Question Number. 1. Flaps at landing position

Option A: decrease take-off and landing speed

Option B: decrease take off speed **Option C:** decrease landing speed

Correct Answer is. Decrease landing speed

Question Number. 2. Lowering of the flaps

Option A: increases drag and lift

Option B: increases drag **Option C:** increases lift

Correct Answer is. Increases drag and lift

Question Number. 3. Pushing the left rudder pedal

Option A: yaws the aircraft left and possibly the right wing will rise

Option B: yaws the aircraft left and possibly the left wing will rise

Option C: yaws the aircraft left but has no effect on the wing

Correct Answer is. yaws the aircraft left and possibly the right wing will rise

Question Number. 4. What preventative maintenance can be carried out in case of HIRF?

Option A: Check of aircraft structure

Option B: Bonding and insulation tests

Option C: Shielding of all sensitive equipment

Correct Answer is. Shielding of all sensitive equipment

Question Number. 5. What do rudder vectors do?

Option A: Control pitch and yaw

Option B: Control pitch and roll

Option C: Control yaw and roll

Correct Answer is. Control pitch and yaw

Question Number. 6. On a helicopter what is dragging?

Option A: Movement of each blade vertically about their lateral hinges

Option B: Movement of each blade horizontally about their vertical hinge

Option C: Contact of the blade tips on the ground

Correct Answer is. Movement of each blade horizontally about their vertical hinge

Question Number. 7. What controls pitch and roll on a delta wing aircraft?

Option A: Elevators
Option B: Ailerons

Option C: Eleven's

Correct Answer is. Eleven's

Question Number. 8. If you add an aerial, to strengthen the airframe you add

Option A: an internal doubler Option B: external doubler Option C: an intercostals

Correct Answer is. an internal doubler

Question Number. 9. What does a trim tab do?

Option A: Eases control loading for pilot

Option B: Allows the C of G to be outside the normal limit

Option C: Provides finer control movements by the pilot

Correct Answer is. Eases control loading for pilot

Question Number. 10. How does a balance tab move?

Option A: In the same direction proportional to the control surface it is attached to

Option B: In the same direction a small amount

Option C: In the opposite direction proportional to the control surface it is attached to

Correct Answer is. : In the opposite direction proportional to the control surface it is attached to

Question Number. 11. Satellite transmits updates on every

Option A: 13th orbit Option B: 9th orbit Option C: 2nd orbit

Correct Answer is. 2nd orbit

Question Number. 12. Galley and cabin lighting operate on

Option A: DC bus
Option B: AC bus
Option C: GND services

Correct Answer is. GND services

Question Number. 13. Buffer amp on transmitter is between

Option A: modulator and power amp **Option B:** local oscillator and modulator **Option C:** local oscillator and demodulator

Correct Answer is. local oscillator and modulator

Question Number. 14. Aircraft is North of VOR beacon on a course of o90 RMI pointer points to

Option A: 0 Option B: 090 Option C: 180

Correct Answer is. 180

Question Number. 15. What is power at pulse?

Option A: Peak power **Option B:** Pulsed power **Option C:** Average power

Correct Answer is. Peak power

Question Number. 16. What frequency increases radar relative range

Option A: Long **Option B:** Short

Option C: Radar relative range cannot be increased by frequency change

Correct Answer is. Short

Question Number. 17. If radar pulse is reduced there is

Option A: increased relative range **Option B:** reduced relative range

Option C: no effect

Correct Answer is. no effect

Question Number. 18. If an 80 ohm coaxial cable is connected to an 80 ohm dipole aerial, resistance would

be

Option A: 80 ohm Option B: 160 ohm Option C: 0 ohm

Correct Answer is. 80 ohm

Question Number. 19. Adding 6 foot of cable to TX RX aerials on rad alt would give you

Option A: 3 ft error **Option B:** 6ft error **Option C:** 12 foot error

Correct Answer is. 3 ft error

Question Number. 20. Maximum power on a wave guide is governed by the

Option A: widest width **Option B:** narrowest width

Option C: number of joints and bends **Correct Answer is.** narrowest width

Question Number. 21. Which side of the pilot is the collective?

Option A: Left Option B: Right

Option C: In-between legs **Correct Answer is.** Left

Question Number. 22. What effect does the ground have on a helicopter?

Option A: Increases lift **Option B:** No effect

Option C: Increases thrust

Correct Answer is. Increases lift

Question Number. 23. What damps vibrations on a helicopter?

Option A: Pfifer damper Option B: Swashplate Option C: Scissor levers

Correct Answer is. Pfifer damper

Question Number. 24. What design factors govern RPM of a helicopter rotor?

Option A: Weight of blade **Option B:** Engine and gearbox **Option C:** Fineness ratio

Correct Answer is. Weight of blade

Question Number. 25. Relative velocity of rotor

Option A: increases at fwd. travelling blade **Option B:** increases at retreating blade

Option C: is equal for all blades

Correct Answer is. Increases at fwd. travelling blade

Question Number. 26. When OAT increases what happens to an helicopter operating ceiling?

Option A: Increase Option B: Decrease Option C: No effect

Correct Answer is. Decrease

Question Number. 27. How many satellites required for GNS?

Option A: 8 Option B: 4 Option C: 6 900

Correct Answer is. 4

Question Number. 28. If on a lead-acid battery, several cell checks of SG read consistently low. Battery needs

Option A: topping up with distilled water

Option B: replacing **Option C:** recharging

Correct Answer is. recharging

Question Number. 29. What happens when battery master is switched off in flight?

Option A: Battery disconnected from charge circuit

Option B: No effect

Option C: Electrical systems shut down

Correct Answer is. Battery disconnected from charge circuit

Question Number. 30. in MLS, what is the beam angle away from runway

Option A: 20 degrees Option B: 15 degrees Option C: 10 degrees

Correct Answer is. 15 degrees

Question Number. 31. A full operational autopilot system will ensure that

Option A: the automatic pilot will automatically disengage whenever any failure is detected

Option B: the automatic pilot will automatically cause the aircraft to overshoot if any failure is detected

Option C: the aircraft will continue its automatic landing in the event of a single failure

Correct Answer is. the aircraft will continue its automatic landing in the event of a single failure

Question Number. 32. What is the 'Q' code for runway heading?

Option A: QDH **Option B:** QDM **Option C:** QDR

Correct Answer is. QDM

Question Number. 33. during an automatic landing, the aircraft descent rate is sensed by

Option A: pitch rate gyros **Option B:** radio altimeters **Option C:** vertical acceleron

Option C: vertical accelerometers **Correct Answer is.** radio altimeters

Question Number. 34. the aircraft describing signal, used during auto land, originates from

Option A: roll errors

Option B: localizer deviation errors

Option C: heading errors

Correct Answer is. localizer deviation errors

Question Number. 35. An automatic throttle, engaged in the EPR mode, will control

Option A: the aircraft altitude to maintain constant engine input pressure

Option B: the engine throttles to maintain a constant acceleration rate

Option C: the engine throttles to maintain a constant engine power setting

Correct Answer is. the engine throttles to maintain a constant engine power setting

Question Number. 36. Overshoot or go-around mode can be initiated

Option A: only when autopilot is engaged

Option B: after glideslope capture

Option C: at any time

Correct Answer is. after glideslope capture

Question Number. 37. The wheel height at which the approach path has been visually assessed as satisfactory to continue the approach to a landing is known as the

Option A: decision height **Option B:** intercept height **Option C:** alert height

Correct Answer is. decision height

Question Number. 38. The International Civil Aviation Organization weather category 3A is

Option A: operation down to and along the surface of the runway without external reference

Option B: operation down to sixty meters and RVR of 800 meters

Option C: operation down to and along the surface of the runway with RVR of 200 meters

Correct Answer is. operation down to and along the surface of the runway with RVR of 200 meters

Question Number. 39. Runway visual range in (RVR) is obtained by information obtained the local

Option A: Meteorological Office

Option B: three sets of instruments at the side of the runway

Option C: one set of instruments the threshold of the runway

Correct Answer is. one set of instruments the threshold of the runway

Question Number. 40. A category 3B aircraft using fail operational automatic landing equipment which fail operational control and roll out guidance will have

Option A: a decision height of about 50 feet

Option B: no decision height

Option C: a decision height depending upon the RVR

Correct Answer is. no decision height

Question Number. 41. The purpose of a yaw damper is to

Option A: assist the aerodynamic response **Option B:** produce a coordinated turn **Option C:** block the Dutch roll frequency

Correct Answer is. block the Dutch roll frequency

Question Number. 42. in a triplex system, the detection of a failure of one simplex system will disconnect

Option A: all channels

Option B: the failed system and carry on with an auto land

Option C: the failed system and continue with a manual approach

Correct Answer is. the failed system and carry on with an auto land

Question Number. 43. Standoff errors on localizer approach are washed out by

Option A: differentiating deviation signal **Option B:** integrating deviation signal **Option C:** integrating course error

Correct Answer is. integrating course error

Question Number. 44. With auto throttle selected in the SPEED MODE compatible autopilot modes are

Option A: VOR ARM and HDG HOLD **Option B:** IAS HOLD and ALT ARM

Option C: V/S and ALT ARM

Correct Answer is. IAS HOLD and ALT ARM

Question Number. 45. Which modes are incompatible

Option A: VOR + ALTITUDE HOLD
Option B: G/S + ALTITUDE HOLD

Option C: HDG + V/S HOLD

Correct Answer is. G/S + ALTITUDE HOLD

Question Number. 46. To carry out an autopilot check first

Option A: switch off all power

Option B: ensure all control surfaces are unobstructed

Option C: switch on NAV receivers

Correct Answer is. ensure all control surfaces are unobstructed

Question Number. 47. FAIL PASSIVE means

Option A: system self-monitors, failure does not affect system **Option B:** system self-monitors, failure does affect system

Option C: system is duplicated, failure allows aircraft to continue auto land

Correct Answer is. System self-monitors, failure does affect system

Question Number. 48. On the approach the autopilot loses the LOC signal; the aircraft would

Option A: fly a circle

Option B: increase its drift angle **Option C:** fly parallel to the beam

Correct Answer is. fly parallel to the beam

Question Number. 49. The Airworthiness requirements for the autopilot / auto land system are laid down in

Option A: JAR AWO
Option B: CAIPs
Option C: BCARs

Correct Answer is. JAR AWO

Question Number. 50. VOR capture can be determined by

Option A: a predetermined level of the course error signal away from the selected radial

Option B: is computed from the vectorial summation of the course error and radio deviation signals

Option C: a predetermined level of the VOR deviation signal away from the selected radial

Correct Answer is. is computed from the vectorial summation of the course error and radio deviation signals

Question Number. 51. Version is generated by

Option A: torque receiver synchro's

Option B: synchro's resolvers

Option C: control synchro transformers **Correct Answer is.** synchro's resolvers

Question Number. 52. Automatic trim is used to

Option A: maintain level flight

Option B: prevents standing loads on the elevator

Option C: allow full authority to be regained by the aileron

Correct Answer is. maintain level flight

Question Number. 53. An over station sensor (OSS) is triggered by

Option A: measured radio deviation

Option B: rate of change of radio deviation

Option C: rate of change of course

Correct Answer is. rate of change of radio deviation

Question Number. 54. Synchronization circuits in autopilots ensure

Option A: that the trim indicators will read zero prior to engagement

Option B: that the autopilot control circuits are at zero demand conditions engagement

Option C: that the aircraft will always be returned to straight and level flight when the autopilot is engaged

Correct Answer is. that the autopilot control circuits are at zero demand conditions engagement

Question Number. 55. In the FMS vertical navigation (V NAV) climb mode the throttles are used for

Option A: maintaining a computed EPR
Option B: controlling to a maximum thrust
Option C: correction minor speed deviations
Correct Answer is. maintaining a computed EPR

Question Number. 56. The GA mode is usually initiated by

Option A: pressing a button on the control wheel **Option B:** pressing a button on thrust levers

Option C: making a selection on the mode control panel **Correct Answer is.** pressing a button on thrust levers

Question Number. 57. On selection of the Turbulence Mode

Option A: the gain is doubled to reduce oscillation

Option B: the gain remains the same but signals are phase advanced **Option C:** the gain is reduced to prevent stresses to the airframe

Correct Answer is. the gain is reduced to prevent stresses to the airframe

Question Number. 58. To know the valid data base on the FMS

Option A: perform a BITE check

Option B: call up the relevant page on the CDU **Option C:** call up the relevant current status

Correct Answer is. call up the relevant page on the CDU

Question Number. 59. Co-ordinated autopilot turns are achieved by

Option A: yaw rate gyro signals

Option B: aileron to rudder cross feed Option C: aileron to elevator cross feed Correct Answer is. yaw rate gyro signals

Question Number. 60. A yaw damper system operates on

Option A: all yaw frequencies

Option B: only mid range frequencies **Option C:** low range frequencies

Correct Answer is. low range frequencies

Question Number. 61. A GCR will trip if what is detected?

Option A: Under frequency and over frequency **Option B:** Over frequency and under current **Option C:** Over current and over frequency

Correct Answer is. Over current and over frequency

Question Number. 62. What is the impedance of VOR or HF aerial cables?

Option A: 75 ohms and 25 ohms

Option B: 25 ohms **Option C:** 50 ohms

Correct Answer is. 50 ohms

Question Number. 63. To improve the image or picture when using the WRX (weather radar receiver)

Option A: scan at a lower rate Option B: use shorter bursts Option C: use longer bursts

Correct Answer is.

Question Number. 64. In a vibrator type voltage regulator

Option A: the resistor is in series with the field

Option B: parallel with the field

Option C: in series with the voltage coil

Correct Answer is. the resistor is in series with the field

Question Number. 65. Where does it state what emergency equipment and what levels of emergency

equipment should be carried on an aircraft

Option A: BCAR section A4-8 or A8-4

Option B: JAR OPS

Option C: Maintenance Manual

Correct Answer is. BCAR section A4-8 or A8-4

Question Number. 66. If a section of the emergency floor proximity lights are inoperative

Option A: the aircraft cannot fly i.e. grounded until the defect is fixed

Option B: the aircraft can fly but the section with the problem is not used/ shut off **Option C:** the aircraft is allowed to fly back to base where the defect can be fixed

Correct Answer is. the aircraft is allowed to fly back to base where the defect can be fixed

Question Number. 67. The tail navy light. What angle of divergence should it have? Option A: 180 degrees

Option B: 120 degrees **Option C:** 140 degrees

Correct Answer is. 140 degrees

Question Number. 68. When changing the brushes on a DC generator the brushes must be bedded first, this can be done

Option A: with the generator fitted to the aircraft

Option B: the generator taken off the aircraft and bedding done on the bench

Option C: at the manufacturers only

Correct Answer is. with the generator fitted to the aircraft

Question Number. 69. What must be taken into account when measuring the SG or relative density of a lead acid battery?

Option A: The temperature

Option B: The ambient pressure
Option C: The ambient humidity
Correct Answer is. The temperature

Question Number. 70. The polythene coating on a HF antenna wire is provided

Option A: to prevent precipitation static build up

Option B: to prevent the wire from corroding

Option C: to prevent the wire from chafing

Correct Answer is. to prevent precipitation static build up

Question Number. 71. Weather radar domes are protected from lightning strikes by

Option A: the use of special conductive paint

Option B: bonding strips

Option C: special conducting or non-conducting grease

Correct Answer is. bonding strips

Question Number. 72. An elevator tab moves down

Option A: to counteract for the aircraft flying nose heavy

Option B: to make the nose go down

Option C: to counteract for the aircraft flying tail heavy

Correct Answer is. to counteract for the aircraft flying nose heavy

Question Number. 73. The electrolyte in a nicad battery can be checked by checking

Option A: one cell at a time until all cells are completed

Option B: only the end cell as all the others will be the same

Option C: any single cell as all the others will be the same

Correct Answer is. one cell at a time until all cells are completed

Question Number. 74. In a RVSM system what is the tolerance level of separation i.e.. + or - feet

Option A: 400ft Option B: 160ft Option C: 80ft Correct Answer is.

Question Number. 75. in a fly by wire system, pitch and roll control positions are known by using

Option A: LVDTs for roll control surfaces and RVDTs for pitch control surfaces

Option B: LVDTs for roll and pitch control surfaces

Option C: RVDTs for roll and pitch control surfaces

Correct Answer is. LVDTs for roll and pitch control surfaces

Question Number. 76. in a CMC aircraft, flight deck indications and warnings are managed and provided by

Option A: the central warning computer (CWC) **Option B:** the electronic interface units (EIU)

Option C: the engine indicating and crew alert system (EICAS)

Correct Answer is. the engine indicating and crew alert system (EICAS)

Question Number. 77. What type of memory do CMCs have?

Option A: Volatile **Option B:** Non-volatile

Option C: Hard

Correct Answer is. Non-volatile

Question Number. 78. What is the purpose of the tail cone in helicopters?

Option A: To provide a balance for CofG

Option B: To hold the stabilizers and tail rotor

Option C: To provide vibration damping to the tail rotor **Correct Answer is.** To hold the stabilizers and tail rotor

Question Number. 79. An aircraft in climb maintains the same IAS. What is it's true airspeed?

