

AIR CONDITIONING

- 1 The main components of the air conditioning system are:
 - A) Two packs, two zone controllers and one pack controller.
 - B) Two packs, two packs controllers and one zone controller.
 - C) Two packs, each one having its independent zone and pack controller.

- 2 The cabin pressure controllers receive signals from _____.
 - A) FMGC
 - B) Pack flow control valves ADIRS
 - C) All of the above

- 3 Two pressure outflow valves are located below the flotation line.
 - A) True.
 - B) False.

- 4 What are the different sources of air for air conditioning and pressurization?
 - A) Engine bleed air and recirculated air (only on ground)
 - B) Engine bleed air and recirculated air.
 - C) Engine bleed air and recirculated air, or if selected, APU bleed air and recirculated air.

- 5 The air conditioning pack flow control valve closes automatically in case of:
 - A) Insufficient upstream pressure
 - B) Pack overheating
 - C) Engine starting

- 6 During the exterior preflight on a warm day, in what position would you expect to find the avionics ventilation system INLET and EXTRACT valves to be in?
 - A) Closed.
 - B) Open.
 - C) Closed or open regarding of the APU bleed valve.

- 7 What happens to the pack flow control valves during engine start?
 - A) They must be selected off.
 - B) They must be selected off on cold days only.
 - C) They must be selected off on hot days only.

- 8 In the event of failure of one pack air cycle machine:
 - A) The pack is inoperative and should be turned off with no flight restrictions with the other pack available.
 - B) The air is still cooled by the heat exchanger and no flight operational restrictions with the other pack available.
 - C) Aircraft can operate with one pack and no flight operational restrictions

- 9 The temperature of each aircraft zone is optimized by means of:
 - A) A HOT AIR valve.
 - B) A ZONE control valve.
 - C) A PACK FLOW VALVE.

- 10 When does normal pressurization occur?
- A) After second engine start.
 - B) Pressurization occurs during taxi
 - C) Pressurization occurs during the takeoff roll.
- 11 When does normal depressurization occur?
- A) 100 feet AGL above touchdown.
 - B) It is complete three minutes after touchdown.
 - C) After flap retraction.
- 12 Under what conditions should the pack flow controller be set to LO?
- A) With a low passenger load to reduce bleed air demand and improve fuel efficiency.
 - B) With a low passenger load to increase cabin temperature
 - C) With a high passenger load to reduce cabin temperature
- 13 The crew can control the amount of air flow to the packs by using:
- A) The PACK FLOW selector.
 - B) The COCKPIT and CABIN selectors.
 - C) The RAM AIR pushbutton.
- 14 Which statement is correct regarding illumination of the amber AFT ISOL VALVE fault light?
- A) Automatically closes the aft cargo compartment isolation valves.
 - B) Means that either the inlet or outlet isolation valve(s) disagrees with the switch position.
 - C) Indicates that the extract fan has stopped.
- 15 Pressurization controllers receive inputs from:
- A) LGCIU, ADIRU, FMGS, and EIU.
 - B) LGCIU s and the MCDU.
 - C) LGCIU' s and pitot static sources.
- 16 In case of air cycle machine failure:
- A) A bypass valve allows the air to be cooled by the associated heat exchanger only.
 - B) The pack must be shut off and the available pack will operate in high flow to satisfy demand.
 - C) The pack is not affected since the bypass valve allows the compressor to still operate.
- 17 There are ___ high pressure air conditioning and engine starting service panels located on the top center fuselage.
- A) 2
 - B) 3
 - C) 4
- 18 What computers control the cabin and cockpit conditioned air?
- A) Two zone controllers that pass information and requests to two pack controllers.
 - B) Two pack controllers that pass information and requests to three zone controllers
 - C) Three zone controllers that pass information and instructions to two pack controllers for three zones.

- 19 What happens when a temperature selector rotary knob is adjusted?
- A) A signal is sent to the zone controller requesting a different temperature.
 - B) Nothing as there is no relationship between a temperature selector knob and the trim air valve.
 - C) The associated trim air valve immediately moves to a different position.
- 20 With APU BLEED ON and engine BLEED switches ON with engines running, what is the position of the engine bleed valves?
- A) Closed
 - B) Open
 - C) Depends on the crossbleed selector
- 21 Pressurization is normally automatic. Can you interfere with it?
- A) Yes, CABIN PRESS MODE SEL to OVERRIDE and MAN V/S CTL toggle switch.
 - B) Yes, manually set landing elevation using the LND ELEV AUTO selector.
 - C) Both are correct.
- 22 What is the function of the ram air valve?
- A) Ventilation while on the ground.
 - B) Emergency smoke removal and ventilation in the event of dual pack failure.
 - C) Avionics cooling.
- 23 Placing the EXTRACT push button to override:
- A) De-energizes the extract fan
 - B) Places the avionics ventilation system in the closed configuration
 - C) Insures the extract fan will continue to be energized.
- 24 PACK BAY ventilation:
- A) Is controlled from the VENTILATION panel and monitored on the PRESS ECAM page.
 - B) Is controlled from the VENTILATION panel, normal system operation cannot be monitored.
 - C) Cannot be controlled or monitored by the pilot when operating normally.
- 25 _____ and _____ temperature can be selected from the AIR panel in the cockpit.
- A) Cabin and aft equipment bay
 - B) Flight deck and cargo compartment
 - C) Cabin and Flight deck
- 26 With the pressurization system in the automatic mode, which valves are closed when the ditching push button is selected on?
- A) All valves below the water line.
 - B) APU inlet.
 - C) The engine bleed valves.
- 27 The HOT AIR valve push button controls:
- A) The trim air valve.
 - B) The hot air manifold.
 - C) The engine bleed valves.

28 28. Both pressurization auto controllers are set by the active flight plan loaded in the MCDU. The QNH entry on the MCDU Approach Performance page refines the depressurization schedule for the landing.

- A) True.
- B) False.

29 Aft cargo indications may be found on which ECAM page(s)?

- A) Only the ECAM cruise page.
- B) Only the BLEED page.
- C) Only the CAB PRESS page.

30 Avionics ventilation system indications may be found on which ECAM page(s)?

- A) Only the BLEED page.
- B) Only the CAB PRESS page.
- C) The in-flight ECAM cruise page.

31 When APU is supplying the packs, the pack controller sends a demand signal to increase airflow when a zone temperature cannot be satisfied. This signal is sent to the:

- A) Pack Ram Air Inlet Flap.
- B) APU ECB.
- C) Pack Outflow Control Valve.

32 The PACK FLOW controller is set to NORM and yet the ECAM display shows PACK FLOW to be high. How is this possible?

- A) As the engines are not running the PACK FLOW indicators are at the position they were selected to at the last shut down.
- B) As no bleed air is flowing the PACK FLOW valves are spring loaded to the fully open position.
- C) HI flow is automatically selected regardless of PACK FLOW selector position because air is only being supplied by the APU.

33 Air is supplied by the pneumatic system via two packs, four pack flow control valves and a mixing unit.

- A) True.
- B) False.

34 To decrease compartment temperature, the inlet ventilation air is mixed with cold air from _____.

- A) Engines.
- B) Pack 1
- C) Pack 2

35 The avionics ground cool valves open when:

- A) The engines are stopped.
- B) The aircraft is on the ground
- C) The ground cool pushbutton is in the Auto position.

36 The ram air inlet and outlet flaps close during takeoff and landing to avoid ingestion of foreign objects.

- A) True.
 - B) False.
- 37 Two cabin fans are used to:
- A) Ventilate the avionics by the recirculated air from the cabin.
 - B) Ventilate the lavatories and galleys.
 - C) Ventilate the pack bays.
- 38 Which of the following statements is correct concerning conditioned air?
- A) Conditioned air and trim air are mixed then distributed to each zone.
 - B) Recirculated air, conditioned air and hot trim air are mixed then distributed to each zone.
 - C) Hot trim air is added to the mixing unit before distribution to each zone.
- 39 Warm, pre-conditioned bleed air enters the cooling path via the _____ and is ducted to the primary heat exchanger.
- A) Ram air inlets
 - B) Cargo valves
 - C) Recirculation valves
- 40 During normal flight, the avionics ventilation system controls the temperature of the cooling air by:
- A) Adding air conditioned air to the flow.
 - B) Extracting air over board.
 - C) Adding a avionics bay air.
- 41 Placing the avionics ventilation system in the smoke configuration:
- A) Opens the #1 GLC.
 - B) Opens the cargo under-floor valve.
 - C) Opens the #2 GLC.
- 42 How can you change pressurization controllers during flight?
- A) Cycle the LDG ELEV AUTO knob out of the AUTO position then back to AUTO.
 - B) Cycle the CABIN PRESS MODE SEL pushbutton to the MAN position then back to AUTO.
 - C) Cycle the cabin pressurization MAN V/S CTL switch
- 43 Low pressure air is supplied to the air conditioner mixing unit by _____
- A) An inlet valve
 - B) A ground connection
 - C) The engines
- 44 Hot air FAULT light illuminates on the air conditioning panel.
- A) The hot air press reg. valve opens and the trim air valves close.
 - B) The hot air press reg. valve closes and the trim air valves open.
 - C) The hot air press reg. valve closes and the trim air valves close.
- 45 How many trim air valves are there?
- A) One trim air valve.

- B) Three: one each for the cockpit zone, the forward cabin zone, and the aft cabin zone.
C) Two: one for the cockpit and first class zone, and one for the cabin zone.
- 46 What position do the pack valves go to in the event of a loss of the bleed system pressure?
A) They remain in their last position.
B) Full open.
C) Mid position.
- 47 Air for ventilation of the toilets and galleys from:
A) Individual air outlets in the pack bay.
B) The cabin trim air system.
C) Two bleed sources in the air conditioning trim air system.
- 48 What is the function of the Pack Flow selector?
A) Allows the pilot to increase pack flow but will not allow a manual decrease in flow if needed by the aircraft demands.
B) Always allows high flow regardless of switch position when the APU is used for air conditioning.
C) Both are correct.
- 49 The RAM AIR switch should be used:
A) At any time.
B) Only when differential pressure is less than 1 psi.
C) When differential pressure is more than 1 psi.
- 50 The pack compressor outlet temperature indication, on the ECAM bleed page, is normally green but becomes amber above _____ degrees C.
A) 220
B) 230
C) 250
- 51 Which configuration is the avionics ventilation system in while airborne with no abnormalities present?
A) Open.
B) Smoke.
C) Fire.
- 52 In case of air cycle machine failure, a bypass valve allows the bleed air to be cooled by the _____ only.
A) Engines
B) Associated heat exchanger
C) Avionics cooling system
- 53 Trim air valves are modulated by:
A) The zone controller.
B) Anti-ice valve.
C) Hot air pressure regulating valve.

- 54 While operating in the AUTO PRESS mode, the aircraft will depressurize:
- A) Immediately after landing because the outflow valves will fully open when touchdown is sensed.
 - B) At a scheduled rate after landing.
 - C) One minute prior to landing.
- 55 Which statement is TRUE concerning the cargo compartment ventilation?
- A) Both cargo compartments are pressurized and heated using both cabin air and hot trim air
 - B) Recirculated air, conditioned air, and hot trim air are mixed then distributed to each cargo compartment.
 - C) Only the aft cargo compartment is heated and ventilated. Cabin ambient air is mixed with hot trim air and drawn through isolation valves by extraction fans.
- 56 The electric fan which discharges LAV and GALLEY ventilation air overboard:
- A) Is controlled by the pilot from the VENTILATION panel.
 - B) Is controlled by the cabin crew from the forward attendant control panel.
 - C) Cannot be controlled by the crew, it operates automatically.
- 57 The APU BLEED FAULT indicates that the main APU controller is in fault.
- A) True.
 - B) False.
 - C) An APU leak is detected.
- 58 Air from the cabin goes via the inlet valve to the _____, driven by the extraction fan.
- A) Bulk cargo compartment
 - B) Toilets
 - C) Flight deck
- 59 Pack flow will automatically go to HI:
- A) During all ground operations.
 - B) When the cabin temperature exceeds a selected temperature.
 - C) During single pack operation or while the APU is the source of bleed air for the packs
- 60 Channel 1 or channel 2 failure of the air conditioning pack controllers has no effect on pack regulation.
- A) True.
 - B) False.
- 61 Aft cargo ventilation is controlled by:
- A) The aft cargo rotary selector knob.
 - B) The cargo ventilation controller.
 - C) The zone controller and the SDCU.
- 62 The vent fan runs any time there is a normal ships power and the isolation valves are open.
- A) True.
 - B) False.

63 Battery ventilation is achieved by ambient air drawn around the batteries and vented overboard. The crew:

- A) Controls battery ventilation via the CAB FANS pushbutton.
- B) Controls battery ventilation via the EXTRACT pushbutton.
- C) Cannot control battery ventilation, air is vented thru a venturi

64 The cabin zone temperature sensors are ventilated by the air extracted by the lavatory and galley fans.

- A) True.
- B) False.

65 Pressurization indications are found on which ECAM page(s)?

- A) BLEED page.
- B) Only on the CAB PRESS page.
- C) The in-flight ECAM cruise page and the CAB PRESS page.

66 When the DITCHING pushbutton is pressed in:

- A) All fuselage openings below the flotation line are closed.
- B) All fuselage openings are closed or moving to closed.
- C) The slide / rafts will deploy automatically upon impact with the water.

67 How many outflow valves are there?

- A) One valve with one door
- B) One valve with two doors.
- C) Two valves with only one door visible.

68 The two air conditioning packs can only operate together.

- A) True.
- B) False.

69 Each air conditioning pack controller regulates the temperature of its associated pack by modulating the _____.

- A) Bypass valve
- B) Ram air outlet flaps
- C) Ram Air Inlet Flaps

70 At what cabin altitude do you get an ECAM warning?

- A) 8,800 feet.
- B) 9,000 feet
- C) 9,550 feet

71 When the pack flow control knob is positioned to HI, air flow is:

- A) 80% of normal rate.
- B) 100% of normal rate.
- C) 120% of normal rate.

72 If you select a position other than the AUTO detent on the LDG ELEV AUTO selector, how can you see the actual landing elevation value?

- A) On the ECAM CRUISE

- B) On the PRESS page
 - C) On the ECAM CRUISE or the PRESS page.
- 73 What will cause the ENG BLEED fault light to come on?
- A) Overpressure (downstream of bleed valve)
 - B) Bleed overheat
 - C) Wing or engine leak on associated side.
- 74 What does the CARGO HEAT HOT AIR FAULT light indicate?
- A) A duct overheat is detected.
 - B) The Aft Cargo Pressure Regulating valve closes.
 - C) The system will reset if the ISOL VALVE switch is ON.
- 75 During Ground function operation, the outflow valve is:
- A) Fully open.
 - B) Fully closed.
 - C) Positioned according to FMGS demands.
- 76 The outflow valve is powered by:
- A) One of two electric motors.
 - B) One of three electric motors.
 - C) Three mechanically linked electric motors.
- 77 The purpose of the safety valve is to avoid:
- A) Excessive positive pressure differential.
 - B) Excessive negative differential.
 - C) Both are correct.
- 78 The safety valves are operated:
- A) Electrically.
 - B) Hydraulically.
 - C) Pneumatically.
- 79 Which statement is true about the cabin pressure controllers?
- A) Both cabin pressure controllers have backup power supplies for cabin altitude sensing and ECAM display in the manual mode.
 - B) Both cabin pressure controllers have no backup power supplies.
 - C) Only one cabin pressure controller has a backup power supply for cabin altitude sensing and ECAM display in the manual mode.
- 80 When landing elevation is set to AUTO, the landing elevation is sent to the controller from:
- A) FMGS.
 - B) FCU.
 - C) ADIRS.
- 81 What happens when both hot air valves fail closed?
- A) Trim air valves are driven to full closed position.
 - B) Optimized regulation is lost.
 - C) Only the packs regulate temperature.

82 Shortly after takeoff, the crew decides to level-off and return to the point of departure. Which statement is true?

- A) The new landing elevation must be reset manually to stop the cabin from climbing.
- B) The new landing elevation must be reset manually or automatically to stop the cabin from climbing.
- C) The cabin altitude will stop climbing without any action on the pressurization system.

83 Hot air indication, on ECAM cond. page, is normally green but becomes _____ if the flow control valve is fully closed.

- A) White
- B) Amber
- C) Red.

84 When the cooling demand cannot be satisfied, the _____ signals the BMC to decrease the bleed temperature from normal to reduced setting.

- A) Pack controller
- B) Zone controller

85 What does the air conditioner mixing unit do?

- A) Mixes air coming from the engines and packs.
- B) Mixes air coming from the cabin and engines.
- C) Mixes air coming from the cabin and packs.

APU

- 1 On the ground with engines not running, the APU can be started using:
 - A) All 3 aircraft batteries.
 - B) The engine bleed air.
 - C) The APU battery.

- 2 The Electronic Control Box (ECB) is primarily a full authority digital electronic controller that performs the APU system logic for all modes of APU operation such as:
 - A) Sequence and monitoring of start.
 - B) Speed and temperature monitoring.
 - C) Monitoring of bleed air and shut down.

- 3 The APU BLEED valve is automatically closed above _____ feet climbing by the
 - A) 23,000
 - B) 25,000
 - C) 28,000

- 4 When selected on, the APU START push button, will:
 - A) Connect the APU generator to the aircraft electrical system.
 - B) Start the APU if the APU MASTER SW was previously selected ON.
 - C) Open the air intake flap and supply fuel pressure.

- 5 Which one of the following statement is true?
 - A) The APU is supplied by the aircraft fuel system via two APU fuel pumps (forward or aft).
 - B) The APU is supplied by its own fuel reservoir
 - C) The APU is supplied by the aircraft fuel system via the single APU fuel pump.

- 6 The APU has an integral independent lubrication system for lubrication and cooling.
 - A) True.
 - B) False.

- 7 Before the APU starter is energized:
 - A) The APU bleed switch must be deselected.
 - B) Both APU fuel pumps must be selected on
 - C) The APU air intake flap must be fully open.

- 8 The ECB (Electronic Control Box) controls the fuel flow.
 - A) True.
 - B) False.

- 9 When the APU MASTER SW is selected ON:
 - A) the APU computer automatically completes a self-test, opens the air intake flap and supplies fuel pressure.
 - B) The APU computer automatically starts the APU.
 - C) Connects the APU generator to the aircraft electrical system.

