- A) Close the outflow valve.
- B) Open the outflow valve.

4 Following an unpressurized takeoff, the first pack can be restarted:

- A) Prior to 400 feet above the ground.
- B) After the gear is up and obstacle clearance has been attained.
- C) At not less than 400 feet and prior to 2000 feet above the ground.

5 The output air temperature from the pack can be manually controlled even though the DUCT OVERHEAT light is illuminated.

- A) True.
- B) False.

6 With the PACK TRIP OFF light illuminated:

- A) Position the pack switch to OFF.
- B) The pack valve closes automatically and may be reset.
- C) Position the bleed switch to OFF.
- D) Open the isolation valve.

7 Illumination of the engine BLEED TRIP OFF light will also automatically open the isolation valve.

- A) True.
- B) False.

8 During ground operation you must assure that the equipment cooling off light will be extinguished.

- A) True.
- B) False.

9 The deflector door extends when activated electrically by the air ground safety sensor.

- A) True.
- B) False.

10 The off schedule descent light indicates:

- A) The airplane has leveled-off below the selected flight altitude.
- B) The selected landing altitude is higher than the flight altitude.
- C) The airplane has descended before reaching selected flight altitude.

11 The water tank is pressurized by bleed air of the pneumatic system.

- A) True.
- B) False.

12 The forward outflow valve has two positions, close and open, which depends on the main outflow valve position.

- A) True.
- B) False.

13 Before descent, the CAB ALT selector must be adjusted to:

- A) Landing field elevation.
- B) Landing field elevation plus 200 feet.
- C) Landing field elevation minus 200 feet.
- D) Landing field elevation minus 300 feet.

14 To pressurize the airplane for takeoff, move the FLT/GRD switch to FLT.

- A) True.
- B) False.

15 The engine bleed shutoff and isolation valves are actuated by DC electrical power.

- A) True.
- B) False.

16 With the isolation valve switch in AUTO, the isolation valve closes when:

- A) Both pack switches are positioned OFF.
- B) An engine bleed trip off has occurred.
- C) Both Pack and Engine Bleed switches are ON.
- D) There is equal duct pressure on both sides.

17 When a bleed trip off has been reset, what indications show that the engine bleed valve has reopened?

- A) The pack temperature begins to increase.
- B) The BLEED TRIP OFF light extinguishes.
- C) Cabin pressurization fluctuates for a short time.
- D) Air mix valve indicator moves to full cold.

18 If the FLT/GRD switch is inadvertently moved to the GRD position during flight, the airplane's Cabin will:

- A) Depressurize.
- B) Remain pressurized.
- C) Seek selected CAB ALT.

19 In the automatic mode of operation the cabin rate of ascent and descent in feet per minute is:

- A) 500 and 500.
- B) 500 and 350.
- C) 300 and 300.

20 The airplane should never be pressurized on the ground to a differential pressure of more than. 125 psi. Why?:

- A) The doors would be difficult or impossible to open.
- B) There would be a noticeable pressure bump during takeoff.
- C) The air conditioning packs could be back pressured and trip off.

21 The MAN DC moves the outflow valve at about half the rate the MAN AC mode.

- A) True.
- B) False.

22 With an wing body overheat light illuminated, the respective engine bleed air valve are open and interconnected.

- A) True.
- B) False

23 The lights that you can reset with the trip reset button are:

- A) Duct overheat.
- B) Dual bleed.
- C) Pack trip off.
- D) A and B are corrects.

24 Properly position the engine bleed air, APU and pack valve switches to accomplish a pressurized no bleed takeoff.

- A) Left pack on.
- B) Isolation valve close.
- C) Right pack on.
- D) All are corrects.

25 When required, you are permitted to supply both packs from one engine's bleed air.

- A) True.
- B) False.

26 The F/O selects a CAB ALT below field elevation. The airplane will:

- A) Pressurize to the selected CAB ALT.
- B) Pressurize to a maximum of .125 psi.
- C) Remain depressurized.

27 Before engine start the CAB ALT should be set for:

- A) Landing field elevation minus 200 feet.
- B) Takeoff field elevation minus 200 feet.
- C) Cruise altitude for the planned flight altitude.
- D) Takeoff field elevation minus 300 feet.

28 The ram door full open lights will illuminate.

- A) On the ground.
- B) Inflight when the flaps are extended.
- C) Whenever the pack temperature is above 110°C.
- D) A and B are corrects.