Option A: Higher than its IAS **Option B:** Lower than its IAS **Option C:** The same as its IAS

Correct Answer is. Higher than its IAS

Question Number. 80. The stall margin is controlled by

Option A: EPR limits

Option B: speed bug cursor

Option C: angle of attack and flap position

Correct Answer is. EPR limits

Question Number. 81. When can the FMS be engaged with the auto throttle

Option A: only with the Flight Director selected

Option B: With either the Flight Director or the Digital Control System (DFCS) engaged

Option C: only after take off

Correct Answer is. only after take off

Question Number. 82. A full authority Digital Engine Control

System (FADEC) consists of

Option A: electronic engine control unit only

Option B: electronic engine control unit and all its sensors

Option C: electronic engine control unit and throttle position transmitter **Correct Answer is.** electronic engine control unit and all its sensors

Question Number. 83. A FADEC system does not have the following system?

Option A: An automatic starting capability

Option B: Control of thrust reverser operation

Option C: Automatic control of engine fire extinguishers

Correct Answer is. Automatic control of engine fire extinguishers

Question Number. 84. Which is the correct sequence for an auto land?

Option A: Glideslope capture, altitude hold and flare

Option B: Localizer capture, glideslope capture, attitude hold and flare **Option C:** Localizer capture, glideslope capture, flare and attitude hold

Correct Answer is. Localizer capture, glideslope capture, attitude hold and flare

Question Number. 85. The wheel height at which the approach path has been visually assessed as satisfactory to continue the approach to a landing is know as the

Option A: decision height
Option B: intercept height

Option C: alert height

Correct Answer is. decision height

Question Number. 86. The ICAO weather category 3A is

Option A: operation down to and along the surface of the runway without external reference

Option B: operation down to 60 m and 800 m

Option C: operation down to and along the surface of the runway with RVR of 200m

Correct Answer is. operation down to and along the surface of the runway with RVR of 200m

Question Number. 87. A category 11 facility performance ILS has an intercept height of Option A: 15 m

Option B: 60 m **Option C:** 0 m

Correct Answer is. 60 m

Question Number. 88. The facility performance ILS intersect height is the point

Option A: where the aero plane receives the first glide path signal

Option B: the localizer and glide path signals cross each other

Option C: where the aero planes first receives both the localizer and glide path signals

Correct Answer is. where the aero plane receives the first glide path signal

Question Number. 89. The average risk of auto land should not contribute a rate of fatal accidents per

landing greater than **Option A:** 1 x 10⁻⁶ **Option B:** 1 x 10⁻⁷ **Option C:** 1 x 10⁻⁸

Correct Answer is. 1 x 10-7

Question Number. 90. Before an aero plane is able to make an automatic landing the

Option A: ground radio aids must be at least CAT II **Option B:** ground radio aids must be at CAT III

Option C: ILS system must be working

Correct Answer is. ILS system must be working

Question Number. 91. For an aero plane to be certified for automatic landing an auto throttle system is

Option A: mandatory

Option B: a matter of choice for the operator

Option C: dependent upon the operation of the aero plane at slow speed

Correct Answer is. mandatory

Question Number. 92. The overshoot or go around mode is initiated

Option A: automatically

Option B: by a selector on the throttle control panel **Option C:** by pushing the throttles forward to maximum

Correct Answer is. by pushing the throttles forward to maximum

Question Number. 93. The aero planes autopilot is programmed to leave the glide slope at

Option A: 300 ft

Option B: the decrab phase **Option C:** start of flare phase

Correct Answer is. start of flare phase

Ouestion Number. 94. Overshoot or go-around mode can be initiated

Option A: only when the autopilot is engaged

Option B: at any time after auto land has been engaged

Option C: at any time

Correct Answer is. only when the autopilot is engaged

Question Number. 95. The following modes may be retained when overshoot has been initiated after the

selection of auto land **Option A:** ILS localizer an IAS

 $\mbox{\bf Option B:}\ \mbox{IAS and glide slope}$

Option C: IAS and steering or heading

Correct Answer is. IAS and steering or heading

Question Number. 96. If go-around has been initiated after auto land has been selected, the aero plane will

Option A: increase speed **Option B:** rotate nose up

Option C: increase speed and rotate nose up

Correct Answer is. increase speed and rotate nose up

Question Number. 97. V NAV can be selected

Option A: alone

Option B: only if A/P and F/D selected

Option C: only if A/T selected

Correct Answer is. only if A/T selected

Question Number. 98. If during auto land the LOC signal is lost at 400 ft in final approach

Option A: system degrade to CAT II Option B: auto land is continued **Option C:** go-around is initiated

Correct Answer is. go-around is initiated

Question Number. 99. The order of auto land approach is

Option A: LOC, GS, ATT HOLD, FLARE Option B: GS, LOC, ATT HOLD, FLARE Option C: LOC, GS, FLARE, ATT HOLD

Correct Answer is. LOC, GS, ATT HOLD, FLARE

Question Number. 100. Purpose of an auto land decrabbing man oeuvre is to

Option A: assist with localizer tracking **Option B:** assist with glide slope tracking

Option C: point the aircraft down the runway at touch down

Correct Answer is. point the aircraft down the runway at touch down

Ouestion Number. 101. An auto land failure monitoring system must ensure that

Option A: the automatic pilot will automatically disengage whenever any failure is detected

Option B: the automatic pilot will automatically cause the aircraft to overshoot if any failure is detected

Option C: the aircraft will continue its automatic landing in the event of signal failure

Correct Answer is. the aircraft will continue its automatic landing in the event of signal failure

Question Number. 102. The effective gain of the glide path receiver

Option A: is increased as the aircraft descends

Option B: remains constant as the aircraft descends **Option C:** is decreased as the aircraft descends

Correct Answer is. is decreased as the aircraft descends

Question Number. 103. During an automatic landing, the aircraft descent rate is sensed by

Option A: pitch rate gyros **Option B:** radio altimeters **Option C:** vertical accelerometers

Correct Answer is. radio altimeters

Question Number. 104. An autopilot with two separate power supplies is

Option A: fail passive **Option B:** fail operational **Option C:** fail redundant

Correct Answer is. fail operational

Question Number. 105. on touchdown, auto pilot

Option A: remains engaged ready for G/A **Option B:** drives the throttles forward **Option C:** disconnects after a short time

Correct Answer is. remains engaged ready for G/A

Question Number. 106. When will the decision height aural warning sound

Option A: at D.H.
Option B: before D.H.
Option C: after D.H.

Correct Answer is. before D.H.

Question Number. 107. Automatic steering of the aircraft after touch down is affected by

Option A: the area navigation system **Option B:** the runway localizer **Option C:** the airfield marker beacon

Option C: the airfield marker beacon **Correct Answer is.** the runway localizer

Question Number. 108. The flare man oeuvre may be controlled by signals from

Option A: radio altimeter

Option B: the glide slope receiver Option C: the localizer receiver Correct Answer is. radio altimeter

Question Number. 109. A triplex system loses one channel, the system is now,

Option A: fail passive **Option B:** fail operational **Option C:** fail redundant

Correct Answer is. fail operational

Question Number. 110. A fail passive system in the event of failure will

Option A: produce a significant out of trim condition **Option B:** produce no significant out of trim condition **Option C:** ensure the aircraft can still land automatically

Correct Answer is. produce no significant out of trim condition

Question Number. 111. A triplex system loses one channel, the system becomes a

Option A: simplex system **Option B:** duplex system **Option C:** dual-dual system

Correct Answer is. duplex system

Question Number. 112. The two parameters used for category classification are

Option A: radio height/runway visual range

Option B: localizer and glideslope

Option C: decision height and runway visual range

Correct Answer is. decision height and runway visual range

Question Number. 113. What is the controlling factor in the automatic flare mode? **Option A:** Decision height

Option B: Radio altimeter **Option C:** Glideslope signal

Correct Answer is. Radio altimeter

Question Number. 114. CAT-3b allows

Option A: approach land and runway guidance with zero DH and RVR

Option B: approach land and RVR in the order of 50 meters

Option C: approach land and runway guidance with taxing visibility in the order of 50 meters

Correct Answer is. approach land and RVR in the order of 50 meters

Question Number. 115. The definition of fail operational is the ability of a system to

Option A: disconnect and leave the aircraft in trim
Option B: continue to control after any first fault
Option C: disconnect but leave the aircraft out of trim
Correct Answer is. continue to control after any first fault

Question Number. 116. What is added to the flare computation at touchdown?

Option A: Nose down bias Option B: Nose up bias Option C: No signal

Correct Answer is. Nose down bias

Question Number. 117. What controls are used in response to the PVD displays? **Option A:** Ailerons

Option B: Throttles

Option C: Nose wheel steering or rudder pedals

Correct Answer is. Nose wheel steering or rudder pedals

Question Number. 118. The ground run monitor (GRM) presents

Option A: distance to go

Option B: ground speed and distance to go **Option C:** take off speed and distance to go

Correct Answer is. ground speed and distance to go

Question Number. 119. for a vertical Gyro which is moved in pitch, which gimble would be moved to correct

the pitch movement? **Option A:** Lateral

Option B: Longitudinal Option C: Normal

Correct Answer is. Longitudinal

Question Number. 120. Versine is used in which channel?

Option A: Pitch Option B: Roll Option C: Yaw

Correct Answer is. Pitch

Question Number. 121. With airspeed hold engaged whilst flying with Flight Director engaged, a down

command means your speed has **Option A:** increased **Option B:** decreased

Option C: is the same

option C. is the same

Correct Answer is. Decreased

Question Number. 122. A Master Warning is issued when

Option A: over speed and low cabin altitude occurs

Option B: cargo smoke and a low oil quantity occurs

Option C: engine fire and generator trip occurs

Correct Answer is. over speed and low cabin altitude occurs

Question Number. 123. The total static resistance along the length of an aircraft is

Option A: 50 milliohms

Option B: 1 ohms

Option C: 1M - 100,000 ohms Correct Answer is. 50 milliohms

Question Number. 124. In the ATA zoning where is section 100 in on an aircraft

Option A: in the undercarriage bay including the doors

Option B: at the lower section of the cabin up to the pressure bulkhead

Option C: at the rear of the fuselage behind the bulkhead

Correct Answer is. at the lower section of the cabin up to the pressure bulkhead

Question Number. 125. Sparking in a generator would be caused by

Option A: low spring tension **Option B:** bedding of brushes

Option C: brushes on the Magnetic Neutral Axis

Correct Answer is. low spring tension

Question Number. 126. Which is the most important part of preventative maintenance on HIRF

installations?

Option A: Visual inspections Option B: Insulation testing Option C: CMC fault indications

Correct Answer is. Visual inspections

Question Number. 127. What should be done to a transformer secondary connections which are open circuit?

Option A: Short the terminals together

Option B: Put a set resistance across the terminals

Option C: Leave the terminals open circuit

Correct Answer is. Leave the terminals open circuit

Question Number. 128. an RMI in VOR mode, it's Pointer is showing a course of 000, if the course knob is adjusted to 010 what happens to the pointer?

Option A: Move left

Option B: Move right **Option C:** Moves left then hard right

Correct Answer is. Move right

Question Number. 129. If a fault is detected during an auto land

approach the system will totally disconnect if it is a

Option A: Triplex system **Option B:** Duplex system **Option C:** Simplex system

Correct Answer is. Simplex system

Question Number. 130. A Glass Reinforced Plastic surface on an aircraft, to reduce the risk of high potential

differences would be

Option A: painted in a conductive paint **Option B:** painted in a non-conductive paint **Option C:** bonded to the primary structure

Correct Answer is. painted in a conductive paint

Question Number. 131. The VHF aerial resistance and transmission line resistance is

Option A: 50 ohms **Option B:** 20 ohms

Option C: 20 and 50 ohms respectively

Correct Answer is. 50 ohms

Question Number. 132. TAS uses which inputs

Option A: Pitot and Static

Option B: Pitot and Static, Mach and Temperature

Option C: Mach and Temp

Correct Answer is. Mach and Temp

Question Number. 133. Other than spoilers, where are speed brakes located?

Option A: On the wing

Option B: Under the Fuselage

Option C: Either side of the Fuselage

Correct Answer is. Either side of the Fuselage

Question Number. 134. With a trailing edge flap being lowered, due to rising gusts what will happen to the angle of attack?

Option A: Tend to increase **Option B:** Tend to decrease **Option C:** Stay the same

Correct Answer is. Tend to increase

Question Number. 135. If a fly-by-wire system fails, the rudder

Option A: remains at the neutral position **Option B:** controls the aircraft in trim **Option C:** remains in the previous position

Correct Answer is. remains in the previous position

Question Number. 136. A poor oscillator in a receiver would cause

Option A: poor channel selectivity **Option B:** poor audio output **Option C:** poor volume output

Correct Answer is.

Question Number. 137. The Ground Proximity Warning Computer in mode 4 would use which inputs to issue a warning?

Option A: A low range altimeter and rate of change of low range altimeter

Option B: A low range altimeter and configuration of aircraft

Option C: A low range altimeter and GPS

Correct Answer is. A low range altimeter and configuration of aircraft

Question Number. 138. Alert Height is when **Option A:** a decision of whether to land is made

Option B: an alert of the altitude of the aircraft is made

Option C: an alert of the ground proximity is made

Correct Answer is. an alert of the altitude of the aircraft is made

Question Number. 139. When downgrading an Auto land system what needs to be done?

Option A: Placards in the cockpit

Option B: An entry in the log book and cockpit placarding

Option C: Crew retraining

Correct Answer is. An entry in the log book and cockpit placarding

Question Number. 140. If a drain trap in a pitot static system is removed but nothing was found

Option A: no leak test is required unless the drain trap contains water

Option B: a leak test must be carried out even if nothing found

Option C: a leak test is never required

Correct Answer is. a leak test must be carried out even if nothing found

Question Number. 141. TCAS transmits and receives on a frequency of

Option A: 1030 MHz. and 1090MHz. respectively **Option B:** 1090MHz. and 1030MHz. respectively

Option C: 1090 MHz.

Correct Answer is. 1030 MHz. and 1090MHz. respectively

Question Number. 142. When an aircraft is aligned for a compass swing check to be carried out it will be

aligned with an error of plus or minus

Option A: 1 degree **Option B:** 3 degree **Option C:** 5 degree

Correct Answer is. 3 degree

Question Number. 143. The quadrantal error in ADF is maximum at a heading of Option A: 000

Option B: 045 **Option C:** 090

Correct Answer is. 045

Question Number. 144. Circulating currents is caused by an unbalanced

Option A: DC generators
Option B: AC generators
Option C: AC & DC generators
Correct Answer is. AC generators

Question Number. 145. A device used do dump lift from an aircraft is the

Option A: spoiler

Option B: leading edge flaps Option C: trailing edge flaps Correct Answer is. Spoiler

Question Number. 146. Runway turn of lights have a beam width of

Option A: 10 degree Option B: 110 degree Option C: 50 degree

Correct Answer is. 50 degree

Question Number. 147. Stall warning will be given at speeds

Option A: that are higher than stall speed **Option B:** that are lower than stall speed

Option C: at the actual stall speed

Correct Answer is. that are higher than stall speed

Question Number. 148. when a helicopter lands how does the pilot signal to the ground staff that it is safe to approach the aircraft?

Option A: Turning on and off the NAV lights **Option B:** Turning off the anti-collision lights

Option C: Flashing the landing light

Correct Answer is. Turning off the anti-collision lights

Question Number. 149. An aircraft will capture the auto land system at

Option A: 1500 ft Option B: 2500 ft Option C: 3500 ft

Correct Answer is. 1500 ft

Question Number. 150. FADEC system gets its power supply from

Option A: channel A and B from the same windings of a dedicated Generator **Option B:** channel A and B from separate windings of a dedicated Generator

Option C: emergency Batt bus

Correct Answer is. channel A and B from separate windings of a dedicated Generator

Question Number. 151. Loss of an electrolyte in a battery is due to

Option A: excessive charging current **Option B:** insufficient charging current **Option C:** excessive charging voltage

Correct Answer is. excessive charging current

Question Number. 152. An autopilot interlock circuit is to **Option A:** prevent the system engagement if a fault exists

Option B: disconnect the system if a fault appears

Option C: both a & b

Correct Answer is. both a & b

Question Number. 153. A rain fall of 5mm/hr is indicated in the WXR by a

Option A: green color Option B: amber Option C: red color

Correct Answer is. Amber

Question Number. 154. The international emergency frequency used in VHF Comms is

Option A: 131.55 **Option B:** 121.5 **Option C:** 118.00

Correct Answer is. 121.5

Question Number. 155. In a modern aircraft a BITE is carried out

Option A: on the ground only

Option B: continuously when the systems are working

Option C: only in the air

Correct Answer is. continuously when the systems are working

Question Number. 156. The electrical A/H has a movement of

Option A: 85 degree in pitch and roll Option B: 360 in roll and 110 in pitch Option C: 360 in roll and 85 in pitch

Correct Answer is. 360 in roll and 85 in pitch

Question Number. 157. When working on a hydraulic operated flight control it is sensible to **Option A:** remove/disconnect hydraulic power

Option B: remove/disconnect electrical power

Option C: pull the appropriate CB

Correct Answer is. Remove/disconnect hydraulic power

Question Number. 158. Emergency electronic equipment requirement will be found in a

Option A: CAAIPs

Option B: Maintenance Manual

Option C: JAR OPS

Correct Answer is. JAR OPS

Question Number. 159. When an aircraft is at a height of 9500ft and the QNH is 500 ft what is the distance

that VHF Com cover?

Option A: 100 nm

Option B: 120 nm

Option C: 140 nm

Correct Answer is. 120 nm

Question Number. 160. When the VOR ref and Vari phase are in phase quadrature, the aircraft is at the

Option A: 180 degree radial Option B: 090 degree radial Option C: 275 degree radial

Correct Answer is. 090 degree radial

Question Number. 161. A unit with two springs and a mass pick off is

Option A: an accelerometer **Option B:** a gyroscope **Option C:** a tach generator

Correct Answer is. an accelerometer

Question Number. 162. The units of vibration are measured in

Option A: phons **Option B:** decibels

Option C: relative amplitude

Correct Answer is. relative amplitude

Question Number. 163. A fuel flow system can be adjusted for

Option A: maximum flow rate **Option B:** minimum flow rate **Option C:** cannot be adjusted

Correct Answer is.