- 10 The APU MASTER SW FAULT light will illuminate:
- A) When APU low oil pressure is detected.
 - B) When an automatic shutdown of the APU occurs.
 - C) For an APU overheat or APU fire.
- 11 The APU may be started up to what altitude?
- A) The APU can be started at any altitude using normal aircraft electrical power.
 - B) The APU can be started up to 35,000 feet using only the aircraft batteries.
 - C) The APU can be started up to 30,000 feet using only the aircraft batteries.
- 12 The APU system page will appear on the ECAM:
- A) When selected by the crew.
 - B) Automatically whenever the APU is started and AC power is available.
 - C) Both are correct.
- 13 You switch off the APU but curiously you still have the APU AVAIL indications.
- A) There is a fault with the APU master switch.
 - B) The APU will run for a cooling period of 60 to 120 seconds because you have been using the APU bleed
 - C) You have to push the START SW to initiate the shut down sequence.
- 14 The air intake and an electrically operated flap allow air to reach the compressor inlet.
- A) True
 - B) False.
- 15 With the engines off, if the AVAIL light is illuminated on both the APU START push button and the EXT PWR push button, what is the source of electrical power for the aircraft busses?
- A) It is not possible to determine without checking the ECAM.
 - B) The aircraft batteries
 - C) The APU.
- 16 BAT 1 and 2 push buttons do not need to be selected ON if external power is available.
- A) It is normally left in the lights out position.
 - B) When selected OFF, the APU generator is de-energized.
 - C) Both are correct.
- 17 What is the maximum altitude at which the APU may be started using the batteries only?
- A) 15, 000 ft
 - B) 20, 000 ft
 - C) 25, 000 ft
- 18 If APU is operating in flight:
- A) You may use ELEC plus bleed air up to FL230.
 - B) Use of electric power only is restricted to FL250.
 - C) There are no altitude restrictions on use of APU electrics or bleed air.
- 19 With nobody in the cockpit, if you have an APU FIRE, which statement is correct?
- A) On the ground, an APU EMER shut down will occur and the APU fire bottle will be discharged automatically.

- B) On the ground, you have to perform the ECAM actions to shut down the APU and extinguish the fire from the cockpit.
C) On the ground an APU AUTO shut down will occur but you have to discharge the APU fire bottle manually.
- 20 The basic element of the APU is a single shaft gas turbine which delivers _____ power for driving the accessory gearbox (electrical generator) and produces bleed air (engine starting and pneumatic supply).
A) 2nd stage compressor
B) 3rd stage turbine
C) 2nd stage turbine
- 21 Fire on ground or in flight will cause the APU MASTER SW pushbutton FAULT light to come on.
A) True.
B) False.
- 22 The ECB (Electronic Control Box) controls the electric starter
A) True.
B) False
- 23 With battery power, what would an APU fire test look like?
A) APU FIRE pushbutton illuminated.
B) SQUIB and DISCH lights illuminated
C) Both are correct.
- 24 The starter engages if the air intake is closed and the MASTER SW and the START pushbuttons are ON.
A) True.
B) False.
- 25 The APU may obtain power for starting from:
A) Ground services.
B) Normal aircraft supply.
C) The aircraft/ s batteries or in combination with the external power.
- 26 The Electronic Control Box (ECB) is primarily a full authority digital electronic controller that performs the APU system logic for all modes of APU operation such as:
A) Sequence and monitoring of start.
B) Speed and temperature monitoring.
C) Monitoring of bleed air and shut down.
- 27 The APU cannot be shut down from outside the aircraft.
A) True.
B) False.
- 28 What are some of the causes for an APU automatic shutdown?
A) Fire (on ground only), EGT overtemperature, No acceleration, low oil pressure.

- B) Fire (on ground only), EGT overtemperature, Underspeed, Overspeed, low oil pressure, high oil pressure
C) Fire (on ground only), EGT overtemperature, Reverse flow, Overspeed, low oil pressure, high oil pressure
- 29 Maximum altitude for APU bleed operation is:
A) 15, 000 ft
B) 18, 000 ft
C) 20, 000 ft
- 30 The LOW OIL LEVEL advisory message is set by the:
A) SDAC
B) ECB
C) FCDC.
- 31 On ground, the No Break Power Transfer function is inhibited in case of APU shutdown generated by which of the following conditions?
A) Automatic APU shut down triggered by the ECB.
B) APU shut down from the REFUEL/DEFUEL panel or from the APU FIRE pushbutton.
C) APU shut down from emergency control provided on the external power panel.
- 32 Can the APU be used with wing anti-ice on?
A) No.
B) Yes, but only for electrical power. The APU bleed valve should not be opened while using wing anti-ice.
C) Yes, except during approach and go-around.
- 33 The ECB (Electronic Control Box) controls the electric starter
A) True.
B) False
- 34 The air intake and an electrically operated flap allow air to reach the compressor inlet.
A) True
B) False.
- 35 A 60 minutes cool down period must be observed:
A) After 3 starts attempts without a cool down.
B) After 2 consecutive start attempts
C) After 2 start attempts provided a 1 minute cool down was observed after the first start.
- 36 To shut down the APU, the crew must:
A) Select the APU START pushbutton to OFF.
B) Select the APU MASTER pushbutton to OFF.
- 37 If APU is operating in flight:
A) You may use ELEC plus bleed air up to FL230.
B) Use of electric power only is restricted to FL250.
C) There are no altitude restrictions on use of APU electrics or bleed air.

HYDRAULICS

- 1 The A340 hydraulic system is composed of:
 - A) Three hydraulic systems sharing the same pressure source.
 - B) Three fully independent systems working simultaneously.
 - C) Three hydraulic systems which interchange hydraulic fluid.

- 2 In the event of low hydraulic pressure, the priority valve and pressure maintaining valves give priority to primary flight controls and brakes. The pilots:
 - A) Controls the priority valve from the HYD panel.
 - B) Cannot control the priority valve but monitors their operation on the HYD ECAM page.
 - C) Can neither control nor monitor the priority valve (automatic operation)

- 3 The corresponding hydraulic systems can be pressurized by:
 - A) Two engine driven pumps, an electric pump and a RAT (Ram Air Turbine) for the green system.
 - B) Two engine driven pumps for the blue system.
 - C) Two engine driven pumps for the yellow system.

- 4 When will the yellow system electric pump operate? (AC power is available).
 - A) During the second engine start.
 - B) When the first engine MASTER switch is moved to the ON position.
 - C) If any N2 RPM is less than 45%.

- 5 What are the major equipment losses with loss of Green system?
 - A) Speed Brakes.
 - B) Nosewheel steering, Autobrakes.
 - C) Alternate Brakes.

- 6 The Hydraulic System Monitoring Unit (HSMU) controls:
 - A) Fluid transfer between the three systems.
 - B) Blue and Yellow hydraulic fire shut off valves closure.
 - C) Automatic activation of electric pumps and Ram Air Turbine (RAT) extension.

- 7 After takeoff, engine 4 fails prior to raising the landing gear. When the gear handle is selected UP:
 - A) The green electric pump comes on automatically to assist gear retraction.
 - B) The RAT extends automatically to assist gear retraction.
 - C) The green engine driven pumps only are used to retract the gear. Retraction time is not a factor.

- 8 After extending the RAT, is it possible to check its position and status?
 - A) Check to see if the blue system ELEC PUMP FAULT light is not illuminated.
 - B) Yes, select the ECAM ELEC page.
 - C) Yes, select the ECAM HYD page.

- 9 In case of green reservoir LOW LEVEL the HSMU will:
 - A) Automatically close the ENG 1 and ENG 4 fire shut off valves.

- B) Automatically extend the RAT.
 - C) Automatically start the green electric pump.
- 10 The RAT is capable of powering a pump which will pressurize:
- A) Only the blue system.
 - B) All systems.
 - C) The blue and yellow system.
- 11 The PTU comes into action automatically when the differential pressure between the GREEN and the YELLOW systems is greater than _____ psi.
- A) 300.
 - B) 500.
 - C) 650.
- 12 An electric pump can also pressurize the yellow hydraulic system. This pump runs automatically when:
- A) In flight or in the event of engine 3 failure.
 - B) If the FLAPS lever is not at zero.
 - C) On the ground during cargo door operation.
- 13 What is the normal pressure in the hydraulic system?
- A) 500 psi.
 - B) 1,000 psi.
 - C) 3,000 psi.
- 14 For hydraulic system malfunctions, when will the RAT deploy?
- A) Automatically with the failure of both the green and blue hydraulic systems.
 - B) Automatically with the failure of both the green and yellow hydraulic systems.
 - C) Automatically in some cases, i.e. during a 4 engines failure
- 15 What does the RAT MAN ON switch do?
- A) Extends RAT, pressurizes BLUE system, starts Emergency Generator.
 - B) Extends RAT, must push RAT MAN ON again to pressurize BLUE system.
 - C) Extends RAT and pressurizes GREEN system, starts Emergency Generator.
- 16 During engine start up, when is the BLUE hydraulic system pressurized?
- A) As soon as the PTU is turned on.
 - B) As soon as the BLUE electric pump is manually turned on.
 - C) Automatically after engine 2 start.
- 17 If you lost the GREEN system, what equipment is lost?
- A) Reverser 1 and gear retraction.
 - B) Reverser 1, gear retraction and nose wheel steering.
 - C) Reverser 2, gear retraction, cargo doors and nose wheel steering.
- 18 Crew members can use a hand pump to pressurize the YELLOW system in order to operate the cargo doors when no electrical power is available.
- A) True.
 - B) False.

- 19 If you lost the YELLOW system, what equipment is lost?
- A) Reverser 3
 - B) Parking brake accumulator recharging
 - C) Cargo door.
- 20 On the hydraulic quantity indicator what does the amber level indicate?
- A) The warning level.
 - B) The reservoir contents
 - C) The normal filling level
- 21 All hydraulic systems have a fire shutoff valve.
- A) True.
 - B) False.
 - C) Each of the GREEN and YELLOW systems has a fire shutoff valve in its upstream of its engine driven pump.
- 22 What is the signification of an amber RAT indicator (ECAM HYD page)?
- A) The RAT is uncorrectly stowed.
 - B) The RAT is not stowed.
 - C) Pressure for stowing the RAT has been applied, or the RAT pump is not available.
- 23 In the event of low pressure, heavy load users are isolated to give priority to:
- A) Rudder, elevators and ailerons.
 - B) Rudder, elevators, ailerons and Trimmable Horizontal Stabilizer (THS)
 - C) Rudder, elevators, ailerons, spoilers and braking.
- 24 Leak measurement valve push buttons on maintenance panel:
- A) Are for maintenance purposes and ground operation only.
 - B) May be used by the crew to isolate flight controls during flight.
 - C) May be used to isolate heavy users.
- 25 The Ram Air Turbine (RAT) deployment is automatically controlled by the HSMU when:
- A) Low level in green and yellow hydraulic reservoirs is detected.
 - B) Low level in green and blue hydraulic reservoirs is detected.
 - C) Engine 1 and 4 have failed and the landing gear is in retraction phase.

COMMUNICATIONS

- 1 The audio management system includes how many audio control panels?
 - A) 1
 - B) 2
 - C) 3

- 2 One RMP (radio management panel) gives the flight crew control of all radio communication systems and the other RMP provides back up to FMGCs for controlling radio navigation systems.
 - A) True
 - B) False

- 3 The service interphone system provides communication between:
 - A) The flight crew and the service interphone jacks.
 - B) The flight attendant stations and the service interphone jacks.
 - C) The different service interphone jacks.

- 4 How can you get the mechanics attention when he is outside the aircraft?
 - A) Use the MECH pushbutton on the CALLS panel which sounds an external horn.
 - B) Press the PA button
 - C) Select the MECH transmission key on the ACP

- 5 If the VHF 3 transmission key illuminated amber showing the word CALL
 - A) An ACARS message is waiting.
 - B) Indicates a SELCAL
 - C) The N°1 flight attendant is calling

- 6 RMP #1 is dedicated to which VHF radios?
 - A) VHF 2 and 3.
 - B) VHF 1 and 3.
 - C) VHF 1 and 3.

- 7 You can tune the ILS receivers to different channels.
 - A) Yes
 - B) No
 - C) This protects the autoland mode if the #1 autopilot fails and the #2 system assumes control.

- 8 If you depress the guarded NAV button, the MCDU RAD NAV pages are inhibited and the RMP controls navaid tuning.
 - A) True.
 - B) False.

- 9 Which ACP switch configuration is correct for communication with other cockpit crew members while wearing your Oxygen Mask?
 - A) ACP INT/RAD switch selected to INT, INT reception knob on, loud speaker volume up.
 - B) INT transmission key to on, INT reception knob on, use the sidestick push-to-talk when speaking, loud speaker volume up.

C) Both are correct.

10 The AUDIO SWITCHING rotary selector allows replacement of a failed #1 or #2 ACP with ACP #3.

- A) True.
- B) False.

11 Which statement is correct regarding the cockpit voice recorder?

- A) Is automatically energized when the battery pb/s are selected on.
- B) Is always active after DC electrical power is applied to the aircraft.
- C) Is automatically energized when the parking brake is set.

12 The override switch for the service interphone system is located on the _____ and is used for maintenance purposes only.

- A) Center pedestal
- B) Overhead Panel
- C) BCB behind the Captain/ s seat

13 How do you erase the CVR?

- A) Press the CVR ERASE pushbutton when the aircraft is on the ground with the parking brake set.
- B) Press the CVR ERASE pushbutton for 2 seconds when the aircraft is on the ground with the parking brake set
- C) Press the CVR ERASE pushbutton and CVR TEST pushbuttons for 2 seconds simultaneously.

14 On the ground, CVR is stopped automatically _____ after the last engine shutdown.

- A) Immediately
- B) 1 minute
- C) 3 minutes

15 On the ground, the crew can energize the CVR manually by pressing the GND CTL pushbutton.

- A) True.
- B) False.

16 Only the last 60 minutes of recording are retained by the CVR.

- A) True.
- B) False.

17 There are two service interphone jacks in the hydraulic compartment.

- A) True.
- B) False.

18 When RMP1 (Radio Management Panel) or RMP2 is OFF, RMP3 is still able to control VHF/HF transceivers through them.

- A) True.
- B) False.

- 19 To make a PA announcement:
- A) Depress and hold the PA transmission key push button.
 - B) Use the pedestal mounted headset
 - C) Both are correct.
- 20 The service interphone has _____ interphone jacks and an OVRD switch located on the overhead panel.
- A) Five
 - B) Seven
 - C) Eight
- 21 When selecting the guarded RMP NAV key:
- A) Manual tuning via the MCDU RAD NAV page is still possible.
 - B) Manual tuning via the MCDU RAD NAV page is always possible.
 - C) FMGC auto tuning is inhibited.
- 22 In case of RMP 2 failure, VHF 2 is lost.
- A) True.
 - B) False.
 - C) VHF 2 can still be selected on RMP 1 or RMP 3.
- 23 The AM pushbutton switch, on the radio management panel, is only operative when:
- A) A VHF transceiver has been selected.
 - B) An HF transceiver has been selected.
- 24 Where are the HF antennas located?
- A) Forward top fuselage.
 - B) Left wing tip.
 - C) Under the fuselage.
- 25 When looking at either RMP, how is it possible to determine if an RMP is selected to a VHF system it is not dedicated to?
- A) The white SEL light will be illuminated on both ARMP/s. This is a normal occurrence in-flight.
 - B) The white SEL light is illuminated on the offside RMP.
 - C) The white SEL light is illuminated on the onside RMP.
- 26 If RMP navigation tuning is currently in use for VOR tuning and ATC assigns a new communication frequency, what must be done?
- A) The NAV key must be deselected and then press the transfer key.
 - B) Tune the new frequency on the offside RMP.
 - C) Select the appropriate VHF communication radio transmission key, tune using the rotary selector, press the transfer key.
- 27 When the aircraft is in the Emergency Electrical Configuration:
- A) RMP/s 1 and 2, and ACP/s 1 and 2 are both operative.
 - B) RMP 1 and ACP/s 1 and 2 are operative.
 - C) RMP 1 and ACP 1 are operative.

- 28 With the AUDIO SWITCHING knob in the CAPT3 position, the Captain uses his acoustic equipment on ACP3.
- A) True.
 - B) False.
 - C) The Captain has to make all the selections on ACP3
- 29 The flashing amber MECH light indicates that the interphone system is faulty.
- A) True.
 - B) False.
- 30 What is the function of the Guarded EMER push button on the overhead panel?
- A) To alert ATC of an in-flight emergency.
 - B) To alert the aft flight attendants of a routine need to speak to them.
 - C) To alert all flight attendants of a pending urgent need to speak to them.
- 31 If RADIO is selected on the side stick when the INT/RAD switch is on INT, the radio function has priority over the interphone function.
- A) True.
 - B) False.
- 32 Which ACP transmission key will illuminate if the flight attendants are calling the cockpit?
- A) PA.
 - B) CAB.
 - C) ALERT.
- 33 Normally how should you call a Flight Attendant?
- A) By his or her firstname.
 - B) Using the ACP CAB pb.
 - C) Using an overhead FWD or AFT call pushbutton.
- 34 The BFO key enables the beat frequency oscillator for listening to the ID signal.
- A) True.
 - B) False.

ELECTRICAL

1 Electrical Contactor Management Unit (ECMU) function is:

- A) Control of AC and DC bus ties.
- B) TR contactors monitoring.
- C) Automatic management and monitoring.

2 You enter a dark cockpit, what action is necessary before checking the battery voltages?

- A) You have to check that the external power is on.
- B) You have to ensure that at least one battery is on.
- C) You have to ensure that both batteries are on.

3 The green hydraulic circuit drives an emergency generator that automatically supplies emergency AC power to the aircraft electrical system if all three main generators fail.

- A) True
- B) False

4 Loss of one generator or TR:

- A) Results in the loss of the corresponding AC or DC bus.
- B) Has no effect on flight.
- C) Requires the APU generator to be operational.

5 Having starting the APU, how can you get the APU generator to power the electrical system?

- A) The APU generator must be switch on.
- B) By pushing the EXT PWR pushbutton thus disconnecting the external power.
- C) By pushing the BUS TIE pushbutton.

6 The minimum number of generators required to supply all the network is:

- A) One engine generator.
- B) One engine generator and the EMER generator.
- C) Two generators.

7 Are there any limitations associated with disconnecting an IDG?

- A) Never disconnect an IDG in flight, or push the IDG disconnect push button for more than 30 seconds.
- B) There is no limitations
- C) Never disconnect an IDG in flight, or push the IDG disconnect push button for more than 5 seconds.

8 The APU is supplying the electrical system. What is the order of priority for the different generators?

- A) Engines, external power, APU.
- B) APU, engines, external power.
- C) External power, engines, APU.

9 The Emergency Generator is powered by:

- A) A Ram Air Turbine.