29 After takeoff, a CAB ALT for cruise of 3.400 feet has been selected. To hold the cabin at a constant differential pressure when the airplane levels off.

- A) Maintain a pressure differential of 7.5 psi. (7.8 psi where appropriate).
- B) Climb to and maintain 5.000 feet.
- C) Climb to and maintain 3.400 feet.

POWER PLANT

1 What bus power the fire extinguisher bottles?

- A) Hot battery bus.
- B) Battery bus.
- C) Standby DC.

2 When the overheat detector switch is move to the fire position, the overheat sensors are connected to fire warning indicator.

- A) True.
- B) False.

3 Pressing either the MASTER FIRE WARNING LIGHT or BELL CUT OUT, while the TEST the switch is held to FIRE, will silence the APU remote horn.

- A) True.
- B) False.

4 When an engine fire switch handle is pulled and rotated, freon is discharged into the selected engine:

- A) Between N°1 and N°2 compressors.
- B) Into the engine inlet.
- C) Between the cowling and engine.

5 The start Levers control the:

- A) Starter and fuel.
- B) Fuel and ignition.
- C) Pneumatic pressure and fuel.
- D) Ignition and starter.

6 The ignition system is energized by activating the:

- A) Start switch.
- B) Starter energizer.
- C) Start switch and start lever.
- D) Flight/ground ignition switch.

7 The correct amount of fuel is metered to the engine by the:

- A) Fuel flow transmitter.
- B) Fuel control unit.
- C) Thrust lever.
- D) Pressurization/dump valve.

8 A fuel heater is provided to:

- A) Heat fuel in the wing tanks.
- B) Prevent filter icing.
- C) Control oil temperature.
- D) Control hydraulic fluid temperature.

9 Illumination of a REVERSER UNLOCKED light indicates:

- A) Deflector doors are full open.
- B) Engine is in reverse thrust.
- C) Deflector doors are unlocked.
- D) Low pressure in reverser hydraulic system.

10 In reacting to a fire warning, the first action to be taken is to press the MASTER FIRE WARNING LIGHT.

- A) True.
- B) False.

11 Pulling N°2 FIRE SWITCH will discharge the right fire bottle into N°2 engine.

- A) True.
- B) False.

12 During an engine fire condition, the isolation valve:

- A) Should be selected to OPEN.
- B) Should be selected to CLOSE.
- C) Should be left in AUTO.

13 During a fire condition in any engine the APU bleed valve must be OFF.

- A) True.
- B) False.

14 Illumination of the ISOLATION VALVE light indicates.

- A) Both reverser systems are armed.
- B) One or both reversers are in use.
- C) "B" hydraulic system is inop.
- D) None is correct.

15 During an engine overheat or fire warning circuit test, the detector elements are heated electronically in order to completely test the circuits under actual conditions.

- A) True.
- B) False.

16 What bus power APU and engines fire detection and protection?

- A) Hot battery bus.
- B) Battery bus.
- C) Standby DC.

17 When you pull on engine fire warning switch:

- A) Close the engine bleed air valve, fuel shutoff valve, hydraulic valve and thrust reverser valve.
- B) Trip the engine generator and arm the fire extinguisher circuit.
- C) Deactivate the hydraulic pump low pressure light.
- D) all are correct.

WARNING

1 The warning horn will sound any time the landing gear is not down and locked and either or both thrust levers are retarded to idle and flaps are to 10 units. The horn can be silenced with the horn cutout switch.

- A) True.
- B) False.

2 The altitude alert system compares the altitude set in the window to:

- A) Observers altimeter.
- B) F/O's altimeter.
- C) Captain's altimeter.

3 When the Captain's radio altimeter is inoperative, all modes of the GPWS are inoperative.

- A) True.
- B) False.

4 To reset the Master Caution System, you must:

- A) Press the master caution light.
- B) Press the fire warning light.
- C) Correct the corresponding fail (or fails).

5 The Master Caution Lights and annunciator panel will come on with an amber light in:

- A) Overhead panel.
- B) Overheat/fire protection panel.
- C) Frontal instrument panel.

6 With the emergency exit light switch in arm position, the emergency exit lights will illuminate if:

- A) N°1 DC BUS Failure.
- B) Both gen buses unpowered.
- C) A and B.
- D) Battery switch off.