Question Number. 164. Magnetic variation is the difference in angle between

Option A: true north and magnetic north

Option B: magnetic heading and aircraft heading **Option C:** the compass north and magnetic north

Correct Answer is.

Question Number. 165. GPWS mode 1 is excessive

Option A: terrain closure **Option B:** rate of ascent **Option C:** rate of descent

Correct Answer is. rate of descent

Question Number. 166. How many bits make up the mode "S" address

Option A: 12 Option B: 24 Option C: 36

Correct Answer is. 24

Question Number. 167. The applied pressure to an ASI varies with the

Option A: square of the speed
Option B: square root of the speed
Option C: cube root of the speed
Correct Answer is. square of the speed

Question Number. 168. Temperature compensation is required on an altimeter because of

Option A: capsule elasticity **Option B:** capsule shape

Option C: nonlinear pressure/height relationship

Correct Answer is. capsule elasticity

Question Number. 169. The loss of the vertical gyro signal to the flight director system would cause

Option A: aircraft to under bank **Option B:** aircraft to overbank

Option C: aircraft to remain in level flight **Correct Answer is.** aircraft to overbank

Question Number. 170. The doppler VOR beacon reference signal

Option A: amplitude modulates the carrier frequency
Option B: amplitude modulates the sub carrier frequency
Option C: frequency modulates the sub carrier frequency

Correct Answer is. amplitude modulates the carrier frequency

Question Number. 171. During flare mode auto throttle will

Option A: retard throttles to idle **Option B:** disconnect auto throttle **Option C:** select reverse thrust

Correct Answer is. retard throttles to idle

Question Number. 172. A CSD is monitored for **Option A:** low temperature and high oil pressure **Option B:** high temperature and low oil pressure **Option C:** high temperature and high pressure **Correct Answer is.** high temp and low oil pressure

Question Number. 173. As the rotor head is tilted to travel forward what happens to the reward travelling

blades pitch angle?

Option A: Increases

Option B: Decreases

Option C: No change

Correct Answer is. Increases

Question Number. 174. In a fully fly by wire system if the rudder becomes disconnected

Option A: it is centralized by a spring

Option B: its control is maintained by electric trim

Option C: it is centralized by the airflow

Correct Answer is. it is centralized by the airflow

Question Number. 175. What is the power supply to cabin flow tubes?

Option A: 115v ac
Option B: 200v ac

Option C: High voltage stepped up

Correct Answer is. High voltage stepped up

Question Number. 176. When all three leads of a bonding tester are connected together the output reading is

Option A: zero

Option B: full scale deflection

Option C: center scale Correct Answer is. zero

Question Number. 177. in a capacitive fuel gauging system an increase in fuel level would

Option A: increase capacitive reactance

Option B: increase capacitance **Option C:** decrease capacitance

Correct Answer is. increase capacitance

Question Number. 178. Float fuel gauge system is

Option A: adjusted when tanks are full **Option B:** adjusted when tanks are empty

Option C: cannot be adjusted

Correct Answer is. Cannot be adjusted

Question Number. 179. A vertical structural member forming part or full walls are

Option A: bulkheads
Option B: longerons
Option C: frame

Correct Answer is. Bulkheads

Question Number. 180. Low electrolyte in a NiCad battery is caused by

Option A: excessive electrical loading

Option B: high charge current **Option C:** low charge current

Correct Answer is. excessive electrical loading

Question Number. 181. With engine stopped, EPR indicator read slightly above 1. Option A: This is normal

Option B: You would change the Tx as the datum is shifted

Option C: You would adjust the Tx

Correct Answer is. You would change the Tx as the datum is shifted

Question Number. 182. To ensure the compass is serviceable before installation you would carry out

Option A: damping and periodicity checks **Option B:** damping and pivot friction check

Option C: damping and alignment checks

Correct Answer is. damping and pivot friction check

Question Number. 183. The specific gravity readings of a lead acid cell taken twice after charging shows substantially lower value.

Option A: Cell is defective

Option B: You top up the cell with distilled water

Option C: You replace the cell

Correct Answer is. Cell is defective

Question Number. 184. Suppressor line is required for

Option A: ATC and DME only

Option B: TCAs only

Option C: all L band equipment's including TCAS

Correct Answer is. all L band equipment's including TCAS

Question Number. 185. Differential GPS requires

Option A: 3 satellites and two ground based transmitters Option B: 4 satellites and 2 ground based transmitters Option C: 4 satellites and 1 ground based transmitters

Correct Answer is. 4 satellites and 1 ground based transmitters

Question Number. 186. GPS has

Option A: 6 satellites in 4 orbits

Option B: 4 satellites in 6 orbits

Option C: 7 satellites in 3 orbits

Correct Answer is. 4 satellites in 6 orbits

Question Number. 187. When the captain calls attendant

Option A: a high low chine and pink light comes on

Option B: a low chine and blue light comes on **Option C:** a high chine and pink light comes on

Correct Answer is. a high low chine and pink light comes on

Question Number. 188. in ACRS, if an upcoming message is received

Option A: a designated light comes on

Option B: a selcall light along with chine comes on

Option C: a chime sounds in the cockpit

Correct Answer is. a chime sounds in the cockpit

Question Number. 189. A manual trim wheel, when fully moved in the direction of tail

Option A: the authority of elevators not effected **Option B:** the up movement authority is effected **Option C:** the down movement authority is effected

Correct Answer is. the up movement authority is effected

Question Number. 190. If on an ILS approach, LOC signal is lost **Option A:** aircraft continues to descent with an accumulating drift

Option B: aircraft descends in a parallel path to runway

Option C: aircraft moves in a circle

Correct Answer is. aircraft descends in a parallel path to runway

Question Number. 191. IDG output voltage

Option A: does not require voltage regulation as RPM is constant.

Option B: voltage is regulated by GCU **Option C:** voltage is regulated by IDG

Correct Answer is. voltage is regulated by GCU

Question Number. 192. The over-station sensor is activated by

Option A: radio deviation signal

Option B: rate of radio deviation signal **Option C:** deviation and course error

Correct Answer is. rate of radio deviation signal

Question Number. 193. When moving the control column

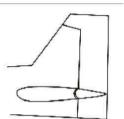
Option A: sensors located under the control column produces a signal

Option B: sensor located along the control run produces a signal

Option C: sensor in the AFCS computer produces a signal

Correct Answer is. sensors located under the control column produces a signal

Question Number. 194. In the reversed camber horizontal stabilizer as shown



Option A: the elevator causes tail down movement i.e. increases tail plane down force

Option B: there is an increases tail plane up-force **Option C:** there is an increased tail plane downforce

Correct Answer is. there is an increased tail plane downforce

Question Number. 195. Equivalent airspeed is indicated airspeed

Option A: corrected for IE and PE

Option B: rectified airspeed corrected for compressibility **Option C:** calibrated airspeed corrected for compressibility

Correct Answer is. calibrated airspeed corrected for compressibility

Question Number. 196. in an Auto land, auto throttle is disengaged

Option A: after reverse thrust is applied

Option B: after affixed period of the time after landing

Option C: manually after landing

Correct Answer is. after reverse thrust is applied

Question Number. 197. What is the maximum limit of the artificial horizon?

Option A: 85 degrees in pitch and 360 degrees in roll

Option B: 360 degrees in pitch and roll

Option C: 85 degrees pitch and 110 degrees in roll

Correct Answer is. 85 degrees in pitch and 360 degrees in roll

Question Number. 198. Acceleration error produces

Option A: a false indication of left bank **Option B:** a false indication of right bank **Option C:** a false indication of climb

Correct Answer is. a false indication of right bank

Question Number. 199. The normal axis of a helicopter passes through

Option A: the center of rotor disc

Option B: through the center of intersection of longitudinal and lateral axis

Option C: a line parallel to rotor axis

Correct Answer is. through the center of intersection of longitudinal and lateral axis

Question Number. 200. Zone 500 indicates as per ATA 100

Option A: Door
Option B: Left wing
Option C: Right wing

Correct Answer is. Left wing

Question Number. 201. Shock stall

Option A: is a flap down stall Option B: occurs at high speeds Option C: occurs at low speeds

Correct Answer is. occurs at high speeds

Question Number. 202. Drooping of helicopter blades is compensated by

Option A: flapping **Option B:** dragging

Option C: centrifugal force

Correct Answer is. centrifugal force

Question Number. 203. During a turn

Option A: left rudder to be used **Option B:** right rudder to be used

Option C: rudder to be maintained in center position

Correct Answer is. rudder to be maintained in center position

Question Number. 204. Align light flashes during alignment

Option A: A fault has occurred and system needs to be turned off

Option B: It is attracting operators attention **Option C:** It is indicating progress of alignment

Correct Answer is. A fault has occurred and system needs to be turned off

Question Number. 205. During decent with power on in a helicopter

Option A: lift, drag and thrust are acting on the helicopter

Option B: lift, drag, thrust and weight are acting on the helicopter

Option C: lift, weight and thrust are acting on the helicopter

Correct Answer is. lift, drag, thrust and weight are acting on the helicopter

Question Number. 206. to transmit position feedback for actuators of roll and pitch control surfaces, in a fly by wire system

Option A: LVDT is used hence ensuring interchangeability **Option B:** LVDT and RVDT are used for pitch and roll

Option C: Synchros are used

Correct Answer is. LVDT is used hence ensuring interchangeability

Question Number. 207. The compensator in a fuel tank measures

Option A: specific gravity of fuel

Option B: K value of fuel **Option C:** fuel quantity

Correct Answer is. K value of fuel

Question Number. 208. What is the error signal used for in a fixed angle approach in LOC coupling?

Centrifugal force

Option A: Heading and Deviation **Option B:** Course error and Deviation

Option C: Heading, Course error and Deviation **Correct Answer is.** Course error and Deviation

Question Number. 209. in modern aircraft, power distribution of Generators are controlled by

Option A: BPCU

Option B: PCDU (power control distribution unit)

Option C: SPCU

Correct Answer is. BPCU

Question Number. 210. As you approach supersonic

Option A: total drag is increased

Option B: lift is reduced **Option C:** thrust is reduced

Correct Answer is. total drag is increased

Question Number. 211. Range resolution is obtained by

Option A: High PRF

Option B: Shorter pulse width **Option C:** Shorter beam width

Correct Answer is. Shorter pulse width

Question Number. 212. in weather radar, short range targets are missed by

Option A: Larger pulse width **Option B:** Larger beam width **Option C:** Larger frequency

Correct Answer is. Larger pulse width

Question Number. 213. When the trailing edge flap is

Option A: The CP moves forward and the pitching moment changes to nose up

Option B: The CP moves forward but the CG does not change

Option C: CP move rearward

Correct Answer is. CP move rearward

Question Number. 214. During take-off if an input to auto throttle is fails

Option A: Auto throttle disengages

Option B: Throttle hold is annunciated

Option C: Fail light illuminates

Correct Answer is. Throttle hold is annunciated

Question Number. 215. Flight director command bars indicate

Option A: Direction in which aircraft is to be maneuvered

Option B: Direction in which aircraft is flying **Option C:** Direction in which the beacon is

Correct Answer is. Direction in which aircraft is to be maneuvered

Question Number. 216. Mode S has

Option A: 12 address bits Option B: 24 address bits Option C: 36 address bits

Correct Answer is. 24 address bits

Question Number. 217. If an aircraft is on east of VOR beacon, the reference and variable phases are

Option A: In phase

Option B: Opposite phase **Option C:** Phase quadrature

Correct Answer is. Phase quadrature

Question Number. 218. RVSM, Vertical minimum separation error allowed is

Option A: 80 ft Option B: 300 ft Option C: 500 ft

Correct Answer is. 80 ft

Question Number. 219. In a radio altimeter system if you decide to increase the TX cable and RX cable each by 3 inch the total correction factor is

Option A: 3 inch Option B: 6 inch Option C: 9 inch

Correct Answer is. 9 inch

Question Number. 220. If you momentarily short the two spikes of bonding tester

Option A: tester reads zero
Option B: tester reads full scale

Option C: tester would be zero centered **Correct Answer is.** tester reads full scale

Question Number. 221. for bonding, the two ends of a rubber pipe are joined by

Option A: a thick metallic bonding strip **Option B:** a corrugated bonding jumper

Option C: a wire attached by terminal legs at both ends **Correct Answer is.** a corrugated bonding jumper

Question Number. 222. What is the minimum resistance between all isolated electrostatic conducting parts which may be subjected to appreciable charge and main earth system

Option A: 0.5 ohm
Option B: 1 ohm

Option C: 0.5 Megohm or 100,000 ohm/sq.ft. Surface area whichever is less

Correct Answer is. 0.5 Megohm or 100,000 ohm/sq.ft. Surface area whichever is less

Question Number. 223. Mach trim in some aircraft assists

Option A: longitudinal stability
Option B: lateral stability
Option C: vertical stability

Correct Answer is. longitudinal stability

Question Number. 224. In case the airplane is wired for dual installation of the Central Maintenance

Computers and only one computer is to be installed

Option A: it must be installed on LH side **Option B:** it must be installed on RH side

Option C: it may be installed either on LH or RH side **Correct Answer is.** it must be installed on LH side

Question Number. 225. Main electric trim is controlled by

Option A: a switch on control wheel

Option B: a switch installed on center pedestal panel

Option C: a wheel on the center pedestal

Correct Answer is. a switch on control wheel

Question Number. 226. If the static line is disconnected in the cabin, the Mach meter reading would be

Option A: higher mach number **Option B:** lower mach number

Option C: not effected

Correct Answer is. lower mach number

Question Number. 227. in a dual FMC installation, if one FMC is defective

Option A: one CDU blanks **Option B:** both CDU blanks

Option C: not be affected as automatic transfer takes place

Correct Answer is. not be affected as automatic transfer takes place

Question Number. 228. While carrying out a leak check of the altimeter, if the static is leaking, the VSI would

Option A: indicate climb Option B: indicate decent Option C: not be affected

Correct Answer is. indicate decent

Question Number. 229. In a combined pitot-static probe, while carrying out a leak check, which instrument is most likely to be effected by over pressure?

Option A: ASI
Option B: VSI
Option C: Altimeter
Correct Answer is. VSI

Question Number. 230. The correction for a positive error for coefficient A in a compass

Option A: is to rotate clockwise **Option B:** is to rotate anticlockwise

Option C: It may be rotated either direction

Correct Answer is. It may be rotated either direction

Question Number. 231. Radiated interference of current carrying cables can be minimized by

Option A: Having filters in power supply lines

Option B: Separating the affected and affecting cables **Option C:** Putting the affected cable in a single conduit

Correct Answer is. Putting the affected cable in a single conduit

Question Number. 232. during compass swing, using a datum compass, the error permitted in aligning the aircraft is

Option A: 1 degree Option B: 5 degree Option C: 10 degree

Correct Answer is. 5 degree

Question Number. 233. If two aircraft decide to issue the same RA for a potential conflict, which aircraft changes the decision?

Option A: The one with the higher address **Option B:** The one with the smaller address **Option C:** Neither changes the decision

Correct Answer is. The one with the higher address

Question Number. 234. What is the authority of series actuator on an helicopters autopilot?

Option A: 10%
Option B: 50%
Option C: 100%

Correct Answer is. 10%

Question Number. 235. in helicopter autopilots, while operating the actuator, the movement of the cockpit control is prevented by

-

Option A: synchro's attached to the control

Option B: a compressed spring attached to the cockpit control

Option C: a lock on the cockpit control

Correct Answer is. a compressed spring attached to the cockpit control

Question Number. 236. Helicopter blades are

Option A: highly cambered Option B: reverse cambered Option C: Symmetrical

Correct Answer is. Symmetrical

Question Number. 237. GPS antenna is

Option A: vertically polarized **Option B:** horizontally polarized **Option C:** lincomp polarization

Correct Answer is. lincomp polarization

Question Number. 238. The cyclic stick in an helicopter is

Option A: to the left Option B: to the right Option C: in the center

Correct Answer is. in the center

Question Number. 239. An autopilot computer **Option A:** is more sensitive to ILS than to VOR **Option B:** is more sensitive to VOR than to ILS **Option C:** is the same sensitivity for VOR and ILS

Correct Answer is. is more sensitive to ILS than to VOR

Question Number. 240. What type of flap is this?