- B) The Green Hydraulic system which is pressurized by engine 1 or 4 driven hydraulic pump or by Ram Air Turbine.
 - C) The Static Inverter.
- 10 What is the significance of the green collared circuit breakers?
- A) Green collared circuit breakers are pulled when flying on battery power only.
 - B) Green collared circuit breakers are monitored by the ECAM.
 - C) Green collared circuit breakers are not to be reset.
- 11 With the EMER EXIT LT selector in the ARM position, which situation will activate the emergency lights and exit signs?
- A) AC SHED bus unpowered
 - B) AC bus #1 unpowered
 - C) DC ESS SHED bus unpowered
- 12 If batteries are the only source of power in flight, how long will battery power be available?
- A) Between 22 and 30 minutes depending on equipment in use.
 - B) Until the APU is started.
 - C) Two hours and 30 minutes dependent on equipment in use.
- 13 Each engine generator supplies power to:
- A) Its assigned AC BUS in normal operation.
 - B) The outermost BUS on the opposite side in normal operation.
 - C) Only its assigned BUS in all cases.
- 14 What is the minimum voltage when conducting a BATTERY CHECK?
- A) 28 volts.
 - B) Less than 60 amps in 10 seconds.
 - C) Greater than 25 volts.
- 15 A battery fault light will illuminate when:
- A) The batteries have auto disconnected due to low voltage.
 - B) Battery voltage drops below a predetermined level.
 - C) Battery charging current increases at an abnormal rate.
- 16 The contactor of each transformer rectifier (TR) opens automatically in case of:
- A) Overcurrent or open or short circuit
 - B) Overheat or minimum current
 - C) All of the above
- 17 The APU battery:
- A) Can be used as a backup for Battery One or Battery Two.
 - B) Is dedicated to APU start only.
 - C) May be used for Engine Start when the APU is not available.
- 18 Which flight control computer will be inoperative with gear extension while in the Emergency Electrical Configuration?
- A) FAC 1 and ELAC 1.
 - B) SEC 1

C) SEC 1 and ELAC 1

19 If the battery voltages are below the minimum, how do you charge them?

- A) You have to call a mechanic because the batteries can only be charged by maintenance.
- B) You have to call a mechanic because the batteries can only be charged by maintenance.
- C) I have to switch the external power to ON and switch the batteries off.

20 The EMER GEN is being powered by a hydraulic system pressurized by an engine driven hydraulic pump. Pressing the LAND RECOVERY pushbutton switch will:

- A) Operate when the gear is extended.
- B) Normally recover the AC and DC LAND RECOVERY BUSES and the DC SHED LAND RECOVERY BUS. This will power some components for approach and landing.
- C) Energize the landing gear.

21 What is the function of APU GEN push button located on the overhead electrical panel?

- A) Push this button to automatically start the APU.
- B) When selected to OFF the APU generator field is de-energized.
- C) Both are correct.

22 Is it possible to parallel generators?

- A) Of course yes.
- B) Only with the RAT deployed.
- C) The electrical system will not allow 'paralleling' of generators.

23 The No Break Power Transfer function can be used in flight.

- A) True.
- B) False.

24 Where are the ground power receptacles located?

- A) Near the nose wheel bay.
- B) One at the tip of each wing.
- C) On the Right part of the forward fuselage.

25 While operating on Emergency Electrical Power with the landing gear lowered which of the following control laws is in effect?

- A) Backup.
- B) Direct.
- C) Alternate.

26 What cockpit lighting is available during an emergency electrical situation?

- A) Emergency path lighting only.
- B) Right side Dome light, main panel flood lights (left two columns only), and the standby compass light.
- C) Located on normal circuit breaker panels.

27 When does the RAT automatically deploy?

- A) With the loss of two hydraulic systems.
- B) Electrical power to both AC BUS #1 & #2 is lost and the aircraft speed is above 100 knots.
- C) Both are correct.

- 28 During the five seconds it takes for the RAT to extend:
- A) the BATTERIES power both BATT HOT busses, ESS DC SHED, and ESS AC SHED through the STATIC INVERTER.
 - B) The BATTERIES power both BATT HOT busses, ESS DC, and ESS AC through the STATIC INVERTER.
 - C) The STATIC INVERTER powers both BATT HOT busses, ESS DC, and ESS AC through the ESS AC SHED busses.
- 29 ____ ground power connectors near the nose wheel allow ground power to be supplied to all bus bars.
- A) 2
 - B) 3
 - C) 4
- 30 If a transformer rectifier (TR) is lost due to overcurrent detection, reconfiguration does not occur and the related DC BUS is lost.
- A) True.
 - B) False
- 31 What is the significance of the circuit breakers on the overhead panel?
- A) They are not monitored by ECAM.
 - B) Cannot be reset.
 - C) They may be operational in the Emergency Electrical Configuration.
- 32 If powered by the Ram Air Turbine (RAT) only, the EMER GEN is inhibited when slats are retracted.
- A) True
 - B) False
- 33 How many times can you reset a circuit breaker?
- A) Once.
 - B) Once, if authorized by the procedures.
 - C) Twice.
- 34 In flight, a static inverter is automatically activated if nothing but the batteries is supplying electrical power to the aircraft, regardless of the positions of the BAT1 and BAT2 pushbutton switches.
- A) True
 - B) False.
- 35 The main function of the GROUNDSELECT CTL switch is:
- A) To power the AC & DC systems when the aircraft is on the ground.
 - B) To allow external power to supply directly AC and DC ESS busses and their ESS SHED buses without powering
 - C) To allow ground service equipment to be powered directly from the external power without powering the entire electrical system

36 On the cockpit overhead panel, there is a three position EMERGENCY EXIT Light switch. What lights are associated with this switch?

- A) Exit signs, emergency lights, and escape path lighting.
- B) Exit signs, emergency lights, main panel flood lights, and escape path lighting.
- C) Exit signs, emergency lights, dome lights, main panel flood lights, and the standby compass light.

37 When the GROUND SELECT CTL switch is on:

- A) The electrical network supply is limited to Ground Service Items.
- B) Only the DC buses are powered.
- C) It is for the purpose of operating the cargo door only.

38 The GROUND SELECT CTL switch is located:

- A) On the overhead system panel in the cockpit.
- B) On the FWD Circuit Breaker Panel behind the cockpit.
- C) On the Purser's Control panel in the FWD cabin.

39 Which flight control computers are operational in the Emergency Electrical Power configuration (gear down and batteries powering the system)?

- A) All are operational.
- B) ELAC 1, SEC 1, and FAC 1.
- C) ELAC 1 and 2, SEC 1 and 2, FAC 1.

40 Which radios are inoperative with gear extension while in the emergency electrical configuration?

- A) DME 1 and transponder 1.
- B) DME 1, DDRMI, and transponder 1.
- C) DME, and transponder 1.

41 While operating on Emergency Electrical Power with the landing gear lowered which of the following statements is correct?

- A) If the APU is not operating it should be started at this time.
- B) The APU will not start until the aircraft has come to a complete stop and all power has been removed for 15 seconds.
- C) On the ground at 100 knots, the DC BATTERY BUS automatically reconnects to the batteries allowing APU start.

42 If during a normal flight the BUS TIE push button is depressed to 'OFF', what effect would this have on power to the busses?

- A) None.
- B) All power would be lost and the aircraft would be powered by the batteries until the RAT was up to speed.
- C) The power transfer would switch to the opposite bus.

43 While operating on Emergency Electrical Power (EMER GEN powering the system, FAC #1 reset) which of the following control laws are in effect?

- A) Manual
- B) Alternate.
- C) Backup

- 44 Can you reconnect an IDG in flight?
- A) Yes, but only after contacting maintenance control.
 - B) Yes, push and hold the IDG pb until the GEN fault light is no longer illuminated.
 - C) No, it is not possible.
- 45 Which communication and navigation radios are operational in the Emergency Electrical Configuration with the EMER GEN powering the system?
- A) ACP 1 and 2, VHF 1, HF, RMP 1, VOR 1, and ILS 1.
 - B) VHF 1, RMP 1, VOR 1.
 - C) RMP #1 & #2, VHF #1, HF (if equipped), ACP #1, VOR #1 and ILS #1.
- 46 Which condition will automatically illuminate the escape lights?
- A) AC ESS SHED bus not powered.
 - B) Loss of power to the AC bus 1.
 - C) DC ESS BUS not powered.
- 47 What is the meaning of the green AVAIL light?
- A) External power is plugged in and parameters are normal. You must push the external power to connect it
 - B) External power is available to the batteries only.
 - C) The external power panel door has been opened
- 48 What does the blue EXT PWR ON light mean?
- A) External power is plugged in and parameters are normal
 - B) External power is supplying the aircraft's electrical system.
 - C) There is a fault with the external power.
- 49 If EXTERNAL power is available and within limits:
- A) It will automatically close the bus tie contactors's when connected by the ground crew.
 - B) The green AVAIL light will illuminate on the EXT PWR push button.
 - C) The BUS TIE push button illuminates.
- 50 Is it possible to determine the source of power for aircraft busses
- A) It is indicated on the electrical schematic overhead.
 - B) No it is not possible.
 - C) Yes, press the ECAM ELEC push button and view the electrical schematic on the ECAM
- 51 Both batteries are charged by the external power unit. Approximately how long does the charging process take?
- A) 10 minutes.
 - B) 20 minutes.
 - C) 30 minutes.
- 52 While operating on Emergency Electrical Power (EMER GEN powering the system) what should the crew accomplish prior to lowering the landing gear?
- A) Check to see that the FMGC has auto tuned the appropriate NAV facility for the approach to be accomplished.

- B) Depress the guarded RMP NAV push button and tune the appropriate NAV facility and course for the approach to be accomplished.
C) Both are correct.
- 53 The GALLEY FAULT light illuminates when any generator is exceeding 80% of its rated output.
A) True.
B) False.
C) The GALLEY FAULT light illuminates when any generator is exceeding 100% of its rated output.
- 54 If the source of power for the ESS AC bus is lost, does another source of power automatically power the bus?
A) Yes, transfer is automatic.
B) Yes, only if AUTO was selected on the AC ESS FEED push button.
C) No, this must be done by the crew.
- 55 What would cause the GALLEY fault light to illuminate?
A) The flight attendants have all the coffee makers and ovens on at once.
B) The Main Galley has shed.
C) The load on any generator is above 100% of it's rated output.
- 56 While operating on Emergency Electrical Power (EMER GEN powering the system) how is it possible to properly complete the ECAM checklist with only an upper display?
A) Depress and hold the specific ECAM page push button on the ECAM control panel.
B) Transfer occurs automatically.
C) This is not possible. Use the cockpit operating manual.
- 57 Which busses will be powered after the RAT is extended and the EMER GEN begins producing power?
A) BATT HOT busses, ESS DC, ESS DC SHED, ESS AC and ESS AC SHED.
B) The STATIC INVERTER would power both HOT BATT busses, ESS DC and ESS AC through the ESS AC SHED busses.
C) The BATTERIES would power both HOT BATT busses, ESS DC and ESS AC through the STATIC INVERTER.
- 58 Engine #1 has just been started and the APU is inoperative. The EXT PWR push button blue ON light is illuminated. Which of the statements below is correct?
A) External power is supplying all electrical needs.
B) Engine Gen #1 is supplying AC bus #1 and the downstream systems, and AC bus #2 through the bus tie contactors.
C) Gen #1 supplies AC bus #1 and (generally) the downstream systems; Ext power supplies AC bus #2 .
- 59 In cruise, you have suddenly a Master Warning and caution come on with ELEC EMER CONFIG and APP OFF. You notice a red FAULT light on the RAT & EMER GEN pushbutton. What do you think of this indication?
A) The EMER GEN is not yet supplying the system.
B) The RAT has failed. You will have to turn the batteries to OFF.
C) The FAULT light is always on when are in ELEC EMER CONFIG

- 60 When are the Essential Shed buses powered by the battery?
- A) Never. The purpose of the shed buses is to reduce the load on the batteries.
 - B) In case of double generator failure.
 - C) After every IDG connection
- 61 The AC Essential bus is powered by the battery at speed above 50 kt.
- A) True.
 - B) False.
 - C) Below 50 kts the Essential bus is automatically shed and the CRT's are lost.
- 62 Two Electrical Contactor Management Units (ECMU) provide:
- A) Control of TR contactors.
 - B) AC & DC contactors control and monitoring except for TR contactors.
 - C) AC and DC contactors control and monitoring except TR contactors which have their own control, galley shedding and no break power transfer.
- 63 One of Electrical Contactor Management Units (ECMU) function is:
- A) Control of AC and DC bus ties, except TR contactor.
 - B) TR contactors monitoring.
 - C) Automate management of contactors.
- 64 Loss of one generator or TR can result in:
- A) Loss of the corresponding AC or DC bus.
 - B) No effects on flight management.
 - C) APU generator required operational.
- 65 An engine generator is driven:
- A) At a ratio of 5 to engine speed.
 - B) Direct from the Accessory Gear Box (AGB).
 - C) By an Integrated Drive Generator (IDG).
- 66 The main function of the MAINT BUS switch is:
- A) To power the AC and SSDC systems when the aircraft is on ground.
 - B) To allow selected ground equipment to be powered without powering the entire electric system.
 - C) To allow EXT PWR to supply AC and DC ESS buses and their respective shed buses.
- 67 When the MAINT BUS switch is on:
- A) The electric network supply is limited to Ground Service items.
 - B) The DC buses are powered only.
 - C) It is for the purpose of operating the cargo door only.
- 68 During EMER GEN automatic start up sequence:
- A) The MAN ON p/b must be pushed to extinguish red fault light on the EMER ELEC PWR Panel.
 - B) It is not recommended to push the MAN ON p/b to confirm EMER ELEC CONFIG on the EMER ELEC PWR Panel.

C) Red fault light on EMER ELEC PWR Panel will remain on until the EMER GEN reaches its normal output

69 With APU GEN and external power supplying the network:

- A) APU is supplying left side, external power is supplying the right side.
- B) APU supplies AC ESS only.
- C) APU supplies AC 1-1 and AC 1-2 only.

70 The MAINT BUS switch is located :

- A) On the overhead system panel in the cockpit.
- B) On the FWD Circuit Breaker Panel behind the cockpit.
- C) On the Purser/s Control Panel in the FWD cabin.

71 When ECAM shows "ELEC ECMU 1 FAULT":

- A) ECMU 1 controls Generator Line Contactors (GLC 3 and 4) and you should reset generator 3 and 4.
- B) ECMU 1 controls GLC 1 and 2 and you should not reset corresponding generators.
- C) ECMU 1 controls GLC 1 and 2 and you should try to reset corresponding generators.

ENGINES

- 1 The CFM56-5-C2 engine control is achieved through:
 - A) The Integrated Drive Generator Unit (IDGU)
 - B) The Engine Interface Unit (EIU)
 - C) The Full Authority Digital Engine Control (FADEC)

- 2 The engine accessory gear box provides power for the:
 - A) Integrated Drive Generator (IDG) and a separate electric generator for FADEC.
 - B) Integrated Drive Generator (IDG) as a source of power for both aircraft systems and FADEC.
 - C) Alternator as a source of electric power.

- 3 Takeoff can be performed using which power settings?
 - A) Any manual setting.
 - B) FLEX and MCT.
 - C) CLIMB and TO/GA

- 4 Selecting the ENG MAN START pushbutton ON:
 - A) Will open the start valve if the ENG START selector is in crank.
 - B) Will open the start valve and turn on ignition A & B.
 - C) Will open the start valve, turn on ignition A & B and open the LP fuel valve if the FIRE pushbutton is in.

- 5 When is T.O. INHIBIT and LDG INHIBIT active?
 - A) TO 750 feet AGL, LND below 1500 feet AGL.
 - B) TO 1000 feet AGL, LND below 1000 feet AGL.
 - C) TO 1500 feet AGL, LND below 750 feet AGL.

- 6 How many thrust lever positions are there, and how are they labeled?
 - A) There are 6 thrust lever positions: TO/GA, MCT, FLEX, CL, IDLE and REV IDLE.
 - B) There are 6 thrust lever positions: TO/GA, FLX/MCT, CL, IDLE, REV IDLE and MREV.
 - C) There are 4 thrust lever positions: TO/GA, FLX/MCT, CL, IDLE.

- 7 You are just about to take off. You have not inserted a FLEX temperature. Can you still takeoff?
 - A) Yes, by setting the thrust levers to the CLIMB detent.
 - B) Yes, by setting the thrust levers to the FLEX/MCT detent.
 - C) Yes, but only using the TO/GA detent.

- 8 During an engine start sequence, the gray background on N2 disappears at about 57%. What does this indicate?
 - A) That the igniters are no longer being powered.
 - B) That the start sequence has finished and all engine parameters have stabilized.
 - C) That the start valve air pressure has dropped.

- 9 What does the FLEX represent in the FLX/MCT detent?
 - A) This is a reduced thrust setting used for takeoff.
 - B) This is the maximum continuous thrust setting for single-engine operations.

- C) This is the thrust setting that should be chosen in the case of a single-engine go-around.
- 10 Which statement is true?
- A) The four engines are controlled by a computer called Full Authority Digital Engine Control (FADEC)
 - B) Each engine and its sensors are controlled by a computer called FADEC that normally is powered by the aircraft electrical network.
 - C) Each engine and its sensors are controlled by a computer called FADEC that normally is powered by its own internal generator.
- 11 How many FADEC/s are installed in the aircraft?
- A) Two, one per engine.
 - B) One, with two Engine Control Units (ECU).
 - C) Two per engine.
- 12 Automatic cranking is provided:
- A) By placing the engine start selector to CRANK.
 - B) By the FADEC following an automatic start abort.
 - C) In all cases of start abort.
- 13 What is required for the FADEC to compute a reduced thrust setting?
- A) A FLEX temperature must be entered on the INIT page of the MCDU.
 - B) Nothing, it is an automatic function of the FADEC.
 - C) A FLEX temperature must be entered on the TAKE OFF PERF page of the MCDU.
- 14 One of FADEC/s functions is thrust reverser control.
- A) True.
 - B) False.
- 15 Using manual thrust, the thrust lever position will determine the thrust setting for the engine.
- A) True. They will operate like conventional throttles.
 - B) True, but care must be taken not to overspeed the engines.
 - C) False, the next higher detent will be the thrust limit.
- 16 What is considered to be the active range of the A/THR system?
- A) During single engine operations from just above the IDLE stop to the FLX/MCT detent.
 - B) During two engine operations from just above the IDLE stop to the CL detent.
 - C) Both are correct.
- 17 If the thrust levers are set in the idle detent, is Alpha floor protection still available?
- A) Yes Thrust lever position is disregarded.
 - B) Yes, as long as A/THR appears in Column five.
 - C) No, because the IDLE detent is out of the A/THR active range.
- 18 Is there any mechanical linkage between the thrust levers and the engines?
- A) There is a fiber optic backup.
 - B) There is a mechanical linkage in case the ECU fails.
 - C) No, it is electrically powered and hydraulically actuated.

- 19 What is Alpha floor protection?
- A) It helps prevent the aircraft from stalling and protects against windshear encounters during takeoff and approach.
 - B) It is a function of the flight control laws to prevent the aircraft from stalling.
 - C) It helps prevent the aircraft from stalling by limiting the angle of bank at low airspeeds.
- 20 Alpha floor protection is available:
- A) From lift off and down to 100 feet radio altitude in the landing configuration.
 - B) From lift off and down to 50 feet radio altitude in the landing configuration.
 - C) From lift off and down to 500 feet radio altitude in the landing configuration.
- 21 How do you arm the A/THR in flight?
- A) A/THR switch ON when throttles are in the engagement mode.
 - B) A/THR switch ON when throttles are not in the engagement mode.
- 22 What is the difference between variable thrust and the speed mode?
- A) In the fixed thrust mode, thrust is fixed and the elevator controls the speed.
 - B) In the variable thrust mode, thrust is fixed and speed is controlled by the elevator.
 - C) In the fixed thrust mode, thrust is variable and speed is controlled by the elevator.
- 23 The FADEC system electrical power requirements are:
- A) Essential AC or DC aircraft power after start.
 - B) Aircraft power when IGN START is selected until approximately 15% N2.
 - C) Battery power at all times
- 24 The left column, first line of the FMA is used to indicate:
- A) If A/THR is off, armed, or active.
 - B) The mode of the A/THR in use when A/THR is armed or active.
 - C) Amber caution messages.
- 25 What are the two basic modes of the A/THR system?
- A) Thrust and Mach.
 - B) Thrust and speed.
 - C) Variable thrust and fixed speed.
- 26 Is any thrust lever action required if an engine failed at rotation while using FLEX takeoff power?
- A) Yes.
 - B) No.
- 27 After takeoff, a change from FLX to MCT is achieved:
- A) Automatically in case of engine failure.
 - B) By moving the thrust levers momentarily out of the FLX/CT detent and then back to FLX/MCT.
 - C) By setting the thrust levers to the TOGA or CLB detent and then back to FLX/MCT.
- 28 Can the engines be overboosted in the TOGA position?
- A) Yes, if the autothrust function is not active.