Option A: Split flap **Option B:** Fowler flap **Option C:** Plain flap

Correct Answer is. Split flap

Question Number. 241. Purpose of the bellcrank is to

Option A: transmit motion

Option B: reverse direction and transmit motion

Option C: adjust friction

Correct Answer is. reverse direction and transmit motion

Question Number. 242. in an FDS, the attitude gyro is coupled with the FD computer by means of

transformer coupling. The purpose of this arrangement is

Option A: to protect the attitude gyro in case of failure of FD computer

Option B: to protect FD computer in case of attitude gyro failure

Option C: to minimise power losses

Correct Answer is. to protect the attitude gyro in case of failure of FD computer

Question Number. 243. DH is based on

Option A: aircraft characteristics **Option B:** experience of the crew **Option C:** RVR transmitted by ATC

Correct Answer is. RVR transmitted by ATC

Question Number. 244. In a horizontal gyro the random precession of the inner ring is corrected by

Option A: mercury switches on the inner ring **Option B:** mercury switches on the outer ring

Option C: flux valve slaving

Correct Answer is. flux valve slaving

Question Number. 245. Index error is

Option A: coefficient B **Option B:** Coefficient P

Option C: misalignment of compass lubber line

Correct Answer is. misalignment of compass lubber line

Question Number. 246. Helicopter derives its lift from

Option A: the blade of the helicopter creates a low pressure above it

Option B: rotor acts as a airscrew **Option C:** air is pushed downward

Correct Answer is. the blade of the helicopter creates a low pressure above it

Question Number. 247. A two bladed helicopter rotor on a central gimbal is called

Option A: rigid rotor
Option B: semi rigid rotor
Option C: fully articulated rotor
Correct Answer is. semi rigid rotor

Question Number. 248. Use of a diplexer in a receiver is

Option A: to enable signals to be distributed to different receivers

Option B: to amplify the RF signal

Option C: to impedance match the aerial and receivers

Correct Answer is. to impedance match the aerial and receivers

Question Number. 249. If the 'Q' feel in a powered control system fails

Option A: the failed system stops and it remains in this position

Option B: the pilot feels air loads higher than normal **Option C:** the pilot feels air loads lower than normal

Correct Answer is. the pilot feels air loads lower than normal

Question Number. 250. Doppler flag comes on when it receives a) excessive ground Option A: clutter

Option B: no signal **Option C:** excess signals

Correct Answer is. no signal

Question Number. 251. When the bank angle limit is applied to the autopilot, it means

Option A: the max aileron angle that can be commanded

Option B: the max roll angle that can be demanded by the autopilot

Option C: maximum rudder deflection

Correct Answer is. the max roll angle that can be demanded by the autopilot

Question Number. 252. Servo tabs

Option A: enable the pilot to bring the control surface back to neutral **Option B:** move in such a way as to help move the control surface

Option C: provide artificial feel

Correct Answer is. move in such a way as to help move the control surface

Question Number. 253. Spring Tabs

Option A: enable the pilot to bring the control surface back to neutral **Option B:** move in such a way as to help move the control surface

Option C: provide artificial feel

Correct Answer is. move in such a way as to help move the control surface

Question Number. 254. Back beam scanning in an MLS is at a rate of

Option A: 20 degrees per second Option B: 30 degrees per second Option C: 15 degrees per second

Correct Answer is. 20 degrees per second

Question Number. 255. Omega ground stations

Option A: transmit pulses of CW

Option B: carrier modulated by three audio tones

Option C: series of CW

Correct Answer is.: transmit pulses of CW

Question Number. 256. During testing of ATC altitude function the pressure altimeter is set

Option A: 1013.25 mb
Option B: sea level pressure
Option C: prevailing pressure
Correct Answer is. 1013.25 mb

Question Number. 257. When secondary stops are utilized in control surfaces, they come in contact

Option A: before the primary stops **Option B:** after the primary stops

Option C: at the same time as the primary stops **Correct Answer is.** after the primary stops

Question Number. 258. EICAS indicates

Option A: engine performance and aircraft system malfunctions

Option B: engine performance only

Option C: engine performance and aircraft status

Correct Answer is. engine performance and aircraft system malfunctions

Question Number. 259. Helicopter cyclic stick is turned to the right

Option A: rotating aero foil tilts to the right

Option B: pitch operating arms lengthen in one direction and shorten in another

Option C: rotating aero foil tilts to the right

Correct Answer is. Rotating aero foil tilts to the right

Question Number. 260. Magnetic heading errors will be

Option A: positive if easterly **Option B:** negative if easterly **Option C:** negative if northerly

Correct Answer is. positive if easterly

Question Number. 261. What will happen with a flux valve in a turn? **Option A:** It moves once the aircraft is established on a new heading

Option B: It move as the aircraft moves **Option C:** It stays fixed on magnetic north

Correct Answer is. It move as the aircraft moves

Question Number. 262. When will a mode C interrogation be ignored?

Option A: When the P2 pulse is higher amplitude to P1

Option B: When the P2 pulse is antiphase to P1

Option C: If P2 is before P1

Correct Answer is. When the P2 pulse is higher amplitude to P1

Question Number. 263. An aircraft with auto land is fitted with a CMC

Option A: records all faults in volatile memory **Option B:** records all faults in non-volatile memory **Option C:** all memory is erased when aircraft lands

Correct Answer is. records all faults in non-volatile memory

Question Number. 264. A helicopter autopilot uses

Option A: radio altitude for height hold and barometric altitude for altitude hold **Option B:** barometric altitude for height hold and radio altitude for altitude hold

Option C: barometric altitude for both height and altitude hold

Correct Answer is. radio altitude for height hold and barometric altitude for altitude hold

Question Number. 265. On an ILS approach what will cause the aircraft to fly onto the beam?

Option A: Radio deviation **Option B:** Glideslope deviation **Option C:** Course deviation

Correct Answer is. Radio deviation

Question Number. 266. Which of the following modes does a autopilot go through in correct sequence?

Option A: Flare, attitude, rollout **Option B:** Attitude, flare, rollout **Option C:** Rollout, attitude, flare

Correct Answer is. Attitude, flare, rollout

Question Number. 267. When can other autopilot modes be select once Go Around has been selected?

Option A: When aircraft has reached 5000ft **Option B:** When reached a desired altitude

Option C: Disengage and reengage the AFCS system **Correct Answer is.** When reached a desired altitude

Question Number. 268. Once the G/S has been captured what other pitch modes are available?

Option A: No other pitch modes are available

Option B: Only when the aircraft is above the glideslope beam

Option C: All are continuously available

Correct Answer is. No other pitch modes are available

Question Number. 269. If a helicopter rotor disc is rotating anticlockwise, viewed from above where would a pitch input be fed into the disc to move the helicopter backwards, 90 degrees to what?

Option A: In front of the lateral axis **Option B:** Right of the longitudinal axis **Option C:** Left of the longitudinal axis

Correct Answer is. Right of the longitudinal axis

Question Number. 270. A spring balance control system you

Option A: can move the control surface on the ground

Option B: can move the control surface only by moving the tab **Option C:** cannot move the control surface on the ground

Correct Answer is. can move the control surface on the ground

Question Number. 271. Why is a wire HF antenna covered in polythene?

Option A: To prevent corrosion

Option B: To prevent precipitation static **Option C:** To provide lightning protection

Correct Answer is. To prevent precipitation static

Question Number. 272. What is a versine signal attenuated with?

Option A: Increase in airspeed **Option B:** Increase in altitude **Option C:** Decrease in altitude

Correct Answer is. Increase in altitude

Question Number. 273. If you carry out a VSWR check of a SSB HF system what should you do with the control switch? Select it to

Option A: OFF **Option B:** AM

Option C: either USB or LSB Correct Answer is. AM

Question Number. 274. How long is the time between the start of the P1 pulse and the P3 pulse ignoring the P2 pulse length?

Option A: 21 micro seconds Option B: 8 micro seconds Option C: 17 micro seconds

Correct Answer is. 8 micro seconds

Question Number. 275. If a VOR RMI indicates 000 degrees and the course selected is 000 degrees what will the TO/FROM indicator indicate?

Option A: TO
Option B: FROM
Option C: Neither

Correct Answer is. FROM

Question Number. 276. What does the Radar contour button do?

Option A: Alter the beam shape

Option B: Alter the transmitter power **Option C:** Alter the video amplifier

Correct Answer is. Alter the beam shape

Question Number. 277. A radar response takes 329 micro seconds how far away is the target?

Option A: 12 miles
Option B: 25 miles
Option C: 40 miles

Correct Answer is. 25 miles

Question Number. 278. on a helicopter, what is vortex ring state?

Option A: Tip vortex interference at high forward speed

Option B: Ground vortex interference when hovering close to the ground

Option C: Tip vortex build-up during hover

Correct Answer is. Tip vortex build-up during hover

Question Number. 279. What controls are used in response to PVD display?

Option A: Nose wheel steering or rudder pedals

Option B: Control wheel **Option C:** PVD control unit

Correct Answer is. Nose wheel steering or rudder pedals

Question Number. 280. DME transponder transmits on receipt

Option A: of any interrogation

Option B: of pilot input command request

Option C: of a pair of pulses separated by 12 microseconds

Correct Answer is. of a pair of pulses separated by 12 microseconds

Question Number. 281. The best design of a MRB is where the C of P

Option A: does not move

Option B: moves freely along the length of the blade

Option C: is insignificant

Correct Answer is. does not move

Question Number. 282. The RAD alt electrical length for an helicopter is

Option A: 16ft Option B: 12ft Option C: 28ft

Correct Answer is. 28ft

Question Number. 283. Mode S transponders transmits a binary code of

Option A: 12bits Option B: 64bits Option C: 24bits

Correct Answer is. 24bits

Question Number. 284. The rotor cone is formed by

Option A: blade alignment

Option B: centrifugal force and lift **Option C:** centrifugal force only

Correct Answer is. centrifugal force and lift

Question Number. 285. Tracking is carried out to...... the MRB tip path

Option A: balance **Option B:** restore **Option C:** align

Correct Answer is. Align

Question Number. 286. Artificial feel is gained by using a

Option A: hydraulic damper **Option B:** spring bias unit **Option C:** 'feel' generator

Correct Answer is. spring bias unit

Question Number. 287. The ground run monitor presents information

Option A: of distance to go and ground speed

Option B: duration of ground run

Option C: angle of cross track on ground

Correct Answer is. of distance to go and ground speed

Question Number. 288. A mode C transponder

Option A: can be used for TCAS **Option B:** cannot be used for TCAS

Option C: can be used for TCAS on ILS approach only

Correct Answer is. cannot be used for TCAS

Question Number. 289. The audio select panel allows the crew to

Option A: transmit on one channel, listen on one

Option B: transmit on one channel, listen on multiple others **Option C:** receive on one channel, transmit on multiple others **Correct Answer is.** transmit on one channel, listen on one

Question Number. 290. The crew select DH on

Option A: the altimeter

Option B: the DH annunciator panel

Option C: the rad alt display

Correct Answer is. the rad alt display

Question Number. 291. When substituting the radio altimeter antenna cables, you should consider

Option A: power requirements

Option B: the speed of propagation of rad alt signal

Option C: the diameter of cables

Correct Answer is. the speed of propagation of rad alt signal

Question Number. 292. GPS has **Option A:** 24 satellites, 6 orbits of 4 **Option B:** 24 satellites, 4 orbits of 6 **Option C:** 27 satellites, 3 orbits of 9

Correct Answer is. 24 satellites, 6 orbits of 4

Question Number. 293. Audio select panel voice switch

Option A: allows voice ident of DME **Option B:** cuts "beeps" from DME signal **Option C:** disables DME voice ident

Correct Answer is. cuts "beeps" from DME signal

Question Number. 294. GPS frequency is

Option A: 1575 GHz Option B: 1575 MHz. Option C: 1525 MHz.

Correct Answer is. 1575 MHz.

Question Number. 295. Radio switches are normally

Option A: sprung on R/T, latched on I/C **Option B:** latched on R/T, sprung on I/C **Option C:** latched on R/T, latched on I/C

Correct Answer is. sprung on R/T, latched on I/C

Question Number. 296. on GPWS, with aircraft below 1700ft

Option A: systems is disabled
Option B: no traffic will be shown
Option C: all traffic produces aural alert
Correct Answer is. systems is disabled

Question Number. 297. Mode S pulses. Which are used?

Option A: F1,F2,F4,F5 **Option B:** s1,p1,p3,p4 **Option C:** s1,s2,p1,p2

Correct Answer is. s1,p1,p3,p4

Question Number. 298. in a superhet receiver, the advantage of an RF amplifier is

Option A: it amplifies output stages **Option B:** it improves signal to noise ratio

Option C: it couples noise factors

Correct Answer is. it improves signal to noise ratio

Question Number. 299. Fluorescent tubes for the cabin lighting are powered from

Option A: 115 volts from ac bus **Option B:** 200 volts from ac bus

Option C: high voltage produced by transformer ballast units

Correct Answer is. high voltage produced by transformer ballast units

Question Number. 300. The advancing blade of a helicopter is the one moving

Option A: one moving in direction of relative air flow

Option B: highest blade

Option C: one moving forward into relative airflow

Correct Answer is. one moving forward into relative airflow

Question Number. 301. Back beam is captured

Option A: by manually selecting the back beam mode

Option B: this automatically trips the L NAV mode **Option C:** by manually selecting the L NAV mode

Correct Answer is. by manually selecting the back beam

Question Number. 302. With a bonding meter

Option A: the long lead is attached to the aircraft air frame and short lead to item

Option B: the short lead to the aircraft airframe and long lead to the item

Option C: it does not matter which lead goes where

Correct Answer is. the long lead is attached to the aircraft air frame and short lead to item

Question Number. 303. DME reply pulses are 63MHZ.

Option A: higher **Option B:** lower

Option C: higher or lower

Correct Answer is. the long lead is attached to the aircraft air frame and short lead to item

Question Number. 304. Flight director incompatible modes are

Option A: VOR and glideslope
Option B: heading and altitude hold
Option C: VOR and altitude hold
Correct Answer is. VOR and glideslope

Question Number. 305. What is VHF comm range at 9000 feet?

Option A: 110 nm Option B: 120 nm Option C: 130 nm

Correct Answer is. 120 nm

Question Number. 306. GPS sends L1 and L2. What is on L1?

Option A: c/a code only **Option B:** c/a code and P code

Option C: P code only

Correct Answer is. c/a code and P code

Question Number. 307. Medium vibration of 4 to 6 times per revolution is experienced on a helicopter. The primary control method is

Option A: inspect loose fixtures and fittings

Option B: design of engine and gearbox supports

Option C: inspect main rotor head and main drive shaft **Correct Answer is.** design of engine and gearbox supports

Question Number. 308. Mode 4 of GPWS derives warnings from

Option A: rad alt to barometric

Option B: rad alt decrease

Option C: approach along localizer with reference to runway threshold

Correct Answer is. rad alt decrease

Question Number. 309. on power up, the IRS obtains position

Option A: latitude from previous position **Option B:** longitude from previous position

Option C: latitude and longitude from previous position **Correct Answer is.** longitude from previous position

Question Number. 310. Krueger flaps make up part of the

Option A: wing upper surface leading edge **Option B:** wing lower surface trailing edge **Option C:** wing lower surface leading edge

Correct Answer is. wing lower surface leading edge

Question Number. 311. Electronic stab trim switches are found on the

Option A: control column
Option B: flight control panel
Option C: behind thrust levers
Correct Answer is. control column

Question Number. 312. Deviation from the HSI lubber line is known as

Option A: apparent A
Option B: real A
Option C: true A

Correct Answer is. apparent A

Question Number. 313. Emergency electronic equipment for the cabin is referred to in

Option A: BCARs

Option B: JAR OPS subpart M **Option C:** maintenance manual

Correct Answer is. JAR OPS subpart M

Question Number. 314. Carbon microphones require

Option A: DC supply **Option B:** AC supply **Option C:** no supply

Correct Answer is. JAR OPS subpart M

Question Number. 315. Microwave landing systems are modulated with

Option A: FM

Option B: phase drift keying **Option C:** Manchester code

Correct Answer is. phase drift keying

Question Number. 316. A CVR is found to be unserviceable

Option A: flight can continue with serviceable FDR provided they are not combined

Option B: flights must not continue after four days **Option C:** flights must not continue after 72 hours

Correct Answer is. flights must not continue after 72 hours

Question Number. 317. The maximum azimuth coverage by a MLS facility is

Option A: +/- 35 degrees Option B: +/-40 degrees Option C: +/-60 degrees

Correct Answer is. +/-60 degrees

Question Number. 318. The bearing of a NDB measured by ADF is 060 degrees relative to aircraft heading of

030 degrees. The RMI pointer indicates

Option A: 30 degrees Option B: 90 degrees Option C: 60 degrees

Correct Answer is. 90 degrees

Question Number. 319. Fiber glass parts are protected from lightning strikes and dangerous voltages by

Option A: nonconductive paint **Option B:** conductive paint

Option C: earth primary conductors

Correct Answer is. Earth primary conductors

Question Number. 320. in MLS, the 12 bit preamble consists of **Option A:** carrier and 5 bits time reference and 7 bits information **Option B:** 5 bits time function and carrier and 7 bits function **Option C:** 7 bits function and 5 bits time reference and carrier

Correct Answer is. 5 bits time function and carrier and 7 bits function

Question Number. 321. The pseudo-random code used by all civilian GPS users is

Option A: the y code **Option B:** the p code **Option C:** the c/a code

Correct Answer is. the c/a code

Question Number. 322. The respective band widths for a radar IF amplifier and video amplifier should be for

good pulse shape are

Option A: wide and narrow Option B: narrow and wide Option C: wide and wide

Correct Answer is. narrow and wide

Question Number. 323. On localizers approach the radio deviation signal is lost

Option A: the aircraft flies in a circle

Option B: aircraft flies off center line on pre-set heading **Option C:** aircraft flies heading with increasing drift angle

Correct Answer is. aircraft flies off center line on pre-set heading

Question Number. 324. 'Q' feel for the stabilizer requires

Option A: pitot only **Option B:** static only **Option C:** pitot and static

Correct Answer is. pitot and static

Question Number. 325. When the aircraft nose yaws to the left, the yaw damper will apply corrective rudder

to

Option A: the right **Option B:** the left

Option C: the left with some aileron assistance

Correct Answer is. the right

Question Number. 326. A yaw damper will apply rudder proportional to

Option A: amount of aircraft disturbance

Option B: attitude of aircraft **Option C:** rate of yaw

Correct Answer is. rate of yaw

Question Number. 327. In a turn, wing spoilers may be deployed

Option A: to act as an airbrake, interacting with the ailerons

Option B: in unison with both the up going and down going ailerons

Option C: to assist the up going aileron

Correct Answer is. to assist the up going aileron

Question Number. 328. Glideslope deviation signals are

Option A: DC polarity sensitive **Option B:** AC phase sensitive **Option C:** DC positive going only

Correct Answer is. DC polarity sensitive

Question Number. 329.A triplex system loses one channel

Option A: pilot can continue with auto land **Option B:** pilot can use auto approach

Option C: pilot must make a full manual approach and land **Correct Answer is.** pilot can continue with auto land

Question Number. 330. A series actuator in a helicopter autopilot system has

Option A: full authority **Option B:** 50% authority **Option C:** 10% authority

Correct Answer is. 10% authority

Question Number. 331. Stall warning will be given

Option A: before stall Option B: after stall Option C: at stall

Correct Answer is. before stall

Question Number. 332. With on-board maintenance (OBM) systems, the purpose of central maintenance

function (CMF) is to

Option A: log relevant maintenance data

Option B: transmits to the CMC

Option C: provides details of defect action

Correct Answer is. log relevant maintenance data

Question Number. 333. How are spoilers normally operated?