- B) No, because the ECU provides engine protection limit by monitoring N1, N2, and HMU fuel flow adjustments.
- C) No, because the EIU is responsible for monitoring N1 and N2.
- 29 How can A/THR be ARMED automatically?
- A) Whenever a takeoff or go-around is initiated with at least one flight director ON.
- B) When Alpha floor protection is activated.
- C) Both are correct.
- 30 The FADEC provides engine protection:
- A) Through the start phase of operation only.
- B) Only at high thrust settings
- C) For overspeed limits (N1 & N2) in all flight phases and EGT monitoring during start phase only.
- 31 During a manual start, how is the start valve opened?
- A) It is automatic once the ENG MASTER is placed to the ON position.
- B) By depressing the ENG MAN START pushbutton/s on the overhead panel.
- C) By depressing the ENG MAN START pushbutton/s on the overhead panel while the ENG MODE selector is out of the NORM position.
- 32 If ENG START selector is set to NORM position before engine start, FADEC supply is cut off.
- A) True.
- B) False.
- 33 An engine master switch in the ON position (Engine Fire pushbutton in):
- A) Sends a signal to open the LP fuel valve.
- B) Sends a signal to open the LP and HP fuel valves during automatic start.
- C) Sends a signal to open the HP fuel valve
- 34 When does oil quantity indication begin to pulse?
- A) Decreasing below 5 qts.
- B) During engine start.
- C) Oil quantity detector or pressure fault.
- 35 Does the FADEC provide EGT limit protection constantly?
- A) Yes, in all phases of flight.
- B) No, EGT limit protection is only available during ground auto starts.
- C) No, EGT limit protection is only available during ground auto starts and single-engine operations.
- 36 Auto Thrust System: When are the throttles in the engagement range?
- A) Both throttles are above idle but not above the CLB detent when both engines are running.
- B) A single throttle of an operating engine is above idle but not above the MCT detent when one engine is running.
- C) All of the above.

- 37 The EEC transmits via the ERU to FADEC the data it uses for engine management.
- A) True.
 - B) False.
 - C) The EIU transmits via the ERU to FADEC the data it uses for engine management.
- 38 The idle setting on the aircraft is capable of modulating due to certain conditions. During descent, what might cause the IDLE N1 setting to increase?
- A) The slats are extended.
 - B) For a higher than normal bleed air demand or warmer than normal engine oil temp in flight.
 - C) Both are correct.
- 39 Verification that Autothrust (A/THR) is active can be made by
- A) Watching the automatic movement of the thrust levers.
 - B) Only when the thrust levers are set at TOGA.
 - C) Only by looking at column five of the FMA.
- 40 When Alpha floor is activated, what power setting is automatically commanded and what FMA annunciation would appear in Column one?
- A) TOGA / A. FLOOR
 - B) CLB / CLB
 - C) THR / LK
- 41 Holding the instinctive disconnect push button/s for more than fifteen seconds will:
- A) Disengage the A/THR (including Alpha Floor) until below 1000 feet AGL for the remainder of the flight.
 - B) Disengage the A/THR (including Alpha Floor) until below 500 feet AGL for the remainder of the flight.
 - C) Disengage the A/THR (excluding Alpha Floor) for the remainder of the flight.
- 42 During the automatic start sequence of ENG 2, you notice that only igniter B is powered. Is it normal?
- A) Yes, igniter A is only used for engine anti-ice.
 - B) No, normally both igniters are used for all engine starts.
 - C) Yes, igniter B is always used for ENG 2 start.
- 43 As far as FMA annunciations are concerned, what would indicate that the A/THR system is active?
- A) SPEED/ appears in green in column one, line one.
 - B) A/THR/ changes from blue to white as shown in column five, line three.
 - C) A/THR/ changes from white to blue in column five, line one.
- 44 If a thrust lever is set between two detents, the FADEC selects the rating limit corresponding to the higher limit.
- A) True. This limit is displayed on the upper ECAM.
 - B) False. For safety reasons, it always selects the rating limit corresponding to the lower limit.

- 45 The FADEC prevents the thrust from exceeding the limit for the thrust lever position in _____ mode.
- A) Manual
 - B) Automatic
 - C) Both are correct.
- 46 What would happen during the takeoff roll if the thrust levers were set to the FLX/MCT detent without FLEX temperature being entered?
- A) Nothing, the thrust setting would be at FLEX since FADEC automatically calculates a reduced thrust setting.
 - B) The thrust setting would be MCT and there would be no corresponding warnings.
 - C) A LEVEL TWO warning would sound along with the appearance of an ECAM message.
- 47 Select the correct statement:
- A) Maximum tailwind for engine start is 20 kt.
 - B) Backing the aircraft with reverse thrust is not permitted.
 - C) A maximum of 5 consecutive start cycles is permitted.
- 48 What abnormalities would cause the FADEC to automatically abort a start?
- A) A hot start, an overtemp, a stalled start or no lightoff.
 - B) An engine overspeed.
 - C) A hot start, a stalled start, an overtemp or APU underspeed.
- 49 During an in-flight start or a manual start, will the FADEC auto abort for an abnormal?
- A) Yes
 - B) No.
- 50 Approach idle is:
- A) A higher idle RPM than normal. It is selected by the FMGS during approach.
 - B) A higher idle RPM than normal. It is selected when Flaps are 3 or FULL or when landing gear is down.
 - C) A higher idle RPM than normal. It is selected when flaps are 3 or FULL and the landing gear is down.
- 51 For reverser actuation, the left engine uses ____ hydraulic system pressure and the right engine uses ____ hydraulic system pressure.
- A) Green - Yellow.
 - B) Yellow - Blue
 - C) Yellow - Green.
- 52 While flying the airplane with A/THR active, the speed knob is pulled and turned to a selected speed that happens to be slower than Alpha prot. What speed will the airplane slow to?
- A) Vls.
 - B) Green Dot + 5 kts.
 - C) Green dot.
- 53 Where is the thrust reduction altitude found and is the number always the same?
- A) Column four, row three of the FMA. It will always be 1500 ft. AGL.
 - B) TAKE OFF PERF page of the MCDU (it can be modified).

- C) PROG page of the MCDU. It can be modified in order to meet constraints.
- 54 The blue circle above the N1 display:
- A) Corresponds to thrust lever position.
 - B) Indicates N2 value.
 - C) Corresponds to maximum thrust rating.
- 55 Thrust reverser deployment requires:
- A) The aircraft to be on the ground, both engines at idle.
 - B) The aircraft to be on the ground, associated pneumatic power available, TLA position confirmed by a PRIM.
 - C) The aircraft in final approach with idle power on associated engine.
- 56 During a manual start, what function does the FADEC perform?
- A) Passive monitoring of the start sequence, to close the start valve and cut off the ignition on the ground.
 - B) To control the start sequence and take corrective action in case of a failure or malfunction.
 - C) The FADEC does not perform any function during a manual start and all actions have to be carried out by the pilots.
- 57 The FADEC displays its engine parameters and information on:
- A) Engine Warning Display (Upper ECAM) only.
 - B) Engine Warning Display (Upper ECAM) and Cruise and Engine page (Lower ECAM).
 - C) Lower ECAM engine page only.
- 58 During normal operation, in what detent are the thrust levers positioned once the thrust reduction altitude has been reached?
- A) CL
 - B) MCT
 - C) FLX
- 59 After take off the A/THR will not become active until:
- A) The thrust levers are placed in the CLIMB position.
 - B) The thrust levers are moved out of the TO/GA or FLEX/MCT detents.
 - C) The autopilot is engaged.
- 60 Continuous ignition is provided automatically when:
- A) ENG ANTI ICE is selected ON and/or engine flameout is detected in flight
 - B) ENG ANTI ICE is selected ON.
 - C) ENG ANTI ICE is selected ON and/or engine flameout is detected in flight and/or the EIU fails.
- 61 The engine primary parameters are permanently on the:
- A) Upper ECAM E/WD
 - B) Lower ECAM SD when selected manually
 - C) Lower ECAM SD when selected manually or automatically.

- 62 A 50% N2 FADEC will:
- A) Close the start valve and turn ignition off during automatic start only.
 - B) Close the start valve only during automatic start.
 - C) Close the start valve and turn ignition off during both automatic and manual start.
- 63 The FMU (Fuel Metering Unit) is controlled by the FADEC and performs which function(s)?
- A) Overspeed protection for N1 and N2
 - B) Actuation of the HP shutoff valve to start or stop the engine.
 - C) Control of fuel flow to engine combustion chamber through the FMV (Fuel Metering Valve).
- 64 The air bleed system is used for:
- A) Cooling the engine compartment, turbine, engine and IDG oil.
 - B) Pneumatic system.
 - C) Engine stability.
- 65 The FADEC system is powered by the aircraft electrical circuit:
- A) Below 8% N2
 - B) Above 5% N2
 - C) Above 7% N2
- 66 Is it possible to disconnect Alpha floor?
- A) No, Alpha floor protection is always available.
 - B) Yes, by placing the thrust levers to IDLE.
 - C) Yes, by depressing the autothrottle push button on the FCU.
- 67 The FADEC will automatically abort an abnormal start thereby providing engine limit protection, but will the FADEC also automatically dry crank the engine?
- A) No, that is why there is a CRANK selection on the ENG MODE selector.
 - B) Yes, even if the crew interrupts the start by placing the ENG MASTER switch to OFF.
 - C) Yes, as long as the ENG MASTER switch remains in the ON position.
- 68 What would happen in flight if the FADEC/s alternator failed?
- A) Automatic control of the engine would be lost.
 - B) The standby channel of the ECU would take over.
 - C) The FADEC would now be powered using ship/s power.
- 69 You are in the middle of a manual engine start. What are you looking for when you select ENG MASTER 2 ON?
- A) The fuel used is reset, fuel flow is indicated and IGNITION message on the E/WD.
 - B) The fuel flow is reset, an igniter is powered and fuel used is indicated.
 - C) The fuel used is reset, both igniters are powered and fuel flow is indicated.
- 70 Each FADEC is a dual channel (A&B) computer providing full engine management.
- A) True.
 - B) False.
- 71 In addition to when the engine is operating, when else will the FADEC be powered?

- A) When the FADEC GND PWR pb on the maintenance panel is depressed, or the ENG MASTER switch is placed to ON.
- B) When the FADEC control switch is placed to the IGN/START position.
- C) For five minutes after electrical power is applied to the aircraft, when the FADEC GND PWR pb on the maintenance panel is depressed, or when the ENG MODE control switch is placed to IGN/START position.

72 During an automatic start, the FADEC controls:

- A) The start valves, igniters and fuel flow.
- B) The start valves, igniters, HP and LP fuel valves.
- C) The igniters and fuel flow.

73 If the instinctive disconnect pushbuttons on the thrust levers are depressed momentarily to disconnect autothrust:

- A) Autothrust can be reengaged using the A/THR pushbutton on the FCU, Alpha Floor is lost for the remainder of the flight.
- B) Autothrust can be reengaged using the A/THR pushbutton on the FCU, Alpha Floor is available if required.
- C) Both autothrust and alpha floor are lost for the remainder of the flight.

74 The accessory box is located behind the combustion chamber.

- A) True.
- B) False.
- C) It is at the bottom of the fan case.

75 The thrust rating limit computed by FADEC is displayed on the upper ECAM. If a thrust lever is set between two detents:

- A) FADEC will select the rating limit corresponding to the thrust lever positions.
- B) FADEC will select the rating limit corresponding to the higher detent.
- C) FADEC will select the rating limit corresponding to the lower detent.

76 How is manual arming of the A/THR system accomplished?

- A) By pressing the A/THR pb on the FCU confirm the pushbutton illuminates green or confirm an A/THR annunciation is displayed in column 5 of the FMA.
- B) By placing the thrust levers into the active range.
- C) Advance at least one thrust lever to the TOGA or FLX/MCT detent with at least one Flight Director (FD) on.

77 You are at the start of a descent and a blue N1 arc is displayed showing the new thrust demand. When does this happen?

- A) Whenever the thrust levers are moved out of the CLIMB position.
- B) Whenever there is a power change in manual thrust.
- C) Whenever there is power change with auto thrust engaged.

78 A few seconds after selecting reverse, the amber REV indication changes to green. What does this mean?

- A) The reversers have been re-stowed.
- B) The reversers are now fully deployed.
- C) The reverse thrust selection has been acknowledged

79 Deployment of the thrust reverser system requires:

- A) One FADEC channel operating with its associated thrust reverse signal.
- B) Aircraft on ground signal from at least one LGCIU.
- C) Throttle Lever Angle signal from the flight control primary computer 1 or 3.

80 During engine start the amber FAULT light on the ENG MASTER panel illuminates. This indicates:

- A) A failure in the automatic start sequence.
- B) A failure of the ENG MODE SELECTOR.
- C) A failure in the engine fire extinguishing system.

81 Which steps of a manual start are being taken care of by the FADEC?

- A) Starter valve closure and ignition cut off.
- B) Starter valve opening and ignition start.
- C) Starter valve closure and ignition start.

82 Can Alpha-floor be disengaged while in Alpha Protection?

- A) Yes, by manually disengaging the auto throttles.
- B) No, the system is designed to avoid such a disengagement.
- C) Yes, by reducing at idle one of the throttles (for more than 5 seconds)

83 A interlock prevents the application of asymmetrical reverse thrust:

- A) On inboard engines.
- B) On outboard engines
- C) On all engines.

84 Which of the following is a FADEC idle mode?

- A) Minimum idle
- B) Minimum idle and Approach idle.
- C) Reverse idle only.

ICE&RAIN

- 1 When engine anti-ice pushbuttons are turned ON, each engine nacelle is anti-iced by:
 - A) The pneumatic system
 - B) Electric heat elements
 - C) Independent bleed air source from HP compressor.

- 2 Hot air from the pneumatic system provides wing anti-ice to:
 - A) The four outboard slats and the horizontal stabilizer
 - B) The four outboard slats.
 - C) All slats.

- 3 What is the difference between the engine and wing anti-ice fault lights?
 - A) Both indicate valve in transit, or valve position disagrees with selected position. Wing light also could indicate low pressure.
 - B) Both indicate low pressure, or valve position disagrees with selected position. Wing light might indicate valve in transit.
 - C) Both indicate valve in transit, or low pressure. Wing light also could indicate valve position disagrees with selected position.

- 4 You are on the ground and the wing anti-ice pushbutton is set to the ON position.
 - A) Wing anti-ice valves will remain open until the wing anti-ice pushbutton is selected OFF.
 - B) Wing anti-ice valves will open and then close immediately.
 - C) Wing anti-ice valves will open for 30 seconds and then close as a ground test is initiated.

- 5 Which one of the following statements is true?
 - A) There are 2 wing anti-ice valves installed on each wing.
 - B) When the engine anti-ice is operating, continuous ignition is automatically activated.
 - C) When the wing anti-ice is operating, continuous ignition is automatically activated

- 6 On ground and at ramp, windshields, windows and probes are heated.
 - A) Automatically when engine 2 or 3 is running or manually by switching ON the PROBE/WINDOW HEAT pushbutton.
 - B) On high heat only
 - C) On low heat when engine 2 or 3 is running and high heat using manual PROBE/WINDOW pushbutton

- 7 When both Engine anti-ice pushbuttons are turned ON, each engine nacelle is anti-iced by:
 - A) The pneumatic system.
 - B) Electric heat elements.
 - C) Independent bleed air source from HP compressor.

- 8 There is an inner and outer wing anti-ice valve on each wing. If the Left inner valve fails to open:
 - A) All slats remain heated.
 - B) One slat is not heated and you must avoid icing conditions.
 - C) No slats are heated.

- 9 With the loss of electrical power the engine anti-ice valves:
- A) Fail in their current position.
 - B) Fail to the open position.
 - C) Fail to the closed position.
- 10 With the loss of electrical power the wing anti-ice valves:
- A) Fail in their current position.
 - B) Fail to the open position.
 - C) Fail to the closed position.
- 11 In the event of an electrical power loss:
- A) The engine anti-ice valves will open automatically, anti-icing is ensured.
 - B) The engine anti-ice valves will close automatically, anti-icing is lost.
 - C) The engine anti-ice valves will be controlled by the wing anti-ice controls.
- 12 At what power level does window heat operate while airborne?
- A) High power while airborne.
 - B) Shifts from low to high as window temperature requires.
 - C) Low power above 18,000 ft.
- 13 What happens to engine RPM when either engine anti-ice valve is open?
- A) There is a fixed RPM increase.
 - B) The N1 limit for that engine is automatically increased.
 - C) The N1 limit for that engine is automatically reduced
- 14 On ground and at ramp, windshields, windows and probes are heated:
- A) Automatically when one engine is running or manually by switching ON the PROBE/WINDOW HEAT pushbutton.
 - B) On high heat only.
 - C) On low heat when one engine is running and high heat using manual PROBE/WINDOW HEAT puhbutton.
- 15 Rain protection is provided by:
- A) Warm bleed air blowing across the windshield.
 - B) Rain repellent and Windshield wipers.
 - C) Both are correct.
- 16 If both functions for automatic windshield heating have failed:
- A) WCH 2 takes over and all windshields and windows remain heated.
 - B) Only demisting of side windows is lost
 - C) All windshield and window heating are lost, but some or all of the heating may be recovered.
- 17 The probe heaters can be activated manually prior to engine start by placing the PROBE/WINDOW HEAT pushbutton.
- A) True.
 - B) False.

- 18 What happens to the heat at the drain masts when the aircraft is on the ground?
- A) Nothing.
 - B) The heat is reduced to prevent injury to ground personnel.
 - C) Some of them are automatically switched off (pitot, AOA).
- 19 If Captain/s pitot heat has failed:
- A) He must disregard his air data for the rest of the flight.
 - B) Captain/s pitot will be heated by First Officer/s pitot heat.
 - C) Captain can recover his air data by using air data switching.
- 20 The RAIN RPLNT (rain repellent) pushbutton is inhibited on the ground when the engines stopped.
- A) True.
 - B) False.
- 21 TAT probes are heated on the ground.
- A) True.
 - B) False.
- 22 Provided the PROBE/WINDOW HEAT pushbutton is in AUTO position window heat and side window demisting comes on automatically.
- A) When at least engine 2 or 3 is running or in flight.
 - B) When AC power is supplied.
 - C) When batteries are on.
- 23 In flight, if both windshields automatic heat has failed:
- A) Probe/window heat pushbutton should be set to ON.
 - B) Both Window Heat Computers have failed and Window Heat pushbutton will not recover heat
 - C) Probe/Window Heat pushbutton should be set to OFF and back to AUTO.

FIRE PROTECTIONS

1 Engine fire protection is provided by 2 detection loops which provide information to a computer. Which statement is true?

- A) If both loops are working together and one loop senses a certain temperature, a fire indication is generated.
- B) If both loops are working, both loops must sense a certain temperature to generate a fire indication.
- C) If both loops break and breaks occur more than 5 seconds apart, fire indications are generated.

2 The avionics compartement is the only area where there is no fire extinguishing system installed

- A) True.
- B) False.

3 When the aircraft is on the ground and the APU is started on battery power only, is fire protection available?

- A) Yes, the APU will initiate an auto shutdown and discharge the extinguishing agent.
- B) No, but the APU will initiate an auto shutdown
- C) No, automatic fire protection is only available if AC power is available

4 How many fire extinguishing bottles are available for fighting an APU fire?

- A) One.
- B) Two.
- C) One cylinder shared with the aft cargo compartment

5 Can the APU FIRE test be performed using battery power only?

- A) Yes.
- B) No.
- C) The APU and engine FIRE test can be performed with battery power only

6 The BTL1 or BTL2 DISCH light comes on _ when the associated fire extinguishing bottle has discharged.

- A) White
- B) Amber
- C) Green.

7 APU fire detection is accomplished by:

- A) A two channel SDCU located in the APU compartment.
- B) Two parallelfire detection loops a. A two channel SDCU located in the APU compartment.
- C) One fire detection loop.

8 Engine heat sensing are located in pylon nacelle, engine core and fan section.

- A) True.
- B) False

- 9 After an APU fire has been detected how long will the chime continue to sound?
- A) Until the crew pushes the red MASTER WARN push button.
 - B) Until the crew pushes and releases the guarded red APU FIRE push button.
 - C) Both are correct.
- 10 STATUS page: INOP SYS indicates "ENG1 LOOP B".
- A) One fire detection loop has failed. Fire detection for both engines is not available.
 - B) One detection loop for engine t has failed. Fire detection for both engines is still available.
 - C) One fire detection loop of engine t has failed. Fire detection for engine 1 is inoperative.
- 11 Which of the following have automatic fire extinguishing systems?
- A) APU, and lavatory waste bins
 - B) APU, lavatory waste bins and avionics bay
 - C) APU, aft cargo, forrard cargo, lavatory waste bins and avionics bay.
- 12 The red disc on the aft left fuselage indicates:
- A) The APU fire extinguisher bottle has experienced an overpressure discharge.
 - B) The APU fire extinguisher bottle has not experienced an overpressure discharge
 - C) The pilot must check the indicator for the second APU bottle on the right side of aircraft.
- 13 The aft cargo compartment smoke detection system consists of:
- A) A dual loop smoke detector.
 - B) Four smoke detectors and a two channel smoke detection control unit.
 - C) One smoke detector, one smoke detection control unit and two automatically discharging fire exting u ishers.
- 14 If an engine fire is detected, when will the pedestal mounted red FIRE annunciator light extinguish?
- A) When the crew pushes the red MASTER WARN push button.
 - B) Only after the fire warning no longer exists.
 - C) Only after the crew selects the adjacent ENG MASTER switch to off.
- 15 The AVNCS SMOKE light illuminates amber when smoke is detected in the avionics ventilation duct.
- A) True.
 - B) False.
 - C) It illuminates red.
- 16 How long will the red APU FIRE pb on the overhead be illuminated?
- A) Until the crew pushes and releases the guarded red APU FIRE push button.
 - B) For as long as the fire warning is present.
 - C) Until the crew pushes the red MASTER WARN push button.
- 17 With reference to cargo compartment fire extinguishing, which statement is true?
- A) There are two fire bottles, one for the FWD compartement and one for the AFT.
 - B) There is only one fire bottle, pressing either DISCH pushbutton discharges it into both compartements

- C) There is only one fire bottle, when it is discharged both amber DISCH lights come on. There are two fire bottles, when the DISCH pushbutton is pressed, they are both discharged into the appropriate compartment. The fire bottle can only be used once on either the FWD or AFT compartment.
- 18 Should you lose both loops or FDU, fire detection is no longer available for the respective engine or the APU
- A) True
 - B) False.
- 19 What is indicated by a missing red APU thermal plug during an exterior preflight?
- A) This is normal indication, the red APU thermal plug only appears if the APU halon cylinder is low.
 - B) An APU fire agent thermal discharge has occurred.
 - C) An external fire discharge has been activated.
- 20 Two smoke detectors are installed in the air extraction duct of the avionics ventilation system.
- A) True.
 - B) False.
- 21 If an engine fire is detected, when will the guarded red ENG FIRE push button light extinguish?
- A) Only after the fire warning no longer exists.
 - B) When the crew pushes and releases the guarded red ENGINE FIRE pushbutton.
 - C) When the crew pushes the red MASTER WARN pushbutton.
- 22 In the event a lavatory smoke detector detects smoke
- A) Warnings will be generated only in the cockpit.
 - B) Warnings will be generated only on the flight deck.
 - C) warnings will be generated in the cockpit and in the cabin.
- 23 Are there any warnings to alert ground personnel when there is a fire in the APU compartment?
- A) Yes, but only if previously selected to automatic by the ground personnel.
 - B) No, APU fire indications are only present in the cockpit.
 - C) Yes, the external fire warning horn will sound and the APU red fire light will illuminate.
- 24 What systems are affected when the guarded red ENGINE FIRE push button is pushed and released?
- A) The Master Warning and the chime will be canceled and the AGENT pb's will be armed.
 - B) All fluids, pneumatics and electrics relating to that engine are shut off
 - C) Both are correct.
- 25 The avionics smoke detection system consists of the following:
- A) A smoke detector, smoke detection control unit and one halon cylinder.
 - B) A smoke detector, and smoke detection control unit.
 - C) A smoke detector, heat detector, smoke detection control unit and one halon cylinder.

- 26 Will an APU fire test shut down the APU?
- A) Yes.
 - B) No.
- 27 Illumination of the GEN 1 LINE SMOKE light indicates:
- A) A fire has been detected in the avionics compartment.
 - B) A satisfactory test of the avionics compartment smoke detection control unit.
 - C) Smoke has been detected in the avionics compartment ventilation duct.
- 28 Cargo smoke warning is activated when smoke is detected in one cavity by:
- A) Both smoke detectors.
 - B) One smoke detector when the other one is inoperativ
 - C) Both are correct.
- 29 In the event an aft cargo compartment smoke detector detects smoke:
- A) Extinguishing is automatic
 - B) Extinguishing is automatic only while on the ground.
 - C) The crew must depress the appropriate DISCH switch.
- 30 How many halon fire extinguishing cylinders are there per engine?
- A) Each engine has two fire extinguishers.
 - B) Each engine has it''s own dedicated fire extinguisher and has the capability to share the other engine''s cylinder.
 - C) Each engine has it''s own dedicated fire extinguisher and has the capability to share one centrally located halon cylinder.
- 31 The APU provides for automatic fire extinguishing:
- A) On the ground only.
 - B) On the ground and in flight.
 - C) Only when selected to automatic by ground personnel.
- 32 When the APU AUTO EXTING RESET pushbutton, on the maintenance panel, is pressed, all_ output signals are reset and the automatic shut down function is reinitialized.
- A) ECB
 - B) FDU
 - C) APU.
- 33 You have detected avionics smoke, You have selected the GEN 1 LINE push button off and the RAT has been deployed. Generator 2 has been removed from the system. Which of the following is TRUE?
- A) The cargo fire bottle automatically fires.
 - B) The avionics fire bottle automatically discharges.
 - C) The aircraft will be in the Emergency Electrical Configuration
- 34 Each gas detection loop of the fire and overheat detection systems consists of three sensing elements for the engine, located in the pylon nacelle and engine core sections, and one sensing element for the APU, located in the APU compartment
- A) True.
 - B) False.

- 35 After depressing the CARGO SMOKE TEST push button once, a satisfactory test of the aft cargo compartment smoke detector consist of:
- A) Two complete cycles with associated warnings.
 - B) Not needed as this system selftests during the first engine start.
 - C) One complete cycle with associated warnings.
- 36 In conjunction with illumination of the GEN 1 LINE SMOKE light and MASTER CAUT light:
- A) The BLOWER and EXTRACT push button FAULT lights will be illuminated.
 - B) Only the BLOWER FAULT light will be illuminated.
 - C) Only the EXTRACT FAULT light will be illuminated.
- 37 If you perform the APU FIRE TEST with only DC power available, you get the MASTER WARN on the ECAM.
- A) True.
 - B) False.
- 38 In the event an aft cargo compartment smoke detector detects smoke:
- A) Only an ECAM message will be generated.
 - B) Only a MASTER WARN and a CRC will be generated.
 - C) A MASTER WARN, CRC and an ECAM message will be generated.
- 39 The avionics bay is equipped with a smoke detection and extinguishing system.
- A) True.
 - B) False.
- 40 How does the APU fire test on battery power differ from the APU fire test with all busses powered?
- A) There is no difference.
 - B) While on battery power, only the red APU FIRE and AGENT/DISC push button will illuminate
 - C) It is not possible to test the APU fire protection while on battery power.
- 41 During the walk-around, you have to check that the APU Fire extinguisher overpressure indication (green disc) is in place. This is an indication that the fire bottle has not been discharged.
- A) True.
 - B) False.
 - C) The disc is red. There is no such indication for the engine fire bottles.
- 42 The AFT SMOKE light closes the aft cargo inlet and outlet isolation valves and shuts off the aft cargo extraction fan.
- A) True.
 - B) False.
- 43 Each lavatory is equipped with:
- A) Two smoke detectors and one smoke detection control unit.
 - B) One smoke detector and one smoke detection control unit.
 - C) One smoke detector, and for lavatory waste bins, an automatically discharging fire extinguisher.

44 Each engine nacelle and pylon area is equipped with:

- A) Two fire detection loops.
- B) A single fire detection loop
- C) Two smoke detectors and two fire detection loops.

45 In addition to the CRC and red MASTER WARN light, a good engine fire test will display which of the following (AC power available)?

- A) In addition to the CRC and red MASTER WARN light, a good engine fire test will display which of the following (AC power available)?
- B) Lower ECAM engine page, pedestal mounted red FI45. In addition to the CRC and red MASTER WARN light, a good engine fire test will display which of the following (AC power available)? RE annunciator, red ENG FIRE push button and the AGENT SQUIB/DISC lights illuminate
- C) EA | úD red 1 (2) ENG FIRE warning, lower ECAM engine page, red FIRE annunciator, red ENG FIRE push button, and AGENT SQUIB/DISC.

46 If an APU fire is detected on the ground, the APU shuts down automatically and the agent is discharged _ after the warning is activated.

- A) Immediately
- B) 1 second.
- C) 3 seconds

47 When the APU AUTO EXTING RESET pushbutton is pressed, all are reset and the automatic shut down function is reinitialized.

- A) FDU
- B) APU
- C) ECB. output signals

48 Fire detection and extinguishing system testing cannot be performed when engines are running

- A) True.
- B) False.

FLIGHT MANAGEMENT&NAV.

1 ADIRU's provide navigation information

- A) By referencing ground stations
- B) By referencing satellites
- C) On an independent basis, without referencing ground stations or satellites

2 Ground dependent position determining systems such as VOR, DME, ILS

- A) Are used only as backup to the independent position determining systems such as ADIRS
- B) Provide information which overrides information supplied by ADIRS
- C) Cross check and refine the Flight management and Guidance System (FMGS) position computed by independent systems such as ADIRS

3 ADIRU 3 includes

- A) ADR 1 and IR 2
- B) ADR 3
- C) ADR 3 and IR 3

4 Barometric settings to the ADIRU's are made:

- A) On the Baro setting knobs on the FCU
- B) Via the MCDU
- C) On the ADIRS switching panel

5 In normal operation, the nav aids are tuned

- A) Manually through the Radio Management Panel
- B) Manually through the RAD NAV page
- C) Automatically through the Flight Management and Guidance System (FMGS)

6 What are the different types of flight guidance?

- A) Slaved and managed
- B) Automatic and manual
- C) Managed and selected

7 One A/P can be engaged on the ground if the engines are not running

- A) This A/P will disengage when both engines are started
- B) This A/P will disengage when one engine is started
- C) This A/P will disengage when speed is sensed at > 10 kts

8 When the thrust levers are moved to the takeoff position, the FMGS updates its position at takeoff using

- A) IRS/DME/DME positioning
- B) IRS/ILS/DME positioning
- C) The navigation database and the takeoff runway entered into the MCDU by the pilot

9 The takeoff bias is

- A) Replaced when a bias is computed based on radio position
- B) Retained for the remainder of the flight

- C) Blended out over the next 30 minutes
- 10 With the DATA selector set to HDG, the time remaining until the completed IRS alignment is displayed on the control display. How long does it take normally?
- A) Approximately 1 minute
 - B) Approximately 3 minutes
 - C) Approximately 7 minutes
- 11 How does the FMGS derive V_{app} ?
- A) $V_{app} = V_{t+5} + 1.13$ surface headwind component
 - B) $V_{app} = V_{t+10} + 1/3$ surface headwind component
 - C) $V_{app} = V_{s+5} + 1.12$ surface headwind component
- 12 When flying at cruise altitude, the aircraft navigates using radio nav aids only
- A) True
 - B) False
- 13 The IR alignment count down stops one minute prior to accomplishment and the ALIGN lights are flashing. Why does it happen?
- A) It is an indication that there is a disagreement between the IRs and the alignment must be restarted.
 - B) It is an indication that the alignment is complete but must be acknowledged
 - C) It is an indication that alignment has stopped as the present position data has not been entered from the FMGS
- 14 What is managed climb speed below 10,000 feet?
- A) Green dot
 - B) 210 knots
 - C) 250 knots
- 15 The selected database date has expired. When must the active data base be changed?
- A) Prior to entering the preflight data
 - B) Anytime prior to takeoff
 - C) The following calendar day
- 16 Which of the following nav aids can be autotuned?
- A) ILS and ADF (for NDB data base approaches).
 - B) VOR and DME
 - C) Both are correct
- 17 Cost Index = 0 (zero) corresponds to
- A) Minimum fuel consumption (max range)
 - B) Minimum time
 - C) best ratio between the flight time cost and the fuel cost
- 18 While taxiing on the ground, the FMGS displays the position of the aircraft using
- A) IRS and DME/DME
 - B) IRS only
 - C) IRS and VOR/DME

- 19 With the autopilot engaged, either sidestick can be moved freely
- A) True
 - B) False, moving either sidestick will cause the autopilot(s) to disengage
 - C) False, only the PNF's sidestick will freely move
- 20 When the aircraft is in the Managed Guidance mode, it is
- A) Guided by the pilot selecting the specific flight modes and parameter target values on the FCU
 - B) Responding to pilot inputs of speed, altitude, and heading selected on the FCU
 - C) Following lateral, vertical and speed profiles as determined by the IRS'S
- 21 What is managed climb speed above 10,000 feet?
- A) Green dot
 - B) 250 knots
 - C) 280 knots
- 22 An amber box on the MCDU screen indicates
- A) An optional data entry
 - B) A mandatory data entry
 - C) A compulsory reporting point
- 23 When can managed vertical navigation be engaged?
- A) Only after managed speed has been engaged
 - B) At anytime regardless of the engagement status of lateral navigation or speed
 - C) Only after managed lateral navigation and managed speed have been engaged
- 24 Managed guidance is engaged by
- A) Pulling on the desired FCU selector knob
 - B) Pushing on the desired FCU selector knob
 - C) Rotating 90° the desired FCU selector knob
- 25 What speed will the FMGS use in an Expedite climb?
- A) Green dot speed
 - B) ECON climb speed
 - C) 250 knots below 10,000 feet
- 26 The weather radar image can be displayed on which modes of the ND?
- A) Rose NAV or VOR
 - B) Rose VOR or Rose ILS
 - C) Rose NAV or ARC
- 27 How does the FMGC compute radio position?
- A) IRS only
 - B) IRS and VOR/DME
 - C) IRS, DME/DME
- 28 You have been cleared to intercept the localizer. You have pushed the LOC push button on the FCU. If all necessary data has been entered in the MCDU, can you now engage both autopilots?

- A) No, the LOC must capture before both autopilots will engage
 - B) Yes
 - C) No, the APPR pushbutton must be pushed
- 29 What does pushing the APPR push button do?
- A) Arms managed navigation
 - B) Arms the Flight Guidance system to capture a localizer and glide slope if the information has been entered into the MCDU
 - C) Allows the aircraft to slow to green dot speed
- 30 During a turnaround, you notice that there is a residual ground speed on both NDs. How do you correct this?
- A) As the engines have been shut down, it is necessary to carry out a full re-alignment
 - B) There is no corrective action possible until the aircraft is completely electrically shut down
 - C) It is possible to carry out a rapid alignment by turning off all 3 ADIRS momentarily
- 31 In flight, either the AP/FD pitch control, or autothrust may acquire and hold a target speed or Mach number, depending on the engaged modes. Speed control is 'Managed' when the target comes from the SPD/MACH FCU window.
- A) True.
 - B) False.
 - C) Speed control is: Managed, when the target comes from the FMGS. Selected, when the target comes from the SPD/MACH FCU window.
- 32 The FMGS data base contains
- A) Performance information, such as engine fuel flow, engine thrust, green dot data (L/D data), etc
 - B) Navigation information, such as nav aids, waypoints, airways, airports, runways, etc
 - C) Both are correct
- 33 If one GPS receiver fails, the three ADIRUs automatically select the only operative GPS receiver
- A) True
 - B) False
- 34 FMGC 1 is not working. To enter data into the FMGC, which MCDU would you use?
- A) MCDU 1 on the Captain's side
 - B) MCDU 2 on the First Officer's side
 - C) Either MCDU 1 or MCDU 2
- 35 The pilot interfaces with the FMGS using the
- A) FCU
 - B) Thrust Levers
 - C) MCDU
- 36 When is the SRS active?
- A) During a Go Around (after the thrust levers are placed in the TOGA position) up to the acceleration altitude

- B) At T/O, when TOGA or FLX power is set, SRS is displayed on the FMA and provides guidance up to the acceleration altitude
 - C) Both are correct
- 37 The energy circle is a green arc, centered on the aircraft's position and oriented towards the current track line. It is displayed on the NDs during descent, when HDG or TRK mode is selected
- A) True
 - B) False
- 38 Can the crew depress the RMP ON NAV pushbutton and use the RMP for navigation simultaneously with FMGC autotuning
- A) Yes, because the opposite FMGC will continue to autotune nav aids
 - B) No, RMP backup tuning supersedes the autotuning function of both FMGC's
- 39 The Captain's FMA indicates -FD2 in column five, line two. What does this mean?
- A) FMGC #1 has 'timed out' and flight guidance is lost
 - B) The First Officer has pushed the priority takeover pushbutton
 - C) FMGC #1 has 'timed out' and FMGC #2 is now providing flight guidance for both pilots
- 40 What do the white round lights on the FCU display mean?
- A) Selected guidance has been engaged
 - B) Automatic guidance has been engaged
 - C) Managed guidance has been armed or engaged
- 41 During descent, if you push the Expedite (EXPED) push button, what speed will the aircraft try to maintain?
- A) Green dot
 - B) 340 knots
 - C) 3,000 fpm vertical speed
- 42 OPEN CLIMB (OP CLB) is a Managed mode
- A) True
 - B) False
 - C) It uses the AP/FD pitch mode to maintain a SPD/MACH, while the autothrust - if active - maintains maximum climb thrust
- 43 If you have depressed the EXPED push button and want to cancel this function, how could this be accomplished?
- A) Push the EXPED push button again
 - B) Pull the altitude, vertical speed, or speed knob
 - C) Retard the thrust levers to IDLE
- 44 The LOC mode disengages when
- A) Another lateral mode is engaged
 - B) The pilot presses the LOC pushbutton again (engaging the HDG/TRK mode on the current HDG/TRK).
 - C) Both are correct

45 Will the aircraft capture and navigate via the ILS signals if the ILS push button on the FCU is not pushed?

A) Yes

B) No

FUEL

- 1 In normal operation, engines are always fed:
 - A) Center tank for takeoff.
 - B) Inner tanks (collector boxes).
 - C) Outer tanks in case of overfull condition.