Option A: Hydraulic actuator

Option B: Air pistons

Option C: Electrical motors

Correct Answer is. Hydraulic actuator

Question Number. 334. The purpose of a force trim release system in an helicopter is to permit the

Option A: pilot to move the cyclic stick to obtain desired new attitude without having to maintain the opposing forces of the artificial feel system forces

Option B: pilot to move the collective to obtain a power change

Option C: appropriate cyclic actuator to be over powered

Correct Answer is. pilot to move the cyclic stick to obtain desired new attitude without having to maintain the opposing forces of the artificial feel system forces

Question Number. 335. A differential relay in a twin generator system will cause

Option A: only one generator can supply a bus bar at a time

Option B: one generator always comes on line before the other

Option C: the generator voltages are nearly equal before they are paralleled

Correct Answer is. the generator voltages are nearly equal before they are paralleled

Question Number. 336. Distilled or demineralised water would be added to an alkaline battery

Option A: in the aircraft

Option B: when the battery is fully charged **Option C:** in the charging room only

Correct Answer is. in the charging room only

Question Number. 337. When removing the load from a current transformer

Option A: short the terminals

Option B: place a resistor across each terminal

Option C: leave the terminals open **Correct Answer is.** short the terminals

Question Number. 338. Wing steady light must be visible through

Option A: 70 degrees Option B: 110 degrees Option C: 180 degrees

Correct Answer is. 110 degrees

Question Number. 339. On AC ground power the interlock system is operated by pins

Option A: a and b Option B: c and d Option C: e and f

Correct Answer is. E and f

Question Number. 340. When paralleling two AC generators

Option A: it is important that they are in phase, and should be brought on

in sequence ABC

Option B: it is important that they are in phase, and can be brought on in either ABC or CBA

Option C: they do not need to be in phase

Correct Answer is. it is important that they are in phase, and can be brought on in either ABC or CBA

Question Number. 341. The neutral shift sensor ensures that

Option A: after an auto trim, the elevator is moved to align with the stabilizer **Option B:** after a mach trim, the stabilizer is moved to align with the elevator **Option C:** after an auto trim, the stabilizer is moved to align with the elevator

Correct Answer is. after an auto trim, the elevator is moved to align with the stabilizer

Question Number. 342. Aileron to rudder cross feed is applied in autopilot systems to

Option A: assist the aircraft back to datum after disturbance in yaw

Option B: prevents slip and skid in yaw

Option C: prevents aircraft yawing in the opposite direction to the turn

Correct Answer is. prevents aircraft yawing in the opposite direction to the turn

Question Number. 343. Standoff errors on localizer approach are washed out by

Option A: differentiating deviation signals
Option B: integrating deviation signals
Option C: integrating course error signals

Correct Answer is. integrating course error signals

Question Number. 344. An open circuit in the temperature bulb as used in the DC radiometer would cause

Option A: the pointer to read zero **Option B:** the pointer to read mid scale **Option C:** the pointer to read full scale

Correct Answer is. the pointer to read full scale

Question Number. 345. The instantaneous VSI is designed to **Option A:** overcome the inherent lag by utilising an accelerometer **Option B:** use an accelerometer to give a rate of climb/descent **Option C:** improve the VSI output during acceleration greater than 1g

Correct Answer is. overcome the inherent lag by utilising an accelerometer

Question Number. 346. with a constant torque applied to a gyroscope, the rate of precession will

Option A: increase with a higher rotor speed Option B: decrease with a higher rotor speed Option C: decrease with a lower rotor speed

Correct Answer is. decrease with a higher rotor speed

Question Number. 347. A gyroscope with a vertical spin axis has the roll torque motor located about the gyroscope's

Option A: lateral axis
Option B: longitudinal axis
Option C: vertical axis

Correct Answer is. longitudinal axis

Question Number. 348. The glideslope equipment operates in the

Option A: HF band **Option B:** UHF band **Option C:** VHF band

Correct Answer is. UHF band

Question Number. 349. The loss of the vertical gyro signal to a flight director system would cause

Option A: aircraft to under bank **Option B:** aircraft to overbank

Option C: aircraft to remain in level flight **Correct Answer is.** aircraft to overbank

Question Number. 350. In a flight director system the radio signal outputs from the navigation receiver are

Option A: DC
Option B: AC
Option C: pulsed DC

Option C: pulsed DC Correct Answer is. DC

Question Number. 351. Fuel quantity test set consists of

Option A: resistance decade **Option B:** Capacitance Bridge **Option C:** inductance decade

Correct Answer is. capacitance bridge

Question Number. 352. EICAS provides the following

Option A: engine parameters

Option B: engine parameters and system warnings **Option C:** engine warnings and engine parameters

Correct Answer is. engine parameters and system warnings

Question Number. 353. The stabiliser is set to high setting when

Option A: the flaps are moving down **Option B:** the flap are moving up

Option C: the flap are moving up or down **Correct Answer is.** the flaps are moving down

Question Number. 354. An auto land system displays Land 2 another failure will make the system

Option A: operational Option B: passive Option C: simplex

Correct Answer is. Passive

Question Number. 355. DSR TK (desired track) means

Option A: the bearing to capture the track

Option B: a great circle path on surface of earth connecting two way points

Option C: distance left or right from desired track

Correct Answer is. a great circle path on surface of earth connecting two way points

Question Number. 356. In helicopter Alt Hold uses a signal from

Option A: the barometric alt capsule

Option B: a rad alt output

Option C: a rad alt or capsule output depend on height

Correct Answer is. the barometric alt capsule

Question Number. 357. In a doppler VOR the 30Hz reference signal is

Option A: FM Modulated **Option B:** AM Modulated

Option C: modulated with a 9960Hz **Correct Answer is.** AM Modulated

Question Number. 358. On aircraft an auto land during auto flare the auto throttle will

Option A: retard the throttle **Option B:** reverse thrust

Option C: control throttle for a IAS **Correct Answer is.** retard the throttle

Question Number. 359. If an FM signal modulated by an audio signal the frequency of the audio would relate

to the

Option A: amplitude **Option B:** frequency

Option C: rate of frequency change

Correct Answer is. rate of frequency change

Question Number. 360. The normal axis on a helicopter is

Option A: straight down the rotor head

Option B: at 90° to the C of G **Option C:** at 90° to the rotor head

Correct Answer is. straight down the rotor head

Question Number. 361. On a HF radio set the clarifier control is used

Option A: to adjust the reinserted carrier due to instability in the RX

Option B: make the audio signal clearer **Option C:** an Americanisum for volume

Correct Answer is. to adjust the reinserted carrier due to instability in the RX

Question Number. 362. A GPS aerial is polarised

Option A: vertically

Option B: horizontally

Option C: right hand circular

Correct Answer is. right hand circular

Question Number. 363. Mach trim threshold are set by the

Option A: pilot

Option B: engineer using aircraft maintenance manual

Option C: manufacture

Correct Answer is. Manufacture

Question Number. 364. An O ring in a wave guide is used to

Option A: correct the VSWR

Option B: stop arcing between the wave guide **Option C:** stop moisture entering the wave guide

Correct Answer is. stop moisture entering the wave guide

Question Number. 365. An RMI requires the following inputs:

Option A: Heading and radio deviation

Option B: Course and radio deviation

Option C: Radio deviation only

Correct Answer is. Heading and radio deviation

Question Number. 366. The versine signal is used in the

Option A: pitch channel only **Option B:** roll channel only

Option C: pitch and roll channel

Correct Answer is. pitch channel only

Question Number. 367. After a change in collective pitch the Rotor rpm will rise and fall.

This is called

Option A: transient droop Option B: static droop Option C: under swing

Correct Answer is. transient droop

Question Number. 368. Loran C Uses

Option A: 16 KHz Option B: 20 MHz. Option C: 100 KHz

Correct Answer is. 100KHz

Question Number. 369. The amount of travel of a series actuator is

Option A: 50% of control movement **Option B:** 10% of control movement **Option C:** full control movement

Correct Answer is. 10% of control movement

Question Number. 370. GPS Telemetry consists of

Option A: week number and time label **Option B:** satellite position information

Option C: 8 bits of preamble and position information **Correct Answer is.** week number and time label

Question Number. 371. After a change in pitch of a rotor blade the blade will be at maximum flap at

Option A: 90° **Option B:** 180° **Option C:** 0°

Correct Answer is. 90°

Question Number. 372. Emergency Electronic equipment is approved by

Option A: Aircraft Maintenance Manual

Option B: JAR (OPS) M **Option C:** BCAR A4-8

Correct Answer is. JAR (OPS) M

Question Number. 373. The rotor disc is **Option A:** the distance between tip to tip

Option B: the rotor head hub **Option C:** the ground cushion

Correct Answer is. the distance between tip to tip

Question Number. 374. A DME is in auto stand by when

Option A: the ATC transponder is transmitting

Option B: the DME receives 200 - 300 pulses a second

Option C: the TCAS is transmitting

Correct Answer is. the DME receives 200 - 300 pulses a second

Question Number. 375. The aircraft is due north of a VOR station on a heading of 90° What is a RMI display?

Option A: 90° Option B: 0° Option C: 180°

Correct Answer is. 180°

Question Number. 376. The flight director is on a localizer when the radio deviation signal is lost the aircraft would

Option A: continue on flying on the localizer

Option B: fly parallel to the localizer

Option C: drift of from the localizer on the same heading

Correct Answer is. fly parallel to the localizer

Question Number. 377. Cat-2 autoland DH limits are

Option A: below 200 feet but not less than 100 ft

Option B: below 500 feet but not less than 400 ft.

Option C: below 300 feet and not less than 200 ft.

Correct Answer is. below 200 feet but not less than 100 ft

Question Number. 378. Cat-1 autoland DH limits are

Option A: not less than 100 ft. **Option B:** not less than 200 ft.

Option C: below 200 ft but not less than 100 ft. **Correct Answer is.** not less than 200 ft.

Question Number. 379. When GA is initiated?

Option A: Auto throttle disengages at 2000 ft/min rate and wings will level

Option B: Auto throttle remains engaged allowing pilot to control the throttles

Option C: Auto throttle remains engaged giving correct G/A thrust

Correct Answer is. Auto throttle remains engaged giving correct G/A thrust

Question Number. 380. The controlling signal in pitch channel in the Flare mode are

Option A: integrated pitch and radio altitude. **Option B:** G/S deviation and radio altitude. **Option C:** integrated pitch and G/S deviation

Correct Answer is. integrated pitch and radio altitude.

Question Number. 381. Rollout guidance after touch down is by

Option A: automatic rudder control and nose wheel steering

Option B: visual indication and nose wheel steering **Option C:** visual indication and rudder control

Correct Answer is. automatic rudder control and nose wheel steering

Question Number. 382. During auto land failure of one channel is detected

Option A: all channels will disconnect in triplex system.
Option B: all channels will disconnect in duplex system.
Option C: all channels will disconnect in dual-dual system.

Correct Answer is. all channels will disconnect in duplex system.

Question Number. 383. In triplex auto land system failure of one channel will

Option A: disconnect all channels

Option B: disconnect the failure channel and continue auto land approach

Option C: disconnect the failure channel and continue with a manual approach

Correct Answer is. disconnect the failure channel and continue auto land approach

Question Number. 384. During the flair mode the A/T throttle will

Option A: retard throttle to idle. **Option B:** disconnect auto throttle **Option C:** select reverse thrust.

Correct Answer is. retard throttle to idle.

Question Number. 385. Roll out mode occurs

Option A: after flare
Option B: before flare
Option C: at alert height
Correct Answer is. after flare

Question Number. 386. High and low signal to voter are

Option A: average Option B: removed Option C: added

Correct Answer is. Average

Question Number. 387. Basic monitoring is function of

Option A: voting

Option B: signal comparison **Option C:** signal summing

Correct Answer is. signal comparison

Question Number. 388. In series rudder system **Option A:** the pilot cannot input to the system

Option B: the pilot can input to the system

Option C: yaw damping is only possible signal input **Correct Answer is.** the pilot can input to the system

Question Number. 389. If a pointer is not centralized on a trim indicators, it means that

Option A: the indicator is not serviceable **Option B:** the control system is out of trim

Option C: the system is trimmed

Correct Answer is. the control system is out of trim

Question Number. 390. in parallel rudder system,

Option A: the pilot can input on rudder pedals

Option B: The rudder pedals move in response to rudder movement

Option C: The rudder pedals are disconnected

Correct Answer is. The rudder pedals move in response to rudder movement

Question Number. 391. The aileron/rudder signal is demodulated in the rudder channel amplifier. This means it is

Option A: AC Option B: DC

Option C: DC output whose polarity is related to the phase of AC input

Correct Answer is. DC output whose polarity is related to the phase of AC input

Question Number. 392. An increase in mach number will cause the

Option A: Cof P to move rearwards giving less downwash on the tail plane

Option B: Cof P to move rearwards giving more downwash on the tail plane

Option C: Cof P to move forwards giving less downwash on the tail plane

Correct Answer is. Cof P to move rearwards giving less downwash on the tail plane

Question Number. 393. If one FMS fails in a duel system

Option A: system operation will not be affected

Option B: FMS CDU on fail side goes blank

Option C: FMS display transfers automatically from serviceable computer

Correct Answer is. FMS display transfers automatically from serviceable computer

Question Number. 394. To carry out FMS database update on FMS

Option A: use database loader
Option B: insert new EPROM
Option C: insert new data on CDU

Correct Answer is. use database loader

Question Number. 395. To know the valid database on FMS

Option A: perform bite check

Option B: call up relevant page on CDU **Option C:** call up relevant current status

Correct Answer is. call up relevant page on CDU

Question Number. 396. Magnetic heading errors will be

Option A: positive if easterly Option B: negative if easterly Option C: negative if northerly

Correct Answer is. positive if easterly

Question Number. 397. What will happen with a flux valve in a turn?

Option A: It will move once the aircraft is established on a new heading

Option B: Move as the aircraft moves **Option C:** Stay fixed on magnetic north

Correct Answer is. Move as the aircraft moves

Question Number. 398. When will a mode C interrogation be ignored?

Option A: When the P2 pulse is higher amplitude to P1

Option B: When the P2 pulse is antiphase to P1

Option C: If P2 is before P1

Correct Answer is. When the P2 pulse is higher amplitude to P1

Question Number. 399. A helicopter autopilot uses

Option A: radio altitude for height hold and barometric altitude for altitude hold **Option B:** barometric altitude for height hold and radio altitude for altitude hold

Option C: barometric altitude for both height and altitude hold

Correct Answer is. radio altitude for height hold and barometric altitude for altitude hold

Question Number. 400. On an ILS approach what will cause the aircraft to fly onto the beam?

Option A: Height Deviation **Option B:** Radio deviation **Option C:** Course deviation

Correct Answer is. Radio deviation

Question Number. 401. in air speed hold mode, a down displacement of the flight director pitch command

bar signifies

Option A: speed increase **Option B:** speed decrease **Option C:** height decrease

Correct Answer is. speed decrease

Question Number. 402. What of the following modes does a autopilot go through in correct sequence?

Option A: Flare, attitude, rollout **Option B:** Attitude, flare, rollout **Option C:** Rollout, attitude, flare

Correct Answer is. Attitude, flare, rollout

Question Number. 403. When can other auto pilot modes can be select once Go-Around has been selected?

Option A: When aircraft has reached 5000ft **Option B:** When reached a desired altitude

Option C: Disengage and reengage the AFCS system **Correct Answer is.** When reached a desired altitude

Question Number. 404. If an elevator is fitted with a fixed tab in the down position, the control surface will

Option A: move up **Option B:** move down

Option C: remain at the same place **Correct Answer is.** Move up

Question Number. 405. Once the G/S has been captured what other pitch modes are available?

Option A: No other pitch modes are available

Option B: Only when the aircraft is above the glideslope beam

Option C: All are continuously available

Correct Answer is. No other pitch modes are available

Question Number. 406. If a helicopter rotor disc is rotating anticlockwise, view from above where would a pitch input be fed into the disc to move the helicopter backwards, 90 degrees to what?