- 2 Which of the following would cause the fault light to illuminate on the MODE SEL push button?
 - A) Fuel is being burned out of sequence.
 - B) Crossfeed push button is ON.
 - C) Center tank pumps do not stop after slat extension.

- 3 The message CTR TK FEEDG appears in the MEMO. What does this mean?
 - A) The center tank fuel mode selector is OFF.
 - B) The center tank pumps are OFF.
 - C) At least one center tank pump is energized.

- 4 The fuel system is fully automatic. The only actions required between flights are:
 - A) Selection of the proper fuel load and insertion of Zero Fuel Weight (ZFW) and Zero FuelWeight Center Of Gravity (ZFWCG) in the FMGS.
 - B) Check of block fuel fuel automatically inserted in the FMGS.
 - C) Selection of the proper fuel load and insertion of Gross Weight CG in the FMGS.

- 5 The 4340 fuel system:
 - A) Stores fuel in center tank, wing tanks and the Trimmable Horizontal Stabilizer tanks.
 - B) Has surge vent tanks in the outer, inner, center and trim tanks.
 - C) Has two Inner tanks divided into three parts which are normally interconnected.

- 6 The 4340 fuel system inner tanks:
 - A) Are divided into four boxes each.
 - B) Are divided into two parts each.
 - C) Maintain equalfuel quantity by gravity.

- 7 From which tanks will fuel gravity feed?
 - A) Outer cell of the wing tanks, inner cell of the wing tanks, and/or center tank.
 - B) Inner cell of the wing tanks, and center tank.
 - C) Outer cell of the wing tanks, and inner cell of the wing tanks.

- 8 Center tank pumps do not stop 5 min after center tank low level reached.
 - A) Yes, only on the refueling panel.
 - B) It is not possible to determine their position
 - C) Only on the ECAM Fuel page.

- 9 During normal operations when should the fuel transfer valves open?
 - A) When a low level is sensed in the center tank.
 - B) When a low level is sensed in either outer wing cell.
 - C) When low level is sensed in either inner wing cell.

- 10 Automatic fuel transfer from outer to inner tanks is accomplished by the outer tank transfer valve. In case of automatic fuel transfer failure:
- A) Outer tank fuel tank on affected side is unusable.
 - B) Crew must take action to carry out a manual transfer.
 - C) Outer tank fuel on both sides is unusable.
- 11 What does an amber line across the last two digits of the fuel quantity mean?
- A) The fuel quantity indication is inaccurate.
 - B) The fuel quality is not good and should be checked.
 - C) A disagreement between fuel measured and fuel entered on the MCDU has been detected.
- 12 The APU fuel system:
- A) Uses it's own dedicated DC powered fuel pump.
 - B) Obtains fuel from either center tank pump.
 - C) Obtains fuel from the left fuel manifold via the left side fuel pumps or if needed, the APU fuel pump.
- 13 With fuel in the center tank the CTR TK MODE SEL push button selected to AUTO and CTR TK PUMP push buttons ON (lights out), which of the following conditions cause the center tank fuel pumps to stop?
- A) Extension of the slats (after completion of the short test cycle).
 - B) Anytime the slats are extended or an overfill condition is detected in either wing inner cell.
 - C) For a short test period after the first Engine Master Switch is selected ON when the slats are extended.
- 14 The main fuel pump system has 2 main fuel pumps and 2 standby fuel pumps.
- A) True.
 - B) False.
- 15 After a refuel operation to maximum tank capacity, the fuel can expand by without spillage.
- A) 2%
 - B) 5%
 - C) 7%
- 16 Automatic transfer from the outer tanks to the inner tanks occurs when the center and trim tank have been emptied and either inner tank reaches kg.
- A) 2,500 kg (5, 500 lbs).
 - B) 3, 000 kg (6, 600 lbs).
 - C) 3, 500 kg (7, 700 lbs).
- 17 There are two fuel pumps in each collector box. They are normally both selected ON with:
- A) Both running.
 - B) One running and one in standby.
 - C) On running and one in standby, alternating every flight.
- 18 With fuel in the center tank, the CTR TK MODE SEL push button selected to AUTO and the CTR TK PUMP push buttons ON (lights out), the center tank pumps:

- A) Will operate for a short period after the first engine MASTER switch is selected ON and while slats are retracted.
 - B) They will continue to run until the center tank is empty or slats are extended.
 - C) Both are correct.
- 19 After engine start, center tank fuel pumps run for minutes regardless of slat position.
- A) 1 minute.
 - B) 2 minutes.
 - C) 3 minutes.
- 20 The Inner tank Split pushbuttons are used to:
- A) Divide jettisoned fuel evenly between Inner tanks.
 - B) Isolate the Inner Tanks into 2 separate sections in the event of tank damage.
 - C) Cross feed fuel between Inner tanks.
- 21 Minimum electrical power requirements for refueling are:
- A) AC from external power or APU.
 - B) DC from external power or APU.
 - C) Battery power is sufficient.
- 22 The message OUTER TK FUEL XFRD appears in the MEMO. What does this mean?
- A) It is a reminder to show that a transfer valve is open.
 - B) Fuel is transferring from the center tank to the inner tank.
 - C) It is a reminder to open the outer tank transfer valve.
- 23 Any tanks which require refueling are refueled one at a time.
- A) True.
 - B) False.
- 24 The FAULT light for the T. TANK MODE pushbutton switch, on the fuel control panel, comes on amber when:
- A) Excess aft CG has been detected.
 - B) FCMC is unable to carry out the forward transfer.
 - C) FUEL LO TEMP warning is triggered.
- 25 The wing fuel transfer valves are:
- A) Manually controlled and open when the MODE SEL push button is selected to MAN.
 - B) Are electrically held closed.
 - C) Open automatically at the start of refueling.
- 26 Automatic transfer of fuel from the outer tanks to the inner tanks is performed by gravity.
- A) True.
 - B) False.
- 27 Why do the center tank pumps stop automatically when then slats are extended for takeoff?
- A) To keep the center of gravity as low as possible.
 - B) Dumping takeoff, the center tank fuel is pumped to the rear to trim aircraft.
 - C) To ensure that the engines are fed from the wing tanks for takeoff (feeding segregation).

- 28 Automatic control of CG (center of gravity):
- A) Begins when climbing through FL 255.
 - B) Is terminated when descending through FL245.
 - C) Is terminated when FMGS time to destination is below 35 minutes.
- 29 What precaution should you observe when gravity feeding fuel?
- A) Operate the aircraft below 15,000 feet.
 - B) Use center tank first.
 - C) Open the crossfeed when above FL250.
- 30 The trim tank may be emptied out of normal sequence if required for CG (center of gravity) control.
- A) True.
 - B) False.
- 31 After engine shutdown, what are your actions to close the fuel transfer valves?
- A) You have to switch the inner tank pumps off.
 - B) You have to call maintenance to close the valves.
 - C) No action is required. The valves will close automatically during the next refuelling.
- 32 The Center tank transfer system controls the center of gravity of the aircraft.
- A) True.
 - B) False.
 - C) The Trim tank transfer system controls the center of gravity of the aircraft.
- 33 When is the APU fed from the trim pipe?
- A) When on ground, during first two minutes.
 - B) During trim tank refueling or aft or forward transfer.
 - C) Both are correct.
- 34 Fuel transfer from center to inner tanks can be manually selected through the CTR TANK XFER pushbutton switch.
- A) True.
 - B) False.
- 35 How has the fuel been transferred from the outer to the inner tanks?
- A) By setting the MODE SEL pushbutton to MAN.
 - B) The transfer valve has been opened automatically by the low level sensor in the center tanks.
 - C) By setting the MODE SEL PB to AUTO.
- 36 The main fuel pump system supplies fuel from the tanks to the engines.
- A) Inner wing.
 - B) Outer wing.
 - C) Center.
- 37 The AC powered auxiliary fuel boost pump for the APU operates whenever the APU is operating and no other pump is on. it has an alternate power source on the AC Static Inverter bus for battery only starts.

- A) True.
- B) False.

38 The APU is fed from the engine 1 collector in the left inner tank through the APU FWD pump and the APU ISOL valve when:

- A) On ground, after two minutes, when the trim tank is not refueled.
- B) In flight above FL 200 when the trim tank is empty.
- C) In flight below FL 190.

39 Fuel temperatures are:

- A) Not available to the crew except in case of excessive temperature.
- B) Measured in all tanks and displayed on ECAM.
- C) Measured in the Left Outer tank, Left and Right inner tanks, trim tank and are displayed on the ECAM FUEL page.

40 Automatic refueling ensures that:

- A) CTR and TRIM tanks are refueled only if INNER tanks are expected to be full.
- B) May take as long as one hour if all tanks are to be filled.
- C) CTR tanks are filled first, followed by INNER and TRIM tanks.

INDICATING & RECORDING

- 1 Which computer generates all aural warnings signals (except GPWS warnings) annunciated in the cockpit?
- A) DMC
 - B) SDAC
 - C) FWC
- 2 What does a pulsing green engine parameter indicate?
- A) An ADVISORY, the parameter is about to reach the limit
 - B) An ADVISORY, the parameter is out of the limits
 - C) A MEMO, the parameter has a faulty indication
- 3 On a bottom of the STATUS page, what does the green arrow mean?
- A) It is a reminder to land as soon as possible
 - B) It indicates that there is a system page behind
 - C) It means that there is more information to be seen
- 4 If the ECAM control panel fails, the CLR, RCL, EMER CANCEL, and ALL pushbutton switches become inoperative
- A) True
 - B) False
- 5 When should the EMER CANCEL push button be used?
- A) At the completion of an ECAM procedure for an abnormal procedure
 - B) Whenever a LEVEL 3 warning or LEVEL 2 caution occurs
 - C) Whenever a repetitive visual or aural warning, or caution is received that the crew has determined to be false
- 6 In case of DU failure
- A) The information can be transferred to another DU to be displayed
 - B) ECAM data cannot be transferred to another DU. The data is lost
 - C) ND or PFD data cannot be transferred to another DU. The data is lost
- 7 If the upper ECAM display fails or is switched off, the engine/warning page automatically replaces the system/status page on the lower ECAM display unit
- A) True
 - B) False
- 8 Course information from the #1 ILS receiver will be displayed
- A) On the captain's PFD when the captain's ILS push button is selected ON
 - B) On the FO's PFD when his ILS push button is selected on and on the captain's ND, when the captain's ND is selected to ILS ROSE.
- 9 What is the function of the System data Acquisition Concentrators (SDACs)?
- A) To generate all visual and aural warnings
 - B) To supply information to the FWCs for warning calculations and data to the DMCs to be displayed

- C) To generate displays to be sent to the various display units
- 10 Information from the #1 VOR receiver will be displayed
- A) On the capt's PFD when the captain's VOR bearing selector is selected to VOR
 - B) On the capt's ND when the capt's VOR bearing selector is selected to VOR
 - C) VOR #1 course information is available on the captain's PFD and ND when the captain's ILS pb is selected ON.
- 11 What causes a display unit (DU) to go blank?
- A) Loss of power
 - B) Display unit internal failure
 - C) Both are correct
- 12 What causes a DU to display a black screen with a white diagonal line?
- A) DMC failure
 - B) No power
 - C) Both are correct
- 13 The maximum speed to select next higher flap setting is indicated by two amber dashes
- A) True
 - B) False
- 14 The system/status display (SD) uses the lower ECAM display unit to display:
- A) An aircraft system synoptic diagram page
 - B) The STATUS page
 - C) Both are correct
- 15 The MASTER CAUT lights on ECAM lights up steady amber for level caution and is accompanied by a single chime
- A) 1
 - B) 2
 - C) 3
- 16 What is the meaning of '9000' in blue at the top of the altitude scale?
- A) It marks the FCU selected altitude
 - B) It marks the airfield elevation
 - C) It marks the transition altitude
- 17 How many DMC's are there?
- A) 1
 - B) 2
 - C) 3
- 18 After a single DMC failure, how could a crew member recover the display units?
- A) It is done automatically.
 - B) Once a DMC has failed, the information is unrecoverable
 - C) Rotate the EIS DMC switch on the switching panel to replace the failed DMC with DMC #3

- 19 The _____ pushbutton switch on ECAM cancels an aural warning, extinguishes the MASTER WARNINGS lights, but does not affect the ECAM message display
- A) RCL
 - B) CLR
 - C) EMER CANC
- 20 Where is information displayed by DMC #1 and DMC#2?
- A) DMC#1 supplies data to PFD#1, ND#1, and lower ECAM. DMC #2 supplies data to PFD#2, ND#2, and upper ECAM
 - B) DMC#1 supplies data to PFD#1 , PFD#2, and upper ECAM. DMC #2 supplies data to ND#1, ND#2, and lower ECAM
 - C) DMC#1 supplies data to PFD#1, ND#1, and upper ECAM. DMC #2 supplies data to PFD#2, ND#2, and lower ECAM
- 21 If the lower ECAM DU fails, is there a way to retrieve that information?
- A) By pressing and holding the related systems page push button on the ECAM control panel, the page will be displayed on the UPPER ECAM
 - B) By rotating the ECAM/ND XFR switch on the switching panel, the lower ECAM page will be transferred to either the Captain or FO's ND
 - C) Both are correct.
- 22 There are three types of failures: Independent, Primary and Secondary. What is an Independent failure?
- A) A failure of a system or an item of equipment that costs the aircraft the use of other systems or items of equipment
 - B) The loss of a system or item of equipment resulting from a Primary failure
 - C) A failure that affects an isolated system or item of equipment without degrading the performance of others in the aircraft
- 23 Weather radar can be displayed in what modes on the ND?
- A) ARC and ROSE NAV modes only
 - B) ROSE VOR and ROSE ILS modes
 - C) ROSE VOR and ROSE ILS modes
- 24 RNAV position information is displayed on the ND in which of the following modes?
- A) ARC and ROSE NAV modes only
 - B) ROSE VOR and ROSE ILS modes
 - C) ARC, ROSE and PLAN modes
- 25 Once the crewmember has completed viewing a specific system, what is the correct procedure for clearing the screen and returning it to a normal presentation?
- A) Press the respective system push button again.
 - B) It goes away by itself
 - C) Press CLR on the ECAM control panel
- 26 Aural alerts and voice messages are transmitted
- A) Through the loudspeakers even if the speakers are switched off
 - B) Only through the pilot's headsets
 - C) Through the loudspeakers only if the speakers are switched on

- 27 After the engine shutdown, you observe a pulsing STS message. What does it mean?
- A) It is an indication that at least one system requires crew attention
 - B) It is an indication that the aircraft has not been shut down correctly
 - C) It is a reminder that the status page holds a maintenance message
- 28 The system page automatically displayed on ECAM during TAXI is
- A) DOOR/OXY
 - B) FLIGHT CONTROLS
 - C) WHEELS
- 29 The upper ECAM Display Unit (DU) has failed. You want to see the DOOR/OXY page
- A) You have to press and hold the DOOR key on the ECP
 - B) You have to switch the EIS DMC to CAPT3
 - C) You have to press and hold the RCL key on the ECP
- 30 Both ECAM screens have failed. Is it possible to get E/WD indications?
- A) Yes, the E/WD is automatically transferred to one of the NDs
 - B) No. The E/WD is lost until the aircraft can be repaired
 - C) Yes, to get E/WD information. It must be manually transferred to one of the NDs
- 31 How are the FMAs displayed on the PFD?
- A) There are 5 columns and 3 rows
 - B) There are 3 columns and 5 rows
 - C) There are 3 columns and 2 rows
- 32 In case of a double FWC failure master caution light, master warning light, aural warnings and ECAM cautions and warnings are lost
- A) True
 - B) False
- 33 The aircraft has two ATC transponders which are controlled by a dual control box on the overhead panel
- A) True
 - B) False
- 34 What happens, when a discrepancy between the signal sent to the E/WD and the feedback signal is detected?
- A) A 'CHECK E/WD' message appears on the upper ECAM and on the ND
 - B) A 'CHECK E/WD' message appears on the upper and on the lower ECAM
 - C) ECAM operation is not affected because there are 3 identical DMCs
- 35 In case of FWCI fault
- A) A message 'FWC fault' appears on the upper ECAM
 - B) A message 'FWC fault' appears on the upper and lower ECAM
 - C) ECAM operation is not affected because there are 2 identical FWCs
- 36 The compass rose on the navigation display is always oriented to magnetic north
- A) True

B) False

37 How did the PNF cancel the caution for the NAV ILS 1 FAULT before calling the STATUS page on the ECP?

- A) By pressing the EMER CANC pushbutton
- B) By pressing the CLR key
- C) By pressing the STS key

38 How can the ILS 1 FAULT be restored from being a CANCELLED CAUTION?

- A) By resetting the appropriate circuit breaker
- B) By pressing and holding any CLR key for more than 3 seconds
- C) By pressing the EMER CAN pushbutton for more than 3 seconds

39 The Flight Warning Computers (FWCs) acquire data to generate

- A) Alert messages, aural alerts, red warnings and amber caution, synthetic voice messages
- B) The display on System pages and Engine/Warning pages
- C) Only red warnings

40 Which one of the following statements is true?

- A) 3 Display Management Computers (DMCs) generate the alert messages and the red warnings
- B) 3 DMCs generate the images displayed on CRTs
- C) 3 DMCs are used to collect Aircraft data sensors information

41 In normal operation

- A) DMC1 and DMC2 supply information to PFDs, NDs and ECAM
- B) DCM3 (ECAM part) supplies information to upper and lower ECAM
- C) DMC1 and 2 supply information to PFDs only, DMC3 supplies information to NDs and upper + lower ECAM