Option A: In front of the lateral axis
Option B: Right of the longitudinal axis
Option C: Left of the longitudinal axis

Correct Answer is. Right of the longitudinal axis

Question Number. 407. Forces on a helicopter in a power-on descent are

Option A: lift, drag thrust, weight

Option B: lift, drag, thrust **Option C:** weight, drag, lift

Correct Answer is. lift, drag thrust, weight

Question Number. 408. What is the primary purpose of a helicopter tail arm? **Option A:** Provide a structure for mounting the stabilizer and anti-torque rotor

Option B: Acts to help balance the centre of gravity of the helicopter

Option C: Provide directional control

Correct Answer is. Provide a structure for mounting the stabilizer and anti-torque rotor

Question Number. 409. How long is the time between the start of the P1 pulse and the P3 pulse ignoring the P2 pulse length?

Option A: 21 micro seconds
Option B: 8 micro seconds
Option C: 17 micro seconds

Correct Answer is. 8 micro seconds

Question Number. 410. What does the Radar contour button do?

Option A: Alter the beam shape
Option B: Alter the transmitter power
Option C: Alter the video amplifier

Correct Answer is. Alter the video amplifier

Question Number. 411. A radar response takes 329 micro seconds. How far away is the target?

Option A: 12 miles Option B: 25 miles Option C: 40 miles

Correct Answer is. 25 miles

Question Number. 412. With a spring balance control system you can

Option A: move the control surface on the ground

Option B: move the control surface only by moving the tab Option C: not move the control surface on the ground Correct Answer is. move the control surface on the ground

Question Number. 413. The VHF aerial resistance and transmission line resistance is

Option A: 50 ohms **Option B:** 20 ohms

Option C: 20 ohms and 50 ohms respectively

Correct Answer is. move the control surface on the ground

Question Number. 414. Alert Height is when

Option A: a decision of whether to land is made

Option B: an alert of the altitude of the aircraft is made **Option C:** an alert of the position of the aircraft is made **Correct Answer is.** a decision of whether to land is made

Question Number. 415. If a fly-by-wire system fails, the rudder

Option A: remains at the neutral position Option B: controls the aircraft in trim Option C: remains in the previous position

Correct Answer is. remains in the previous position

Question Number. 416. for a Vertical Gyro which is moved in pitch, which gimble would be moved to correct the pitch movement?

Option A: Lateral
Option B: Longitudinal
Option C: Normal

Correct Answer is. Longitudinal

Question Number. 417. Versine is used in which channel?

Option A: Pitch Option B: Roll Option C: Yaw

Correct Answer is. Pitch

Question Number. 418. A Master Warning is issued when

Option A: over speed & low cabin altitude occurs **Option B:** cargo smoke & low oil quantity occurs **Option C:** engine fire & generator trip occurs

Correct Answer is. over speed & low cabin altitude occurs

Question Number. 419. Which is the most important part of preventative maintenance on HIRF installations?

Option A: Visual inspections
Option B: Insulation testing
Option C: CMC fault indications
Correct Answer is. Visual inspections

Question Number. 420. an RMI in VOR mode, it's pointer is showing a course of 000. If the course knob is adjusted to 010 what happens to the pointer?

Option A: Move left **Option B:** Move right

Option C: Moves left then hard right **Correct Answer is.** Move right

Question Number. 421. An aircraft flying on a heading of 030 receives an ADF signal 030 relative to the aircraft, what is the ADF pointer indicating?

Option A: 030 **Option B:** 060 **Option C:** 090

Correct Answer is. 060

Question Number. 422. When does the pressure in the standard atmosphere halve?

Option A: 12,000ft **Option B:** 5,000ft **Option C:** 18,000ft

Correct Answer is. 18,000ft

Question Number. 423. If an aircraft is entering a turn to the left, what input would the aileron to rudder cross feed be?

Option A: Left Rudder Option B: Right Rudder Option C: No Rudder

Correct Answer is. Left Rudder

Question Number. 424. If a control surface that is fitted with a balance tab is moved, what will happen to the tab?

Option A: It is moved manually in the opposite direction to the surface **Option B:** It is moved automatically in the same direction as the surface **Option C:** It is moved automatically in the opposite direction as the surface

Correct Answer is. It is moved automatically in the opposite direction as the surface

Question Number. 425. At which two points on a gas turbine engine is EPR measured?

Option A: Compressor inlet and jet pipe
Option B: Combustion chamber and jet pipe
Option C: Jet pipe and combustion chamber
Correct Answer is. Compressor inlet and jet pipe

Question Number. 426. If a stall is approaching, what indication does the pilot get?

Option A: Stick Shaker
Option B: Stick Nudger
Option C: EICAS warning
Correct Answer is. Stick Shaker

Question Number. 427. Flap asymmetry causes the aircraft to

Option A: nose up

Option B: go one wing down

Option C: nose down

Correct Answer is. Stick Shaker

Question Number. 428. On a coupled approach what happens to the aircraft if it looses the localizer signal?

Option A: It will fly straight down the original course but will drift

Option B: It will fly in circles

Option C: It will fly on the heading the aircraft was on

Correct Answer is. It will fly straight down the original course but will drift

Question Number. 429. If an autopilot is fed with radio deviation

Option A: it will stand off the center line by a fixed amount

Option B: it will fly in circles

Option C: it will fly on the heading the aircraft was on

Correct Answer is. it will fly in circles

Question Number. 430. What color are the auto land indication lights next to the pilots instruments with excess deviation?

Option A: Red Option B: Amber Option C: White

Correct Answer is. Amber

Question Number. 431. In what type of Doppler System do altitude holes appear?

Option A: FM
Option B: Pulse

Option C: FM and Pulse

Correct Answer is. FM and Pulse

Question Number. 432. What happens to the F/D command bars if the roll gyro fails in a turn?

Option A: They stay in the same place as nothing is there to null the input signal

Option B: They return back to neutral when the turn is complete

Option C: They Disappear out of view

Correct Answer is. They Disappear out of view

Question Number. 433. If an aircraft moves in yaw what axis is it moving about?

Option A: Normal
Option B: Longitudinal
Option C: Lateral

Correct Answer is. Normal

Question Number. 434. The neutral shift system augments control of the

Option A: stabilizer
Option B: elevator
Option C: spoilers

Correct Answer is. Elevator

Question Number. 435. On a full time Fly-by-wire system a nose up command causes

Option A: the two elevator surfaces on each side of the stabilizer to move up

Option B: all the elevators on each wing to move up **Option C:** the two Ailerons on each wing to move up

Correct Answer is. the two elevator surfaces on each side of the stabilizer to move up

Question Number. 436. What are ground spoilers used for?

Option A: To dump lift

Option B: To assist the aircraft coming to a stop

Option C: To slow the aircraft **Correct Answer is.** To dump lift

Question Number. 437. If the aircraft is to be rolled to the right where does the pilot feed in this command?

Option A: Control Wheel
Option B: Control Column
Option C: Rudder Pedals

Correct Answer is. Control Wheel

Question Number. 438. What is the typical aircraft hydraulic system pressure?

Option A: 3000 psi **Option B:** 1000 psi **Option C:** 300 psi

Correct Answer is. Control Wheel

Question Number. 439. If a bonding lead is found to be broken and a spare is unavailable you must

Option A: replace with a self-manufactured cable of the same type but larger

Option B: defer the defect until correct spares are available

Option C: splice the broken lead

Correct Answer is. replace with a self-manufactured cable of the same type but larger

Question Number. 440. What is the minimum size cable, which is not likely to carry all the current from a primary structure?

Option A: 0.5inch wide by 26AWG cable

Option B: 0.25inch wide by 26AWG cable

Option C: No smaller than 18AWG

Correct Answer is. 0.25inch wide by 26AWG cable

Question Number. 441. What is the bonding value between secondary structure?

Option A: 0.5 Option B: 1 ohm

Option C: Between 1Megohm and 500,000

Correct Answer is. 1 ohm

Question Number. 442. What is the diagonal part of the landing gear called?

Option A: Drag Strut
Option B: Drag Wire
Option C: Shock Absorber
Correct Answer is. Drag Strut

Question Number. 443. What is the advancing blade on a helicopter doing?

Option A: Increasing in lift

Option B: Going to the highest point

Option C: Increasing in drag

Correct Answer is. Increasing in lift

Question Number. 444. In a series actuator fitted to a helicopter how much authority does it have?

Option A: 10% approximately

Option B: 100% **Option C:** 50%

Correct Answer is. 10% approximately

Question Number. 445. What is the output of a localizer NAV receiver?

Option A: Polarity sensitive AC **Option B:** Polarity sensitive DC

Option C: Either

Correct Answer is. Polarity sensitive DC

Question Number. 446. What does an INS calculate on power up?

Option A: Last Known Longitude **Option B:** Last Known Latitude

Option C: Last Known Longitude & Latitude Correct Answer is. Last Known Latitude

Question Number. 447. If a series actuator is fitted in the cyclic control circuit of a helicopter what effect will an autopilot input have?

Option A: The cyclic lever will move in proportion to the autopilot input

Option B: The cyclic lever will not move

Option C: The flight director bars only will move **Correct Answer is.** The cyclic lever will not move

Question Number. 448. On an aircraft fitted with a CMC how do you get to the system pages?

Option A: Through the ground test function
Option B: Through the Existing faults function
Option C: Through the Present Leg faults function

Correct Answer is. Through the ground test function

Question Number. 449. What is the purpose of the autopilot trim indication?

Option A: The voltage activity in the servo amp

Option B: Trim tab position

Option C: Control surface position

Correct Answer is. The voltage activity in the servo amp

Question Number. 450. What is the entry angle of an MLS installation +/-?

Option A: 62 Option B: 42 Option C: 20

Correct Answer is. 42

Question Number. 451. When using a bonding tester you

Option A: use the 6ft lead for testing different points **Option B:** use the 60ft lead for testing different points

Option C: use either leads for the testing

Correct Answer is. use the 6ft lead for testing different points

Question Number. 452. What is the swash plate on a helicopter used for?

Option A: Control of the pitch of the rotor blades **Option B:** Control of the speed of the rotor blades **Option C:** Control of the flap of the rotor blades

Correct Answer is. Control of the pitch of the rotor blades

Question Number. 453. What does a piezo electric type vibration sensor detect?

Option A: Disturbances **Option B:** Velocity

Option C: Pressure changes

Correct Answer is. Pressure changes

Question Number. 454. with a control surface tab in the neutral position, what happens when the control surface is moved?

Option A: It remains in the neutral position

Option B: It moves in the same direction as the control surface

Option C: It moves in the opposite direction as the control surface

Correct Answer is. It moves in the opposite direction as the control surface

Question Number. 455. What should be carried out prior to working on or near control surfaces?

Option A: Ensure Hydraulics are selected off

Option B: Pull & tag circuit breakers

Option C: Wear ear protection

Correct Answer is. Ensure Hydraulics are selected off

Question Number. 456. Instantaneous Vertical Speed Indicator has instant values of Vertical Speed by

Option A: blocking off static and by using an accelerometer

Option B: using a plunger to correct any lagging of the indicator

Option C: blocking off pitot pressure and by using an accelerometer

Correct Answer is. using a plunger to correct any lagging of the indicator

Question Number. 457. What is the glide slope frequency range?

Option A: 108 - 112 MHz. **Option B:** 108 - 112 Ghz **Option C:** 329 - 335 MHz.

Correct Answer is. 329 - 335 MHz.

Question Number. 458. What would indicate the state of charge of a lead acid battery?

Option A: Fluctuations in the level of the electrolyte **Option B:** Fluctuations in the SG of the electrolyte **Option C:** Fluctuations in the terminal voltage

Correct Answer is. Fluctuations in the SG of the electrolyte

Question Number. 459. Upwash on a helicopter would result in

Option A: increase in lift without an increase in power

Option B: decrease in lift
Option C: decrease in speed

Correct Answer is. Fluctuations in the SG of the electrolyte

Question Number. 460. What is the aural warning of an aircraft over speed?

Option A: Bell sound
Option B: Clacking sound
Option C: Horn sound

Correct Answer is. Clacking sound

Question Number. 461. What is a slot used for?

Option A: To reinforce the boundary layer

Option B: Increased angle of attack during approach

Option C: Increase the speed of the airflow

Correct Answer is. To reinforce the boundary layer

Question Number. 462. ADF is

Option A: Rho
Option B: Theta
Option C: Rho-Theta
Correct Answer is.

Question Number. 463. A Boost Gauge reads

Option A: above or below ambient atmospheric pressure

Option B: absolute pressure

Option C: above or below ISA atmospheric pressure

Correct Answer is. absolute pressure

Question Number. 464. Angle of Attack is the angle between cord line and

Option A: relative air flow Option B: tip path plane Option C: horizontal axis

Correct Answer is. relative air flow

Question Number. 465. If cyclic is moved to the right

Option A: POM shortens on one side and lengthens on another

Option B: the rotor blades on the right flap down **Option C:** the rotor blades on the left flap down

Correct Answer is. the rotor blades on the right flap down

Question Number. 466. What is the Speed of an ARINC 429 system

Option A: 2.3 - 23 MHz. **Option B:** 2 - 6 GHz

Option C: 100 KHz

Correct Answer is. 100 KHz

Question Number. 467. What would happen to an aircraft at low speed at high angle of attack had an aileron going down?

Option A: Decrease stall speed Option B: Increase stall speed

Option C: Have no effect on the stall speed **Correct Answer is.** Increase stall speed

Question Number. 468. A high lift device is used for

Option A: take-off and landing Option B: take off only Option C: landing only

Correct Answer is. take-off and landing

Question Number. 469. What is the major vertical component of an airframe that is a load bearing part of the structure that can be used as walls or partial walls?

Option A: Frame
Option B: Bulkhead
Option C: Stringer

Correct Answer is. Bulkhead

Question Number. 470. What is jitter used for in a DME transmission?

Option A: To make an installation recognise it's own transmission

Option B: To make sure only strong signals are replied to in a dense area

Option C: To make an aircraft recognise a DME in a quiet area

Correct Answer is. To make an installation recognise it's own transmission

Question Number. 471. What is the minimum candela of an anti-collision beacon?

Option A: 100 Option B: 50 Option C: 20

Correct Answer is. 20

Question Number. 472. What is the calibration law of a Ratiometer?

Option A: Material of the coil

Option B: Material of the sensing element **Option C:** Material of the indicator needle

Correct Answer is. Material of the indicator needle

Question Number. 473. after a roll to the left of a statically unstable helicopter, the helicopter would

Option A: roll back to the horizontal **Option B:** continue to roll further

Option C: remain at the position that it had rolled to

Correct Answer is. continue to roll further

Question Number. 474. How is a spoiler interconnected to other flight control systems?

Option A: Spoiler to aileron
Option B: Spoiler to flap
Option C: Spoiler to elevator

Correct Answer is. Spoiler to aileron

Question Number. 475. What is audio clipping used for in voice communication?

Option A: To enable vowels to be heard better

Option B: To enable consonants to be heard better

Option C: To enable numbers to be heard better

Correct Answer is. To enable consonants to be heard better

Question Number. 476. The difference between transient droop and static droop is

Option A: under swing Option B: over swing Option C: a hole in one

Correct Answer is. under swing

Question Number. 477. If a QFE is set at an airfield and flown to another airfield at the same level above sea level then

Option A: it will not need resetting and will read zero
Option B: it will display the airfield height above sea level
Option C: it will probably not need resetting and will read zero

Correct Answer is. it will probably not need resetting and will read zero

Question Number. 478. capacitance fuel quantity indication test set is connected

Option A: by replacing capacitance probes Option B: in parallel with capacitance probes Option C: in series with capacitance probes

Correct Answer is. in parallel with capacitance probes

Question Number. 479. What is aileron droop?

Option A: The leading edge of both ailerons presented to the airflow

Option B: One aileron lowered

Option C: The drop of ailerons with no hydraulics on

Correct Answer is. The drop of ailerons with no hydraulics on

Question Number. 480. How is the output of a constant speed drive fed AC generator controlled?

Option A: Hydraulic feedback to a governor

Option B: No control as the generator is fed via a constant speed drive

Option C: By a swashplate

Correct Answer is. By a swashplate

Question Number. 481. What happens to a helicopter in auto rotative flight?

Option A: The cabin goes in the direction of rotation

Option B: The rotor goes in the normal direction of rotation

Option C: The rotor goes the opposite direction to the normal direction of rotation

Correct Answer is. The rotor goes in the normal direction of rotation

Question Number. 482. With a helicopter with a twin blade same gimbal it is

Option A: semi rigid
Option B: rigid

Option C: fully articulating

Correct Answer is. semi rigid

Question Number. 483. Earths atmosphere is

Option A: 1/5 oxygen, 4/5 nitrogen Option B: 4/5 oxygen, 1/5 nitrogen Option C: 3/5 oxygen, 2/5 nitrogen

Correct Answer is. 1/5 oxygen, 4/5 nitrogen

Question Number. 484. A thermocouple

Option A: capacitance and inductance cannot be added

Option B: cannot be shortened **Option C:** can be shortened

Correct Answer is. Cannot be shortened

Question Number. 485. How is temperature compensation achieved in the fluid of a compass?

Option A: Bellows and diaphragm

Option B: Alcohol is used as it does not get effect by temperature

Option C: Press relief valve

Correct Answer is. Bellows and diaphragm

Question Number. 486. When installing an aerial, added support is needed for the structure. This is achieved by

Option A: webs Option B: outer plate **Option C:** inner plate

Correct Answer is. Inner plate

Question Number. 487. What is the difference between transmit and receive pulse frequency?