42 The actual speed is indicated by the _____ reference line

- A) yellow
- B) amber
- C) red

43 If a PFD fails, does anything happen automatically?

- A) The ATT HDG switch must be used on the switching panel in order to recover PFD information
- B) The image automatically transfers to the display formerly occupied by the ND
- C) The image automatically transfers to the UPPER ECAM

44 VOR, ILS, and NDB raw data information is displayed on the ND in which of the following modes?

- A) VOR, RMI and NDB information may be displayed in the ARC or ROSE NAV modes
- B) VOR and ILS information can be displayed in the ROSE VOR and ROSE ILS modes respectively
- C) Both are correct

- 45 The presence of VOR1 in red on the ND indicates
- A) The VOR station currently tuned is out of range
 - B) The VOR station currently tuned is out of service
 - C) The # 1 VOR receiver is inoperative
- 46 The _____ allows the pilot to have the ECAM display either warning and caution messages or system and system status images
- A) PFD/ND XFR on each side console
 - B) ECAM Switching panel
 - C) EFIS DMC switch on each side console
- 47 The FWC generates synthetic voice for radio height announcements below _____ feet
- A) 3000 feet
 - B) 2500 feet
 - C) 2000 feet
- 48 If the UPPER ECAM DU fails, what will be displayed on the lower unit?
- A) System display page
 - B) Engines and Warning page (E/WD)
 - C) Status page
- 49 VLS is the lowest speed that the autoflight system (autopilot or A/THR) will fly the aircraft. This is a dynamic speed corresponding to an Angle Of Attack (AOA).
- A) VLS will change with wing configuration change.
 - B) With speedbrake extension, VLS will increase.
 - C) Above FL200, VLS will provide a 0.2g buffet margin.
- 50 The Speed Trend Arrow is a dynamic information displaying the speed at which the aircraft will be in _____
- A) 5 seconds
 - B) 8 seconds
 - C) 10 seconds
- 51 The digital flight data recording system energizes automatically when: a. On the ground with one engine running
- A) On the ground during the first 5 minutes after the aircraft electric network is energized.
 - B) In flight (whether the engines are running or not).
 - C) All of the above
- 52 Of the three types of EIS displays, which one has the lowest priority?
- A) The ND
 - B) The PFD
 - C) The SED
- 53 Which statement is true about the use of the ALL key on the ECAM Control Panel?
- A) When you press the ALL key, all the systems pages are displayed in succession
 - B) When you press the ALL key, you cannot stop at a particular systems page until all have been displayed
 - C) The ALL key is not operable in case of failure of the ECAM Control Panel

- 54 As you approach a selected altitude, when will the yellow altitude window start flashing?
- A) As you approach within 750 ft of FCU selected altitude and stop when it is within 250 ft
 - B) As you approach within 1000 ft of FCU selected altitude and stop when it is within 150 ft
 - C) As you approach within 500 ft of FCU selected altitude and stop when it is within 150ft
- 55 How many radio altimeter antennas are there?
- A) 3
 - B) 4
 - C) 5
- 56 The Flight Path vector (FPV) represents the lateral and vertical trajectory of the aircraft with respect to the ground. On the lateral scale, it indicates the aircraft's track. On the vertical scale, it indicates the aircraft's flight path angle
- A) True
 - B) False
- 57 When does the Side Stick Order indicator display?
- A) After first engine start and disappears when passing 400 feet RA
 - B) After first engine start and disappears after rotation
 - C) After seconde engine start and disappears when passing 400 feet RA
- 58 When is the 'Green Dot' displayed?
- A) Only when flap handle is the zero position
 - B) Only when flap handle is the zero position, above FL80
 - C) Only when flap handle is the zero position, below FL80
- 59 What does Green Dot represent?
- A) Maneuvering speed in clean configuration
 - B) Maneuvering speed in clean configuration when speed is managed
 - C) The next flap extend (VFE) max speed
- 60 The electric standby horizon normally draws current from the DC ESS BUS. In case of total electrical failure, the indication remains usable for _____ minutes.
- A) 3
 - B) 5
 - C) 10
- 61 In emergency electrical configuration:
- A) Both PFDs are available
 - B) CPT's PFD and E/WD are available
 - C) CPT's PFD and F/O's ND are available
- 62 The green 'S' of the speedtape is the Minimum Slat Retraction Speed. It is only displayed when the flap handle position is in position 1
- A) True
 - B) False

- 63 When is the windshear detection function available?
- A) At takeoff, from 3 seconds after lift off up to 1300 feet RA
 - B) At landing, from 1300 feet RA down to 50 feet RA
 - C) Both are correct
- 64 When will the PFD Heading tape revert to TRU heading?
- A) North of 73° North or South of 60° South
 - B) South of 73° North or North of 60° South
 - C) North of 80° North or South of 73° South
- 65 Is the Side Slip indicator always yellow?
- A) Yes
 - B) No, it turns blue when it becomes a beta target (displaying optimum side slip for a given configuration)
 - C) No, it turns orange when it becomes a beta target
- 66 When will the Flight Directors bars flash?
- A) When a reversion occurs
 - B) When loss of LOC or G/S signal in LAND mode
 - C) All of the above
- 67 The TCAS determines the ___ of intruders
- A) Relative bearing
 - B) Range and closure rate
 - C) Relative altitude
- 68 If the FPV (Flight Path Vector) symbol is right of center, where is the wind coming from?
- A) Right
 - B) Left
 - C) It depends of the Track followed
- 69 If the FPV is above the horizon line, what is the aircraft actually doing?
- A) Descending
 - B) Maintaining FL
 - C) Climbing
- 70 TCAS traffic is displayed on the navigation display in all ROSE modes and ARC mode. Only the 5 most threatening intruders are displayed
- A) True
 - B) False
- 71 The Glide slope index will flash continuously when the deviation exceeds _____ above
- A) 1/2 dot below 120 feet RA
 - B) 1 dot above 100 feet RA
 - C) 1 dot above 60 ft RA
- 72 Both LOC and glideslope will flash if, after capture, the signal is lost.
- A) True
 - B) False

73 The lower end of a red and black strip along the speed scale defines the VMAX speed

- A) It is the lowest of the following VMO (or MMO), VLE, VFE
- B) It is the speed corresponding to the stall warning (VSW)
- C) It represents the speed corresponding to the angle of attack at which alpha protection becomes active

74 The SD displays the Gross Weight (GW) in green as soon as the second engine is started. (As soon as the first engine is started. The last two digits are dashed if accuracy is degraded.. On ground, the indication is replaced by blue dashes, if no computed data is available.)

- A) True
- B) False

LANDING GEARS & BRAKES

1 In case of one LGCIU failure, is the landing gear system affected?

- A) Yes.
- B) No.

2 Which hydraulic system(s) supply pressure to the landing gear system?

- A) Green.
- B) Blue.
- C) Yellow and Blue.

3 In case of green hydraulic system loss, what is the correct statement?

- A) Gear extension is done using the BLUE hydraulic system, nose wheel steering is lost.
- B) Gear extension is done by gravity, nose wheel steering and braking are unaffected.

4 If the brake system automatically transitions to alternate brakes with the A/SKID & N/W STRG switch in the ON position, which of the following will be available?

- A) Auto brakes and anti-skid.
- B) Only auto brakes.
- C) Brakes, auto brakes, anti-skid.

5 What is indicated by the autobrake DECEL lights?

- A) Airplane deceleration is 25% of selected rate.
- B) Airplane deceleration is 50% of selected rate.
- C) Airplane deceleration is 100% of selected rate.

6 The landing gear consists of:

- A) Two inboard retracting main gears.
- B) A forward retracting nose gear.
- C) Both are correct.

7 On the E/WD, you notice the NW STRG DISC memo. What does it mean?

- A) The nose wheel steering has been disconnected by ground personnel.
- B) A failure in the nose wheel steering system has been detected.
- C) There is a discrepancy between the two nose wheel steering handwheel positions.

8 During pushback, you start engine #2. You observe the NW STRG DISC memo has changed to amber. Why?

- A) The NW STRG disconnect mechanism has failed.
- B) The yellow hydraulic system is now pressurized and the amber caption is a warning not to move the handwheel.
- C) . The nose wheel steering is being reconnected by ground personnel. It is amber because the pin is removed.

9 If the landing gear was gravity extended using the hand crank on the center pedestal, landing gear position must be verified through:

- A) The landing gear viewers.

- B) The landing gear indications depicted on the ECAM and, if available, the center panel LDG GEAR indicator panel lights.
C) Both are correct.
- 10 Landing gear operation is inhibited at speeds:
A) Below 100 knots.
B) Above 260 +/- 5 knots.
C) below 100 knots and above 260 knots.
- 11 In the event of an aborted takeoff with autobrake armed, automatic braking is initiated:
A) At ground spoiler extension provided that the speed is above approximately 70 kts.
B) At ground spoiler extension provided that the speed is below approximately 70 kts.
C) At 100 kt.
- 12 How can the brake accumulator be re-pressurized?
A) With the yellow electric hydraulic pump.
B) With the blue electric hydraulic pump.
C) Both are correct.
- 13 The red arrow on the landing gear indicator panel illuminates:
A) If the landing gear is not locked in selected position.
B) If the landing gear is not downlocked in landing configuration.
C) During transit.
- 14 You are ready to taxi. You apply the toe brakes on the rudder pedals and release the PARK BRK. The BRAKES pressure falls to zero. What should you do?
A) This should not happen and you must assume that the BRAKES pressure indicator has failed.
B) Nothing as this is normal. The BRAKES pressure indicator only indicates alternate (yellow) brake pressure.
C) You must re-apply the PARK BRK and call for maintenance personnel as the main system pressure has failed.
- 15 Which hydraulic system supplies pressure to the nose wheel steering?
A) Green.
B) Blue.
C) Green and Blue.
- 16 If the BSCU detects a brake system malfunction in flight with the A/SKID & NA/r/ STRG switch in the ON position:
A) The crew will be notified with an ECAM message after touchdown if the brake system does malfunction.
B) The crew will be notified with an ECAM message.
C) The crew must manually select alternate brakes.
- 17 What is required to arm the auto brakes?
A) Green hydraulic pressure available, anti-skid, no failures in the braking system.
B) Landing gear lever selected down and selection of an autobraking rate.
C) Both are correct.

- 18 The purpose of the RESET position on the LDG GEAR GRVTY EXTN panel is to:
- A) Manually reset the landing gear downlocks.
 - B) Reset the system to the normal extension and retraction mode.
 - C) Actuate the BLUE hydraulic system electric pump to provide an alternate source of hydraulic pressure to the landing gear system.
- 19 What does each turn of the gravity gear extension handle do?
- A) Open gear doors, unlock gear, drop gear.
 - B) Open gear doors, drop gear, shut doors.
 - C) Shutoff hydraulic pressure, open doors, unlock gear.
- 20 How do you manually extend the landing gear?
- A) Lift the red handle and turn anticlockwise 4 turns.
 - B) Lift the red handle and turn anticlockwise a minimum of 2 turns.
 - C) Lift the red handle and turn clockwise a minimum of 4 turns.
- 21 If the Landing Gear was gravity extended using the hand crank on the center pedestal, what other systems will be inoperative?
- A) Nose wheel steering and auto braking.
 - B) Nose wheel steering only.
 - C) Anti-skid and auto braking.
- 22 Auto brake may be armed with the parking brake on.
- A) True.
 - B) False.
- 23 Can normal landing gear operation be restored after a gravity extension if green hydraulic pressure is available?
- A) Restoration is always possible.
 - B) It may be possible if the gravity extension was not caused by a failure of the landing gear mechanism.
 - C) No, only maintenance can restore normal operation.
- 24 To control the nose steering, the BSCU (brake and steering control unit) receives inputs from:
- A) Steering handwheels.
 - B) Rudder pedals.
 - C) The autopilot.
- 25 When the landing gear is gravity extended, will nose wheel steering be available?
- A) Only if the A/SKID & N/W STRG switch is selected ON.
 - B) No.
 - C) Limited nose wheel steering is available only through the captain's rudder pedals.
- 26 Auto brakes, if selected, will only be activated by:
- A) The wheels spinning up.
 - B) The struts being compressed.
 - C) The brake pedals being depressed.

27 A shortening mechanism attached to the reduces main landing gear length by retracting the shock absorber into the main leg during retraction.

- A) Wheel.
- B) Nose.
- C) Wing.

28 When the LDG GEAR GRVTY EXTN selector switch is in the DOWN position, the two motorized actuators are electrically powered to close the hydraulic cut off valve and to disengage door and gear uplocks which permit the nose and main gear to deploy by gravity and automatically lock down.

- A) True.
- B) False.

29 There are two triangles for each gear on the ECAM WHEEL page. What do they represent?

- A) Each triangle represents one wheel on the gear.
- B) Each triangle represents the position detected by one of the two computers systems.
- C) Each triangle represents one of the braking systems available for that gear.

30 Nose wheel steering is available:

- A) At any speed on the ground.
- B) Below approximately 100 kts.
- C) Below approximately 70 kts.

31 When depressing the pedal disconnect pushbutton on a steering handwheel:

- A) Rudder pedal and steering handwheel orders to nosewheel steering are disconnected.
- B) Hydraulic isolation valve is closed, cutting hydraulic supply to nose wheel steering.
- C) Rudder pedal order to nose wheel steering are disconnected.

32 Nose wheel steering is provided by two actuators powered by the green hydraulic system and electrically signaled by the brake and steering control unit (BSCU).

- A) True.
- B) False.

33 What system pressure does the ACCU PRESS and BRAKES pressure indicator indicate?

- A) Yellow brake accumulator and yellow brake system pressure to the left and right brakes.
- B) Yellow brake accumulator and green brake system pressure to the left and right brakes.
- C) Yellow brake accumulator and green or yellow brake system pressure to the left and right brakes.

34 . The normal brake system uses _ hydraulic pressure and the alternate brake system uses _ hydraulic pressure backed up by the hydraulic brake accumulator.

- A) Green - Blue.
- B) Yellow - Blue.
- C) Yellow - Green.

35 With the A/SKID and NA/t/ STRG switch set to OFF:

- A) Nose wheel steering is not energized but anti-skid is energized only when aircraft is moving on ground,
- B) Both NA/ú STRG and A/SKID are de-energized.

- C) Normal brake is lost but alternate brake with anti-skid is available.
- 36 The BSCU (brake and steering control unit) has two independent channels. Both can be active at the same time.
- A) True.
 - B) False.
- 37 ECAM: if you see a green arc shown over a wheel indication.
- A) It marks the hottest brake with a temperature of more than 100°C.
 - B) It indicates an abnormal high temperature.
 - C) The A/SKID system is automatically releasing the pressure of that brake.
- 38 Nose wheels and main wheels have fusible plugs that prevent the tires from bursting if they overheat.
- A) True.
 - B) False.
 - C) Only the main wheels!
- 39 With the A/SKID & NA/ú STRG switch in the ON position, if the BSCU detects a brake system malfunction and/or normal braking is not available:
- A) The crew will be notified with an ECAM message only if after touchdown the brake system does actually malfunction.
 - B) Transition to the alternate brake system is automatic.
- 40 You have just set the parking brake handle to ON. Is it still possible to check the main brake system using the toe brakes?
- A) Yes. As soon as you press the brake pedals the BRAKES indicator will read main system pressure.
 - B) No. It is not possible to press hard enough to obtain an accurate reading.
 - C) No. When the PARK BRK is set, the other braking modes are deactivated.
- 41 The L/G CTL indication, on the ECAM wheel page, appears with a 30 second delay when position of any landing gear disagrees with lever position.
- A) White.
 - B) Amber.
 - C) Red.
- 42 If the accumulator on the alternate brake system is your only source pressure, which of the following will be available?
- A) Auto brakes and antiskid.
 - B) Antiskid.
 - C) Seven applications of the brake pedals.
- 43 The gear doors remain open after a manual extension.
- A) True.
 - B) False. (You have to expect decreased performance in the event of a go-around.)
- 44 The landing gear doors are pneumatically controlled and electrically operated.
- A) True.

B) False.

45 Nose wheel steering control by the handwheel provides up to t _degrees nose wheel steering angle.

A) 55°

B) 65°

C) 78°

46 The green DECEL light on the autobrake pushbutton illuminates when the actual airplane deceleration corresponds to what percentage of the selected rate?

A) 80%

B) 90%

C) 92%

47 Each main wheel has an antiskid brake.

A) True.

B) False.

48 The Cruising altitude is 20,000 ft. If the crew selects landing gear down at 300 kts IAS, what will happen?

A) The landing gear will extend and the Captain will have to write up a special report.

B) The landing gear will not extend until VLO which is 270 kt.

C) Being protected by a safety valve down to 280 kt, the landing gear will not extend.

49 Nose wheel steering is self centering below 100 kt.

A) True.

B) False.

50 Rudder pedals provide nose wheel steering control below.

A) 90 kt.

B) 100 kt.

C) 120kt.

51 The parking brake accumulator is designed to maintain the parking pressure for at least.

A) 6 hours.

B) 12 hours.

C) 18 hours.

52 The autobrake will arm if at least one ADIRS is functioning. (The system needs also:- Green pressure available.- electric power on antiskid- No failure in the braking system.)

A) True.

B) False.

53 What happens to the other brake modes when parking brakes are applied?

A) There is no change.

B) All other braking modes and antiskid are deactivated.

C) Antiskid mode only is deactivated.

54 Auto brake system (MAX) is disarmed by:

- A) Depressing both pedals.
- B) Depressing at least one pedal.
- C) Depressing the rudder pedal disconnect pushbutton

55 While taxiing, if the Captain's handwheel is deflected full Left and the First Officer's handwheel is deflected full right:

- A) The aircraft should continue straight ahead as the handwheel orders are algebraically added.
- B) The aircraft should turn left because Captain's handwheel takes precedence over the F/O's.
- C) The aircraft should turn left or right, depending on which handover pushbutton was last activated.

56 How is the tire pressure measured?

- A) By the LGCIU.
- B) By a sensor.
- C) Directly by the TPIU.

57 On the overhead panel, the NWS TOWING pushbutton switch FAULT light illuminates red, on ground, when the nose wheel steering has exceeded:

- A) 78 degrees.
- B) 82 degrees.
- C) 93 degrees.

58 The landing gear gravity extension system is an electromechanical system controlled through two selectors located on the center instrument panel.

- A) True.
- B) False.

OXYGEN

1 AIRBUS 340 - oXYGEN On which ECAM page could the flight crew check the exact pressure of the oxygen cylinder?

- A) The PRESS page.
- B) The DOORS page
- C) The COND page.

2 The REGUL LO PR indication on the ECAM DOOR/OXY page appears amber if oxygen pressure on the low-pressure circuit is low.

- A) True.
- B) False.

3 What is indicated by a missing green thermal plug during an exterior preflight?

- A) An oxygen system overpressure or thermal discharge.
- B) This is normal indication, the green thermal plug only appears if the oxygen cylinder is low.
- C) The crew oxygen bottle is empty.

4 Approximately how long are the passenger oxygen generators able to produce oxygen?

- A) 15 minutes.
- B) 20 minutes.
- C) 25 minutes.

5 The yellow blinker flowmeter, on the cockpit oxygen mask stowage box, flashes when there is an oxygen system failure.

- A) True.
- B) False.

6 What is the main difference between the crew and the passenger oxygen system?

- A) There is no difference: both are served by oxygen cylinders.
- B) Crew is supplied from an oxygen cylinder; passengers are supplied by chemical oxygen generators .
- C) Both the crew and passengers are supplied with oxygen from chemical oxygen generators.

7 What is the purpose of the CREW SUPPLY push button?

- A) When selected to ON, it supplies oxygen to the Captain & F/O only (umpseats are not supplied)
- B) When selected to ON, it allows the flow of low pressure oxygen to the crew's masks.
- C) In case of low cylinder pressure it allows the crew to tap into the passenger oxygen system.

8 What happens when the mask is used with the selection at 100%o position?

- A) Mask is supplied with diluted oxygen on demand.
- B) Mask is supplied with undiluted oxygen on demand.
- C) Mask is supplied with undiluted oxygen continuous flow.

- 9 At approximately what cabin altitude should the passenger oxygen masks drop?
- A) 10,000 feet (+100, - 500 ft)
 - B) 12,500 feet (+ or - 500 ft)
 - C) 14,000 feet (+0, - 500 ft)
- 10 Overpressure supply for the crew oxygen mask is started automatically when cabin altitude exceeds 25, 000 feet.
- A) True.
 - B) False.
- 11 Use of the EMERGENCY pressure selector on the crew oxygen mask creates an overpressure which eliminates condensation and prevents smoke from entering the mask.
- A) True.
 - B) False.
- 12 What does an amber OXY on the ECAM Doors mean?
- A) The crew supply switch is turned off and/or oxygen pressure is less than 400 psi.
 - B) The crew supply switch is turned off
 - C) Oxygen pressure is less than 650 psi.
- 13 Illumination of the SYS ON light is an indication that:
- A) The crew must depress the MASK MAN ON pb in order to deploy the masks.
 - B) Electrical power has been sent to deploy the masks, either manually or automatically.
 - C) The crew oxygen cylinder is empty.
- 14 There are oxygen generators in each aircraft's galley.
- A) True.
 - B) False.
- 15 The OXY high pressure indication, on the ECAM DOOR/OXY page, appears when pressure is less than 400 psi.
- A) White.
 - B) Amber
 - C) Red.
- 16 what will depressing the guarded MASK MAN ON pushbutton accomplish?
- A) A signal is sent to the chemical oxygen generators to start the flow of oxygen to the masks.
 - B) It manually sends a signal to open the oxygen mask doors.
 - C) Both are correct.
- 17 When does passenger oxygen flow start?
- A) When the mask is pulled toward the seat.
 - B) When the oxygen doors open.
 - C) When the oxygen button is pushed.
- 18 The CKPT OXY indication, on the ECAM DOOR/OXY page, is normally white, but becomes amber when:
- A) Oxygen pressure goes below 400 psi.

- B) Low oxygen pressure is detected.
- C) The OXYGEN CREW SUPPLY pushbutton switch on the overhead panel is OFF.

19 The OXY ON flag, on the oxygen mask stowage box, appears when:

- A) The oxygen supply valve is opened
- B) The Left flap door is open
- C) The oxygen supply valve is opened and the left flap door is open.

PNEUMATIC

- 1 The engine bleed system is controlled and monitored by:
 - A) The central computer.
 - B) Two computers, one primary and the second in standby.
 - C) One dedicated Bleed Monitoring Computer (BMC) for each engine.

- 2 The pneumatic system supplies high pressure air for:
 - A) Air Conditioning, water pressurization and engine starting
 - B) Wing anti-icing.
 - C) Hydraulic reservoir pressurization.

- 3 High pressure air has _ sources.
 - A) 2
 - B) 3
 - C) 4

- 4 With both engines operating, an ENG BLEED pb FAULT light will illuminate when:
 - A) The valve position differs from that of the push button.
 - B) The X BLEED selector is selected to SHUT.
 - C) The X BLEED selector is selected to OPEN.

- 5 Air bleed from the engines is:
 - A) Not cooled prior to being used by the systems.
 - B) Cooled in a heat exchanger by cooling air bleed from Fan section.
 - C) Cooled using ambient air.

- 6 The bleed valve is fully close electrically through the BLEED pushbutton during starting sequence.
 - A) True.
 - B) False.

- 7 If a Bleed Monitoring Computer (BMC) fails:
 - A) All systems associated with the failed BMC also fail.
 - B) The engine bleed is lost.
 - C) The adjacent BMC will automatically takes over most of the monitoring functions.

- 8 Which one of the following is true?
 - A) Three engine bleeds are enough for normal operation.
 - B) With three engine bleeds, there are operating limitations.
 - C) With two engine bleeds, there are no limitations.

- 9 Each engine bleed system is designed to:
 - A) Select the air source compressor stage.
 - B) Regulate bleed air pressure.
 - C) Regulate bleed air temperature

- 10 4 leak detection system detects any overheating in the vicinity of hot air ducts.
- A) True.
 - B) False.
- 11 For engine start, air supplied from the ground air source:
- A) Is regulated.
 - B) Can only be used for emergencies
 - C) Is not regulated.
- 12 When engine and wing anti-ice are in use, and a BMC detects a bleed leak:
- A) Only the engine anti-ice on the associated side will be lost.
 - B) The wing and engine anti-ice on the associated side will be lost.
 - C) The wing anti-ice on the associated side will be lost, and the engine anti-ice on the associated side will continue to function.
- 13 Air leakage is based on:
- A) Double looped sensing units in pylon, APU and wing ducts.
 - B) Single loop for pylon and APU and double loops for wings.
 - C) Single looped sensing units in pylon, APU and wing ducts.
- 14 Each bleed valve is electrically operated and controlled pneumatically by its associate BMC.
- A) True.
 - B) False.
 - C) Each bleed valve is pneumatically operated and controlled electrically by its associated BMC.
- 15 If a BMC detects a bleed leak:
- A) The crew must isolate the affected leak.
 - B) All valves that could supply pneumatic air to the area of the bleed leak will automatically close.
 - C) The crew has to close the valves manually.
- 16 Bleed leak protection for the APU pneumatic duct is provided by:
- A) Detection loops associated with BMC #1.
 - B) Detection loops associated with BMC #2.
 - C) The APU BMC.
- 17 With the loss of pneumatic system pressure, the engine bleed valve will:
- A) Remain in its current position.
 - B) Assume the mid position.
 - C) Assume the open position.
- 18 The APU bleed supply is controlled by the APU Electronic Control Box (ECB).
- A) True.
 - B) False.
- 19 Pneumatic system operation is controlled and monitored by:
- A) One Bleed Monitoring Computer (BMC).
 - B) Two Bleed Valve Computers (BVC).

- C) Four Bleed Monitoring Computers (BMC).
- 20 ECAM BLEED page: when is the GND symbol displayed?
- A) Whenever the aircraft is on the ground.
 - B) All the time
 - C) Only when a ground air supply is connected.
- 21 The precooler inlet pressure indication, on the ECAM Bleed page, becomes amber if lower than _ psi or in case of overpressure detected by the BMC
- A) 2
 - B) 4
 - C) 8
- 22 In automatic mode, the crossbleed valve opens when the system is using APU bleed air.
- A) It closes if the system detects an air leak (except during engine start).
 - B) It closes if the system detects an air leak (except in flight).
 - C) It closes automatically if the system detects an air leak.
- 23 Engine bleed systems are interconnected by a crossbleed duct to which the APU and ground sources are connected.
- A) True.
 - B) False.
- 24 What happens when pressure and temperature are not sufficient to supply the corresponding engine bleed valve?
- A) HP valve closes.
 - B) HP valve opens, if stage closed.
 - C) HP valve opens, IP stage remains in the same configuration.
- 25 When additional pneumatic air is required for anti-ice, engine starting, or air conditioning:
- A) Additional pneumatic air will be requested by the BMC to the FADECS or the APU.
 - B) The crew must observe minimum N1 limits.
 - C) Both are correct.
- 26 When selected, APU bleed air:
- A) Will supply bleed air only if the ENG BLEED pb's are selected OFF
 - B) Has priority over engine bleed air.
 - C) Will supply bleed air only if the X BLEED selector is selected OPEN
- 27 The Precooler outlet temperature visible on the ECAM is normally in green. It becomes amber, if the BMC detects an overheat or low temperature.
- A) True.
 - B) False. (Low temperature is lower than 150°C.- Overtemperature if more than:a) 290°C for more than 5 seconds b) 270" for more than 15 seconds .c) 257"C for more than 55 seconds.)
- 28 With the APU running, the APU BLEED push button selected ON and the X BLEED selector to AUTO. the APU will:
- A) Only supply bleed air to the left side.

- B) Supply pneumatic air to both sides of the aircraft because the pneumatic crossbleed valve automatically opens.
C) Will supply bleed air only to the left side unless the X BLEED selector is selected OPEN.
- 29 Which source controls the crossbleed valve?
A) Pneumatic.
B) Electric.
- 30 The crossbleed valve is automatically controlled to:
A) Close after all engine starts even if the APU bleed is still on.
B) Open when the APU bleed is selected ON, and closed when a leak is detected.
C) Open when one engine bleed has failed.
- 31 The crew may directly control the following bleed valves:
A) Engine, engine high pressure, APU
B) Engine, intermediate pressure, APU.
C) Engine, APU, crossbleed
- 32 APU bleed air supplies the pneumatic system if the APU speed is above _:
A) 80%
B) 85%
C) 92%
- 33 A check valve near the crossbleed duct protects the APU when bleed air comes from another source:
A) True.
B) False.
- 34 Temperature regulation is achieved by the precooler which regulates and limits the temperature at:
A) 150°C
B) 85°C
C) 60°C
- 35 How many ground units can be connected to the crossbleed duct?
A) None.
B) One or two
C) One, two or three.

AUTOFLIGHT

- 1 What are the Autopilot functions?
 - A) Automatic landing and go around.
 - B) Stabilization of the aircraft around its center of gravity.
 - C) Acquisition and tracking of a flight path.

- 2 How can the present position of the aircraft be initialized?
 - A) Present position can be entered through the ADIRS CDU.
 - B) Present position can be entered on the INIT page of the MCDU.
 - C) Both are correct.

- 3 What are the correct positions for the PFD and ND?
 - A) The PFD should be outboard and the ND should be inboard.
 - B) The PFD should be inboard and the ND should be outboard.
 - C) The PFD should be to the left of the ND for both seat positions.

- 4 Insertion or deletion of a holding pattern or change of the SPD target during descent modifies the DES profile.
 - A) True.
 - B) False.

- 5 What information is supplied by the IR's and displayed on the PFD?
 - A) Heading, attitude, and vertical speed.
 - B) Heading, altitude, and vertical speed.
 - C) Airspeed, altitude, and backup vertical speed.

- 6 How long does a normal IR alignment take?
 - A) Approximately 3 minutes.
 - B) Approximately 6 minutes.
 - C) Approximately 10 minutes.

- 7 The IR ALIGN light is extinguished. What does this mean?
 - A) Alignment has been completed.
 - B) Air data output has been disconnected.
 - C) The respective IR is operating normally.

- 8 An amber flashing IR FAULT light indicates that:
 - A) Present position needs to be reentered.
 - B) Attitude and heading information may be recovered in ATT mode.
 - C) A complete failure of the respective IR has occurred.

- 9 What action should be taken if IR #2 is lost:
 - A) Move the EIS DMC rotary selector knob to F/O 3.
 - B) Move the A11 HDG rotary selector knob to CAPT 3.
 - C) Move the ATT HDO rotary selector knob to F/O 3.

- 10 A/IHR in white means that AITHR is:
- A) Disconnected.
 - B) Armed.
 - C) Active.
- 11 The white IR ALIGN light is flashing. What does this mean?
- A) No present position has been entered and ten minutes has elapsed since the IR was selected ON.
 - B) No present position has been entered and ten minutes has elapsed since the IR was selected ON. An alignment fault may exist.
 - C) Attitude and heading information have been lost. An alignment fault may exist.
- 12 What message is displayed if the database effective date does not match the clock date?
- A) Check Data Base Cycle.
 - B) Check Data Base Date.
 - C) Check Effective Date.
- 13 Placing one of the ADR push buttons OFF will accomplish what?
- A) The OFF light will illuminate and air data output will disconnect.
 - B) The respective ADIRU will become deenergized.
 - C) Both AD and IR information will be disconnected.
- 14 While in-flight, operating in Normal law, in the Alpha prot range:
- A) The flight controls revert to direct law.
 - B) The flight controls remain in the load factor demand law.
 - C) The sidestick controller and flight controls revert to the AOA mode, and side stick deflection is proportional to AOA.
- 15 What is the difference between -FD2 and 2FD- on the FMA?
- A) 1 inop, 2 engaged. 2 engaged, 1 off.
 - B) 1 off, 2 engaged. 2 engaged, 1 inop.
- 16 What does the LOW ACCURACY message mean?
- A) FMGC 1 & 2 position difference exceeds limits.
 - B) FMGC position & actual radio position difference exceeds limits.
 - C) FMCG position & IR position difference exceeds limits.
- 17 The thrust delivered by AfHR is already at MAX CLB thrust. Is it possible to obtain some additional thrust?
- A) Yes, by setting a higher speed target.
 - B) Yes, by moving the thrust levers forward from the CL detent.
 - C) No, because the A/THR already delivers the maximum available thrust.
- 18 What information is supplied by the Air Data Modules (ADMs) and displayed on the PFD's?
- A) Heading, attitude, and vertical speed.
 - B) Airspeed, altitude, and backup vertical speed.
 - C) Airspeed, vertical speed, and altitude.

- 19 Can the autopilot be used for a single engine approach and autoland?
A) Yes.
B) No.
- 20 During the takeoff phase:
A) SRS mode will provide guidance to maintain V_2+10 kts (minimum) as a speed reference.
B) SRS mode is available up to 1500 ft.
C) SRS mode will not engage if TOGA is selected.
- 21 If the IR mode rotary selector is selected OFF:
A) AD and IR information will be disconnected.
B) AO information will be disconnected.
C) IR information will be disconnected.
- 22 Which of the following statements is always true when operating in alternate law?
A) Extending the landing gear will place the aircraft in Direct law.
B) Extending the landing gear will place the aircraft in Mechanical backup law.
C) Extending the landing gear will place the aircraft in Mechanical backup law.
- 23 Which protection is not available below 100 feet AGL?
A) Pitch attitude.
B) Vls.
C) ALPHA SPD (alpha speed)
- 24 The flight envelope uses only its own computed gross weight (GW) and center of gravity (CG) to trigger the aft CG signals.
A) True.
B) False.
- 25 What does amber SPDES BRAKES mean on lower ECAM?
A) Speed brakes have a fault.
B) Speed brakes are extended and flap handle is not at 0.
C) Speed brakes are extended and engines are not at idle.
- 26 If LOW ACCURACY message is displayed, are there any approach restrictions?
A) No.
B) Yes, ILS approach only.
C) Yes, both LNAV and VNAV approaches are forbidden.
- 27 The DDRMI provides the pilot with:
A) Bearing only for VOR 1.
B) Bearing and DMF information for VOR 1 and ADF 1.
C) Bearing and DMF information for VOR 2 and ADF 2.
- 28 If both ELACs fail, what controls the elevator and stabilizer?
A) fACs.
B) SECs.
C) Elevator and stabilizer revert to mechanical backup.

- 29 Where is the information displayed by DMC #1 and DMC #2?
- A) DMC #1 supplies data to PFD #2, ND #2 and LOWER HCAM. DMC #2 supplies data for PFD #1, ND #1, and UPPER ECAM.
 - B) . ADMC #1 supplies data to PFD #1, ND #1 and LOWER ECAM. DMC #2 supplies dala for PFD #2, NO #2, and UPPER ECAM.
 - C) . DMC #1 supplies data to PFD #1, ND #1, and UPpER ECAM. DMC #2 supplies data for PFD #2, ND #2, and LOWER ECAM.
- 30 While in flight operating in Normal law, movement of the sidestick and subsequent return to neutral will command:
- A) A load factor proportional to stick deflection, then maintain one G fight corrected for pitci attitude.
 - B) control surface movements proportional to slick dsfection, then return the aircraft to straight and level flight.
 - C) Control surface movements proportional to stick deflection, disconnect auto trim, and maintain its current attitude.
- 31 In normal law all protections are active, which of the following lists is the most complete list?
- A) Protections, Load Factor, Pitch attitude, High AOA, and High speed.
 - B) Protections, Load Factor, Pitch attitude, High AOA, Alpha floor, angle of bank, and high speed.
 - C) Protections, Load Factor, Pitch attitude, high AOA, Vls, Alpha foor, and High speed.
- 32 When in alternate law, all protections except ___ plotection will be lost.
- A) Roll attitude.
 - B) Pitch attitude.
 - C) Bank angle.
- 33 When does the sideslip indicator change to a blue Beta target?
- A) Flaps configuration 1.
 - B) Any EPR exceeds 1.25, and EPR's differ by more than 0.30
 - C) Heading differs from track by 20 deg or more
- 34 High and low speed stabillties may be available in alternate law, stabilities:
- A) Will not allow the pilot to stall the aircraft.
 - B) Prohibit steep bank angles.
 - C) Prohibit steep climb angles and bank angles.
- 35 What is the function of the FACs?
- A) Rudder and Yaw damping inputs, Flight envelope and speed computations.
 - B) Rudder and Yaw damping inputs.
 - C) Rudder and Yaw damping inputs and windshear protection.
- 36 What causes a DU to display a black screen with a white diagonal line?
- A) The circuit breaker for that particular DU has popped.
 - B) DMC failure.
 - C) No power.

- 37 If the LOWER ECAM DU fails, is there a way to retrieve that information?
- A) Pressing and holding the related systems page pb on the ECAM control panel; the page will be displayed on the UPPTR ECAM.
 - B) Rotating the ECAM/ND XFER switch, the LOWER ECAM page will be transferred to either the Captain or First Officer's BNO.
 - C) Both are correct.
- 38 Can the aircraft be controlled with a loss of all electrics?
- A) Yes.
 - B) No.
- 39 The ATT HDG and AIR DATA selectors on the switching panel in the NORM position indicate that:
- A) ADIRU 1 is supplying information to PFD 1 and ND 2, and ADIRU 2 is supplying power to PFD 2 and ND 1.
 - B) ADIRU 1 is supplying information to PFD 1, ND 1 and the DDRMI; ADIRU 2 is supplying power to PFD 2 and ND 2.
- 40 What action should be taken if ADR #1 is lost?
- A) Nothing.
 - B) Move the ATT HDG knob on the switching panel to CAPT 3.
 - C) Move the AIR DATA knob on the switching panel to CAPT 3.
- 41 On an autoland approach, with both autopilots on, which FMOC is master?
- A) FMGC 1.
 - B) FMGC 2.
 - C) Both.
- 42 After a single DMC failure, how could a crewmember recover the display units?
- A) Once a DMC has failed the information is unrecoverable.
 - B) No action is needed as recovery is automatic.
 - C) Rotate the EIS DMC switch on the switching panel to replace the failed DMC with DMC #3.