Option A: 60 Option B: 63 **Option C:** 1000 Correct Answer is. 60

Question Number. 488. Relative airflow over a helicopter blade

Option A: increases at the tip **Option B:** increases at the root

Option C: is unaffected by blade position Correct Answer is. increases at the tip

Question Number. 489. TCAS II is Option A: 10 aircraft per square mile **Option B:** 25 aircraft per square 5 miles Option C: 100 aircraft per 5 miles square

Correct Answer is. 25 aircraft per square 5 miles

Question Number. 490. RMI in ADF mode, the pointer is moved by a

Option A: servomotor Option B: loop voltage **Option C:** Chinaman

Correct Answer is. loop voltage

Question Number. 491. FMC changes movement via

Option A: A/P actuator

Option B: flight control computer **Option C:** straight to the actuator

Correct Answer is. flight control computer

Question Number. 492. Aircraft condition monitoring monitors

Option A: certain parameters

Option B: with a fault detector and tells master warning computer **Option C:** and compares the faults on the aircraft with the CMC

Correct Answer is. certain parameters

Question Number. 493. Radio signals chance of penetration of ionosphere

Option A: increase with the frequency Option B: decrease with frequency Option C: is not affected by frequency

Correct Answer is. increase with the frequency

Question Number. 494. What is lapse rate? **Option A:** Pressure changes with altitude **Option B:** Temperature changes with altitude **Option C:** Density changes with altitude

Correct Answer is. Temperature changes with altitude

Question Number. 495. Increase in speed of spoilers is needed when

Option A: the flaps are lowered **Option B:** at higher speeds

Option C: the landing gear is extended **Correct Answer is.** the flaps are lowered

Question Number. 496. What should be taken into account when measuring the SG of a battery?

Option A: The outside temperature Option B: Electrolyte temperature Option C: Charge state of the battery

Correct Answer is. Electrolyte temperature

Question Number. 497. What happens when a control stick is pulled back and to the left?

Option A: Elevator up, left aileron down **Option B:** Elevator down, right aileron down **Option C:** Elevator up, right aileron down

Correct Answer is. Elevator up, right aileron down

Question Number. 498. Where is the placement of a mercury switch?

Option A: Outer gimbal
Option B: Gyro case
Option C: Instrument case

Correct Answer is. Outer gimbal

Question Number. 499. DC power into the GCU comes from

Option A: main battery bus

Option B: main battery bus and ground service

Option C: ground service

Correct Answer is. main battery bus

Question Number. 500. In a boost gauge system the sensing element contains

Option A: 1 capsule Option B: 2 capsules Option C: 3 capsules

Correct Answer is. 2 capsules

Question Number. 501. Spring tabs **Option A:** cannot be adjusted in flight **Option B:** can be adjusted in the flight deck

Option C: cannot be adjusted

Correct Answer is. cannot be adjusted

Question Number. 502. Rising gust in front of the leading edge with flaps lowered, AoA will

Option A: increase
Option B: decrease
Option C: remain

Correct Answer is. Increase

Question Number. 503. If an aircraft moves in roll it is moving about the

Option A: normal axis
Option B: lateral axis
Option C: longitudinal axis

Correct Answer is. longitudinal axis

Question Number. 504. LOC signal modulation is

Option A: 50 % **Option B:** 20 % **Option C:** 10 %

Correct Answer is. 20%

Question Number. 505. After a roll to the left of a statically stable helicopter, the helicopter would

Option A: continue to roll **Option B:** increases roll

Option C: come back to level flight

Correct Answer is. come back to level flight

Question Number. 506. What instrument uses ram air pressure and atmospheric pressure?

Option A: ASI

Option B: Machmeter

Option C: VSI

Correct Answer is. ASI

Question Number. 507. If increasing altitude at constant IAS, TAS will

Option A: decrease Option B: increase

Option C: remain the same **Correct Answer is.** Increase

Question Number. 508. A Master Warning is issued when

Option A: over speed and low cabin attitude occurs **Option B:** cargo smoke and low oil quantity occurs

Option C: engine fire & trip occurs

Correct Answer is. over speed and low cabin attitude occurs

Question Number. 509. How does a delta wing aircraft move about the pitch and roll axis?

Option A: Elevator s
Option B: Eleven's
Option C: Ailerons

Correct Answer is. Eleven's

Question Number. 510. If a roll was commenced, what command would the versine generator give?

Option A: Up Elevator **Option B:** Left rudder

Option C: Down elevator

Correct Answer is. Up Elevator

Question Number. 511. What effect does lowering the flaps for takeoff have?

Option A: Increases lift & reduces drag

Option B: Increases lift and drag

Option C: Increase lift only

Correct Answer is. Increases lift and drag

Question Number. 512. What effect does lowering flaps for takeoff have?

Option A: Reduces takeoff and landing speeds

Option B: Reduces takeoff speeds only **Option C:** Reduces landing speeds only

Correct Answer is. Reduces takeoff and landing speeds

Question Number. 513. Which signal would be integrated to get onto Localizer centerline?

Option A: Heading error
Option B: Course error
Option C: Radio deviation

Correct Answer is. Heading error

Question Number. 514. What does a vibration type sensor measure?

Option A: Maximum deflection
Option B: Frequency of deflections
Option C: Direction of flexing

Correct Answer is. Frequency of deflections

Question Number. 515. On a Ground Power unit which pins are allocated for interlock circuit?

Option A: A and B Option B: B and C Option C: E and F

Correct Answer is. E and F

Question Number. 516. Which is used for compass damping fluid compensation?

Option A: Bellows or diaphragm

Option B: No damping due to alcohol low temperature co-efficient

Option C: Piston and oil

Correct Answer is. Bellows or diaphragm

Question Number. 517. The result of the equation (Dev E - Dev W)/2 is known as

Option A: Coefficient B
Option B: Coefficient A
Option C: Coefficient C

Correct Answer is. Coefficient B

Question Number. 518. If the torque were increased on a vertical gyro, what would happen to the precession?

Option A: Increase

Option B: Remain unaffected

Option C: Decrease

Correct Answer is. Increase

Question Number. 519. A 'q' feel system supplies

Option A: aerodynamic damping

Option B: the pilot with ever increasing awareness of speed

Option C: control movement effort relief

Correct Answer is. the pilot with ever increasing awareness of speed

Question Number. 520. ADF operates within which frequencies?

Option A: 200 KHz - 1000 KHz **Option B:** 118 MHz. - 132 MHz. **Option C:** 32 KHz - 64 KHz

Correct Answer is. 200 KHz - 1000 KHz

Question Number. 521. Cat IIIB landing, up to what phase is LOC signal used?

Option A: Roll out
Option B: Flare
Option C: Touchdown

Correct Answer is. Roll out

Question Number. 522. FMC mode that can be selected through the CDU is

Option A: DME Freq Option B: LNAV Option C: CRZ

Correct Answer is. CRZ

Question Number. 523. Mode C response is

Option A: 21microseconds
Option B: 12 microseconds
Option C: 8 microseconds

Correct Answer is. 12 microseconds

Question Number. 524. Which would you use to test an aircraft transponder altitude reporting system?

Option A: Read the altitude directly from ATC-600 panel

Option B: Transfer the code displayed by the ATC-600 into binary **Option C:** Check the altitude code with the correct alt/code table **Correct Answer is.** Read the altitude directly from ATC-600 panel

Question Number. 525. An uncorrected ADI is affected by

Option A: climb
Option B:descent
Option C: roll

Correct Answer is. Descent

Question Number. 526. A DGPS system installed on an aircraft requires

Option A: 1 ground station and 4 satellites **Option B:** 2 ground stations and 4 satellites **Option C:** 1 ground station and 6 satellites

Correct Answer is. 1 ground station and 4 satellites

Question Number. 527. The term 'circling current' refers to

Option A: AC generators

Option B: AC and DC Generators

Option C: DC generators

Correct Answer is. AC generators

Question Number. 528. Aircraft normally fitted with 2 central maintenance computers and you only have one to dispatch the aircraft.

Where do you fit it? Option A: LH side Option B: RH side

Option C: LH or RH side (i.e. doesn't matter)

Correct Answer is. LH side

Question Number. 529. If the localizer signal is only applied to the A/P roll channel

Option A: aircraft flies parallel to the runway center line

Option B: aircraft flies along the runway center line

Option C: aircraft flies in circles

Correct Answer is. aircraft flies in circles

Question Number. 530. Speed control on an emergency hydraulic driven generator is via the

Option A: IDG Option B: CSD Option C: swash plate

Correct Answer is. swash plate

Question Number. 531. WX radar display the time base is

Option A: saw tooth wave form Option B: trapezoidal wave form **Option C:** rectangular wave form

Correct Answer is. saw tooth wave form

Question Number. 532. Flight director on VOR, course error wash out signal is lost, following the FD commands. Aircraft will

Option A: stay on center of course **Option B:** stay parallel to course

Option C: follow the course with scalloping or bracketing

Correct Answer is. stay parallel to course

Question Number. 533. Flight director on G/S capture, the pitch integration is

Option A: to increase GS signal Option B: to decrease GS signal **Option C:** to maintain GS signal Correct Answer is. increase GS signal

Question Number. 534. A helicopter needs to re-trim

Option A: indication is shown on the API

Option B: indication is shown on the command bars of the EHSI

Option C: indication is shown on the command bars of the attitude indicator

Correct Answer is, indication is shown on the API

Question Number. 535. API Trim pointers are fed by

Option A: a synchro Option B: an RVDT **Option C:** an LVDT

Correct Answer is. an RVDT

Question Number. 536. VHF transmitter output impedance to match with antenna for maximum power transfer is

Option A: 50 ohms
Option B: 25 to 75 ohms
Option C: 129 ohms

Correct Answer is. 50 ohms

Question Number. 537. Transformer coupling between an ADI and a flight director computer is

Option A: to protect the ADI in event of a FD computer failure **Option B:** to protect the FD computer in case of an ADI failure **Option C:** to protect the FD computer in case of an HSI failure

Correct Answer is. to protect the ADI in event of a FD computer failure

Question Number. 538. In audio clipping

Option A: vowels are strengthened relative to the remaining signal **Option B:** vowels are attenuated relative to the remaining signal **Option C:** there is no change in relative strength of vowels

Correct Answer is. vowels are attenuated relative to the remaining signal

Question Number. 539. Anti cross-talk network for unwanted signals uses

Option A: attenuation first then amplification **Option B:** amplification first then attenuation **Option C:** no attenuation but amplification

Correct Answer is. attenuation first then amplification

Question Number. 540. DME - how does receiver find the received pulse pairs are valid?

Option A: Decoder

Option B: Blocking oscillator

Option C: Integrator

Correct Answer is. Decoder

Question Number. 541. Co-axial transmission line of impedance 80 ohms is connected dipole of 120 ohms. While checking with ohm meter the reading will be

Option A: 80 ohms **Option B:** 200 ohms

Option C: more than 20 mega ohms

Correct Answer is. more than 20 mega ohms

Question Number. 542. Transformer coupling between ADI and Flight director is to protect

Option A: ADI

Option B: Flight director computer

Option C: both of the above

Correct Answer is. Flight director computer

Question Number. 543. A HUMS in a helicopter is

Option A: a vibration analysis system

Option B: a system which monitors time period of components in service and warns of a premature failure

Option C: a system which indicates a crack in the blade

Correct Answer is. a system which monitors time period of components in service and warns of a premature failure

Question Number. 544. When the flaps are lowered

Option A: the lift vector moves forward
Option B: the lift vector moves rearward
Option C: there is no effect on the lift vector
Correct Answer is, the lift vector moves rearward

Question Number. 545. at take-off, if the flaps are lowered there is a

Option A: large increase in lift and drag **Option B:** small increase in lift and drag

Option C: large increase in lift and small increase in drag

Correct Answer is. large increase in lift and drag

Question Number. 546. In a large transport aircraft to check VSWR of a HF system with a long aerial feeder the VSWR meter has to be connected

Option A: between the transmitter and the ATU (transmitter end)

Option B: between the aerial and ATU

Option C: between the transmitter and the ATU (ATU end)

Correct Answer is. between the transmitter and the ATU (transmitter end)

Question Number. 547. With power applied to the autopilot but not engaged, the trim indicator will indicate

Option A: a standby electrical signal in the servo loop

Option B: that the gyro is out of the null and needs aligning

Option C: the trim system is out of datum

Correct Answer is. a standby electrical signal in the servo loop

Question Number. 548. Control loop gain with an autopilot is usually

Option A: dependent on aircraft altitude

Option B: 100%

Option C: chosen as a compromise

Correct Answer is. dependent on aircraft altitude

Question Number. 549. With no.1 h.f. system transmitting the interlock circuit

Option A: allowsno.2 h.f. toreceive only

Option B: allows no.2 h.f. to transmit and receive **Option C:** does not allow no.2 to transmit or receive **Correct Answer is.** allowsno.2 h.f. toreceive only

Question Number. 550. MLS azimuth range is

Option A: +/- 30 **Option B:** +/- 42 **Option C:** +/- 62

Correct Answer is. +/- 42

Question Number. 551. Aircraft is north of VOR beacon, course is set to 90 degrees, RMI indicates

Option A: 90 Option B: 180 Option C: 0

Correct Answer is. 180

Question Number. 552. in an auto trim horizontal stabilizer, 'low' speed mode is when

Option A: flaps are retracted

Option B: landing gear up and locked

Option C: flaps extended

Correct Answer is. flaps are retracted

Question Number. 553. An aircraft receives a response from a DME station, 1236 microseconds after transmitting the interrogation. What is the slant range to the station?

Option A: 96 nautical miles

Option B: 100 nautical miles **Option C:** 104 nautical miles

Correct Answer is. 96 nautical miles

Ouestion Number. 554. If the VOR track error is 2 dots, how many degrees off track is the aircraft?

Option A: 10 Option B: 5 Option C: 2.5

Correct Answer is. 10

Question Number. 555. What frequency range does ACARS operate in?

Option A: 2-30 MHz.
Option B: 118-136 MHz.
Option C: 4-5 GHz

Correct Answer is. 118-136 MHz.

Question Number. 556. An FM signal would have it's sideband signals

Option A: above the carrier signal Option B: below the carrier signal Option C: No sidebands present

Correct Answer is. No sidebands present

Question Number. 557. on an Auto land coupled approach, a GPWS warning

Option A: would initiate a Go Around Option B: audio and Visual warning Option C: visual warning only

Correct Answer is. audio and Visual warning

Question Number. 558. A Doppler VOR station's transmissions

Option A: can be received and processed with a conventional VOR receiver Option B: can not be received and processed with a conventional VOR receiver Option C: can be received but not processed with a conventional VOR receiver Correct Answer is. can be received and processed with a conventional VOR receiver

Question Number. 559. Direction of normal flight is changed by the pilot by applying pressure

Option A: to the control wheel Option B: to the control column Option C: to the rudder pedals

Correct Answer is. to the control wheel

Question Number. 560. On a modern aircraft about to stall

Option A: the outboard slats extend automatically **Option B:** engine power increases automatically **Option C:** the flaps retract automatically

Correct Answer is. the outboard slats extend automatically

Question Number. 561. Wing can spoilers be used?

Option A: To assist the respective down going aileron in a turn

Option B: As ground spoilers on landing

Option C: To assist the elevators

Correct Answer is. As ground spoilers on landing

Question Number. 562. When checking the altitude reporting of the transponder

Option A: set the barometric altimeter to local pressure **Option B:** set the barometric altimeter to 1013.25 mb

Option C: set the rad alt to 0 feet

Correct Answer is. set the barometric altimeter to 1013.25 mb

Question Number. 563. Dutch Roll affects **Option A:** pitch and roll simultaneously **Option B:** pitch and yaw simultaneously **Option C:** yaw and roll simultaneously

Correct Answer is. yaw and roll simultaneously

Question Number. 564. A radar antenna is facing left. On ground test, if you move the vertical gyro to simulate a right

bank, the antenna

Option A: will move up
Option B: will move down
Option C: will not move

Correct Answer is. will move down

Question Number. 565. Standing waves in a Co-Axial feeder cable are proportional to

Option A: length of the cable

Option B: transmitter power output

Option C: degree of mismatch between transmitter and antenna

Correct Answer is. degree of mismatch between transmitter and antenna

Question Number. 566. When more than one D.R. compass is fitted on an aircraft or where a D.R. compass serves as a standby to a remote reading compass

Option A: only the master compass readings and adjustments carried out and remaining compasses are adjusted with master compass

Option B: all readings and adjustments for each compass should be made simultaneously on each heading

Option C: all readings and adjustments for each compass should be made at any one heading only

Correct Answer is. all readings and adjustments for each compass should be made simultaneously on each heading

Question Number. 567. Compass error remaining after all the corrections, which is used for entry on the deviation card should not exceed

Option A: 2 degrees Option B: 3 degrees Option C: 5 degrees

Correct Answer is. 3 degrees

Question Number. 568. Compass error remaining after all corrections are made is called

Option A: apparent error Option B: residual error Option C: index error

Correct Answer is. residual error

Question Number. 569. Instruments used on an aircraft are in some instances fitted with cover glasses whose surfaces are

bloomed to reduce

Option A: Parallax error **Option B:** Surface reflection

Option C: Static to avoid dust attraction Correct Answer is. Surface reflection

Question Number. 570. Versine signal is governed by

Option A: roll
Option B: pitch
Option C: yaw

Correct Answer is. Roll

Question Number. 571. Stick shaker activates at a speed which is above the stalling speed by

Option A: 4% Option B: 7% Option C: 10.321% Correct Answer is. 7%

Question Number. 572. A D.R. compass fitted on an aircraft. The safe distance for electrical cables carrying electrical

current is

Option A: 20 inches Option B: 24 inches Option C: 28 inches

Correct Answer is. 24 inches

Question Number. 573. The pitot head is fitted on the aircraft. The alignment of pitot head is carried out with

Option A: an inclinometer Option B: micrometer Option C: spirit level

Correct Answer is. an inclinometer

Question Number. 574. Oscillation and hunting of flight control surface are prevented by

Option A: Tach generator

Option B: Feedback from control surface Option C: Feedback from servo motor Correct Answer is. Tach generator

Question Number. 575. When an hydraulic system is un pressurized, the position of flight control surfaces are

Option A: down
Option B: neutral
Option C: droop

Correct Answer is. Droop

Question Number. 576. Radar beam width improves

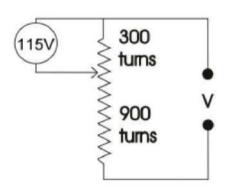
Option A: range resolution
Option B: range accuracy
Option C: bearing resolution

Correct Answer is. bearing resolution

Question Number. 577. A transformer has a power input of 115V AC. What is the output voltage?

Option A: 115V Option B: 345V Option C: 460V

Correct Answer is. 460V



Question Number. 578. The manufacturer of a pitot head gave a specification indicating 2 inches dia. This is the

Option A: opening dia. of pitot head

Option B: internal dia of pitot head where air stagnates

Option C: external dia of pitot head

Correct Answer is. external dia of pitot head

Question Number. 579. on a VSI fitted on an aircraft, for climb and descent indication

Option A: a set screw is provided for zero adjustment

Option B: it does not have any adjustment

Option C: a set screw is provided for climb/descent increments **Correct Answer is.** a set screw is provided for zero adjustment

Question Number. 580. A shunt wound generator fitted on an aircraft, a preset potentiometer is fitted

Option A: in series with the field winding
Option B: in parallel with the field winding
Option C: in series with the generator output
Correct Answer is. in series with the field winding

Question Number. 581. Battery trays are

Option A: metal for earthing purposes

Option B: metal with PVC coating and anti-corrosive paint

Option C: absorbent to soak up electrolyte

Correct Answer is. metal with PVC coating and anti-corrosive paint

Question Number. 582. When installing multiple batteries on aircraft they are connected in

Option A: parallel Option B: series

Option C: either parallel or series and switched between as an option

Correct Answer is. either parallel or series and switched between as an option

Question Number. 583. What is the small pin on the DC ground power connector?

Option A: Ground or earth

Option B: Positive to battery relay

Option C: Positive to external power relay

Correct Answer is. Positive to external power relay

Question Number. 584. Maximum battery temperature on charging before protection circuit starts is

Option A: 115 degrees F
Option B: 144 Degrees F
Option C: 144 Degrees C

Correct Answer is. 115 degrees F

Question Number. 585. If an aircraft has no battery charger the battery is charged by

Option A: constant voltage Option B: constant current

Option C: constant current until a predetermined limit when it automatically switches to constant voltage

Correct Answer is. constant voltage

Question Number. 586. Battery charging procedures can be found in ATA

Option A: Chapter 24 Section 21

Option B: Chapter 24 Section 31 **Option C:** Chapter 31 Section 21

Correct Answer is. Chapter 24 Section 31

Question Number. 587. In a carbon pile regulator the resistive element is **Option A:** in series with the field and changes resistance with changing length **Option B:** in series with the field and changes resistance with surface area contact **Option C:** in parallel with the field and changes resistance with changing length

Correct Answer is. in series with the field and changes resistance with surface area contact

Question Number. 588. The output of a carbon pile regulator with no variation of loading is

Option A: stationary **Option B:** fluctuating

Option C: pulse width modulating **Correct Answer is.** Stationary

Question Number. 589. In a transistor voltage regulator the voltage output is controlled by

Option A: transformers and transistors
Option B: diodes and transformers
Option C: zener and transistors

Correct Answer is. zener and transistors

Question Number. 590. Paralleled relay for DC system is energised and connected by

Option A: voltage coil **Option B:** current coil

Option C: voltage and current coil

Correct Answer is. voltage and current coil

Question Number. 591. Increasing the real load primarily

Option A: decreases frequency
Option B: decreases output voltage

Option C: increases output voltage and increases frequency

Correct Answer is. increases output voltage and increases frequency

Question Number. 592. Inductive reactive load causes

Option A: no effect on torque but produces extra heat dissipated **Option B:** increase in torque and increase in heat dissipated

Option C: increase in torque only

Correct Answer is. increase in torque only

Question Number. 593. The power factor of an AC generator identifies the proportion of

Option A: apparent power from the generator that does work **Option B:** reactive power from the generator that does work **Option C:** real power from the generator that does work

Correct Answer is. real power from the generator that does work

Question Number. 594. The control of hydraulically powered emergency electrical generator frequency is by

Option A: angle of swash plate

Option B: IDG

Option C: restriction valve

Correct Answer is. angle of swash plate

Question Number. 595. Differential protection in an AC system protects against

Option A: A reverse current flowing from the battery

Option B: short circuits

Option C: line-line, line-line, line-earth faults

Correct Answer is. line-line, line-line, line-earth faults

Question Number. 596. When resetting the CSD on the ground, the engine should be

Option A: stationary
Option B: rotating at idle
Option C: rotating at Nsync
Correct Answer is. Stationary

Question Number. 597. One of the main purposes of a CSD is to

Option A: enable generators to be paralleled

Option B: prevent engine overload

Option C: maintain constant load on the generator **Correct Answer is.** enable generators to be paralleled

Question Number. 598. in a under volt condition in an AC generator system, the most likely consequence is

Option A: activation of the time delay circuit

Option B: de-activation of the field regulatory TRs

Option C: energise the bus tie relay

Correct Answer is. activation of the time delay circuit

Question Number. 599. If voltage and frequency of the generator drop to zero in flight, it would be an indication that the

Option A: CSD drives shaft had sheared

Option B: phase sequence detection circuit has operated

Option C: bus tie interlock is inoperative

Correct Answer is. CSD drives shaft had sheared

Question Number. 600. Assuming all systems are operating normally, as aircraft electrical load increases, generator output voltage will

Option A: decrease and amperage output increases

Option B: increases and amperage output increases

Option C: remain constant and amperage output increases

Correct Answer is. remain constant and amperage output increases

Question Number. 601. Directional property is exhibited by

Option A: the sense antenna **Option B:** the loop antenna

Option C: both the sense and loop antenna **Correct Answer is.** the loop antenna

Question Number. 602. In ADF system, Goniometer

Option A: combines the signals from fixed loop antenna and sense antenna

Option B: effectively simulates a rotating loop antenna

Option C: alternately selects signals from loop antenna and sense antenna

Correct Answer is. effectively simulates a rotating loop antenna

Question Number. 603. In an aircraft VOR receiver

Option A: 108 MHz. reference signal is compared with 9960 Hz variable phase signal

Option B: 30 Hz modulated reference signal is compared with 30 Hz variable phase signal

Option C: 30 Hz reference signal is compared with 9960 Hz variable phase signal **Correct Answer is.** 30 Hz modulated reference signal is compared with 30 Hz variable phase signal

Question Number. 604. In CVOR,9960 c/s AM subcarrier is used in

Option A: VAR phase **Option B:** REF phase

Option C: station identification Morse code

Correct Answer is. REF phase

Question Number. 605. The DVOR is preferred in comparison to CVOR because

Option A: DVOR is relatively insensitive to SITE errors **Option B:** DVOR ground installation is relatively simpler **Option C:** DVOR is compatible for digital processing

Correct Answer is. DVOR ground installation is relatively simpler

Question Number. 606. A secondary surveillance radar (SSR) interrogation operates on

Option A: a frequency of 1030 MHz. and pulse spacing of 20.3 microseconds

Option B: a frequency of 1030 MHz. and pulse spacing depending on mode of interrogation

Option C: a frequency of 1090 MHz. and pulse spacing 20.3 microseconds

Correct Answer is. a frequency of 1030 MHz. and pulse spacing depending on mode of interrogation

Question Number. 607. In ILS, the glide slope provides

Option A: lateral steering Option B: vertical steering Option C: distance checks

Correct Answer is. vertical steering

Question Number. 608. The components of an ILS are:

Option A: A localizer and a glide slope

Option B: A localizer, a glide slope and the marker beacons

Option C: A localizer and the marker beacons

Correct Answer is. vertical steering

Question Number. 609. If the 90 Hz tone predominates in a localizer receiver ,the deviation indicator will

show

Option A: the flag **Option B:** fly right **Option C:** fly left

Correct Answer is. fly right

Question Number. 610. Localizer modulation depth is

Option A: 2%
Option B: 20%
Option C: 50%

Correct Answer is. 20%

Question Number. 611. The aerial element of a VHF comms transmitter/receiver should have a midband

length of

Option A: p /4 Option B: p /2 Option C: p

Correct Answer is. P/4

Question Number. 612. The short circuit stub that is used for broad banding a VHF whip must have a length of about

Option A: 29 cm Option B: 59 cm Option C: 70 cm

Correct Answer is. 59 cm

Question Number. 613. An isotropic radiator

Option A: is an end fed p/ 2 unipole

Option B: has a perfectly spherical radiation pattern

Option C: has a cardiod shaped polar diagram

Correct Answer is. has a perfectly spherical radiation pattern

Question Number. 614. The VSWR of a VHF system with a forward power of 100W and a reflected power of 4W will be

Option A: 1.5:1 **Option B:** 2:1 **Option C:** 2.5:1

Correct Answer is. 1.5:1

Question Number. 615. When an ADF antenna is repositioned from the bottom of the fuselage to the top, the wiring of the bearing indicator must be

Option A: reverse R 1+ R 2 connections only

Option B: reverse R 1+ R 2 and S 1 + S2 connections

Option C: reverse R 1+ S 2 connections

Correct Answer is. reverse R 1+ R 2 connections only

Question Number. 616. The mode S squitter pulse will **Option A:** trigger the TCAS mode S all call interrogation

Option B: contain the aircraft identity

Option C: contain the aircraft range and altitude information

Correct Answer is. contain the aircraft identity

Question Number. 617. When using the GPS

Option A: database card must be replaced every 28 days

Option B: once the database card has expired the system will continue to operate with a warning message

Option C: once the database expires the system will not operate

Correct Answer is. once the database card has expired the system will continue to operate with a warning message

Question Number. 618. When the ILS marker hi/lo switch is set to lo

Option A: receiver sensitivity is reduced by 10 to 12 db

Option B: increased by 10 to 12 db

Option C: marker lamps are illuminated by a lower signal level **Correct Answer is.** receiver sensitivity is reduced by 10 to 12 db

Question Number. 619. In a CVR system hot mics

Option A: are as selected by the boom/mic switches

Option B: is a term applied to all the aircrafts mics

Option C: get their power supply from the selected Tx via the r/t switch

Correct Answer is. is a term applied to all the aircrafts mics

Question Number. 620. A DME receives a ground transponder reply after 2472 microseconds, the slant range to the transponder is approximately

Option A: 196 nm **Option B:** 200 nm

Option C: 200 statute miles Correct Answer is. 196 nm

Question Number. 621. The most common type of gyro used in an INS is

Option A: a single rate integrating gyro wih viscosity damping

Option B: a single rate gyro with a spring restrained gimbal and eddy current damping

Option C: a displacement gyro to sense displacement and a rate gyro to sense rate of displacement

Correct Answer is. a single rate integrating gyro wih viscosity damping

Question Number. 622. A laser dither mechanism ensures that

Option A: optical backscatter does not cause the contra rotating beams to lock together

Option B: the contra rotating beams are synchronised together

Option C: that the two contra rotating beams are each at different frequencies

Correct Answer is. optical backscatter does not cause the contra rotating beams to lock together

Question Number. 623. Which modes of the GPWS may be inhibited

Option A: modes 1, 3, 4 a, 6 **Option B:** modes 2, 4, 5 **Option C:** modes 4b,5

Correct Answer is. modes 4b ,5

Question Number. 624. The vocal repetition for Mode 6 warnings are repeated

Option A: once only
Option B: twice only
Option C: three times only
Correct Answer is. once only

Question Number. 625. DFDR [digital flight data recorder] ARINC 573 data bus has how many sub-frames?

Option A: 4 Option B: 6 Option C: 8

Correct Answer is. 4

Question Number. 626. The middle marker is keyed with

Option A: dots **Option B:** dashes

Option C: alternate dots and dashes

Correct Answer is. alternate dots and dashes

Question Number. 627. What is the millivolt deflection per dot on ILS/VOR?

Option A: 25/75 **Option B:** 25/5 **Option C:** 75/75

Correct Answer is. 75/75

Question Number. 628. An accelerometer in an INS must be able to detect accelerations down to

Option A: 10⁻³ g

Option B: 10⁻² g **Option C:** 10⁻⁶ g

Correct Answer is. 10-6 g

Question Number. 629. An accelerometer has

Option A: low inertia, free suspension
Option B: high inertia, restrained
Option C: high inertia, free suspension
Correct Answer is. high inertia, restrained

Question Number. 630. When a compass is in the slave mode

Option A: the azimuth gyro will wander uncompensated

Option B: azimuth gyro will be corrected by long term monitoring of the flux valve **Option C:** the azimuth gyro is slaved to the annunciator or synchroniser circuit

Correct Answer is. azimuth gyro will be corrected by long term monitoring of the flux valve

Question Number. 631. Dome lights on the flight deck are powered by the

Option A: battery bus bar

Option B: battery bus bar or ground services

Option C: ground services

Correct Answer is. battery bus bar or ground services

Question Number. 632. Bandwidth of HF transmission is

Option A: 1 KHz Option B: 1.5 KHz Option C: 3 KHz

Correct Answer is. 3 KHz

Question Number. 633. A flux valve becomes permanently magnetized. What will be the effect?

Option A: More deviation **Option B:** More variation

Option C: Remote compass will indicate in one direction only

Correct Answer is. More deviation

Question Number. 634. GPS

Option A: uses 24 satellites equally spaced around 6 orbits **Option B:** uses 18 satellites equally spaced around 6 orbits **Option C:** uses 21 satellites equally spaced around 7 orbits

Correct Answer is. uses 24 satellites equally spaced around 6 orbits

Question Number. 635. During a system overload, load sharing will first affect

Option A: galley service

Option B: IFE

Option C: first officers transfer bus **Correct Answer is.** galley service

Question Number. 636. What man oeuvre does TCAS II adv

Option A: TA
Option B: RA

Option C: either RA or **Correct Answer is.** RT

Question Number. 637. What are the shapes of traffic shown on a TCAS display?

Option A: White diamonds, red squa s and amber circles

Option B: White squares, red diam

Option C: White circles, red diamonds and amber squares

Correct Answer is. White diamonds, red squa s and amber circles

Question Number. 638. A RAT provides AC power of around

Option A: 7.5 kva **Option B:** 63 kva **Option C:** 28 VAC

Correct Answer is. 7.5 KVa

Question Number. 639. If voltage and frequency of the generator drop to zero in flight, it would be an indication that the

Option A: Phase sequence detection circuit has operated

Option B: CSD drive shaft has sheared **Option C:** bus tie interlock is inoperative

Correct Answer is. CSD drive shaft has sheared

Question Number. 640. Paralleling in AC constant frequency is affected by

Option A: contactors

Option B: Generator Control Unit (GCU)

Option C: But Tie Bar

Correct Answer is. But Tie Bar

Question Number. 641. The power factor of an AC generator identifies the proportion of

Option A: reactive power from the generator that does work **Option B:** apparent power from the generator that does work **Option C:** real power from the generator that does work

Correct Answer is. real power from the generator that does work

Question Number. 642. Parallel distribution systems can typically found on all

Option A: twin-engined aircraft

Option B: aircraft with 3 or more engines **Option C:** aircraft with 4 or more engines

Correct Answer is. aircraft with 3 or more engines

Question Number. 643. Aircraft generators are connected in

Option A: series to the bus bar, parallel to the load and the loads parallel to each other **Option B:** series to the bus bar, series to the load and the loads parallel to each other **Option C:** parallel to the bus bar, series to the load and the loads parallel to each other

Correct Answer is. series to the bus bar, series to the load and the loads parallel to each other

Question Number. 644. Mach trim counters

Option A: longitudinal instability
Option B: lateral instability
Option C: vertical instability

Correct Answer is. longitudinal instability

Question Number. 645. Non-essential loads such as galleys and cabin lighting operate from

Option A: Ground services bus **Option B:** Ground handling bus

Option C: Transfer bus

Correct Answer is. Transfer bus

Question Number. 646. TCAS will issue a traffic advisory if

Option A: aircraft are within 6 nautical miles laterally and 1200 feet vertically of each other

Option B: a collision is within 25 -35 seconds of occurring **Option C:** a collision is within 35 -40 seconds of occurring

Correct Answer is. Transfer bu

Question Number. 647. A split flap

Option A: forms part of the leading edge's lower surface when retracted **Option B:** forms part of the trailing edge's upper surface when retracted **Option C:** forms part of the trailing edge's lower surface when retracted

Correct Answer is. forms part of the trailing edge's lower surface when retracted

Question Number. 648. When carrying out an auto land approach, VNAV is de-selected. The aircraft will

enter MCP SPD mode when

Option A: APP switch is pressed

Option B: the aircraft captures the glideslope **Option C:** the aircraft receives the first ILS signal

Correct Answer is. the aircraft captures the glideslope

Question Number. 649. The auto gain voltage of weather radar is set

Option A: in the workshop **Option B:** by the manufacturer

Option C: by adjusting the gain control until optimum picture quality is obtained

Correct Answer is. by the manufacturer

Question Number. 650. Airspeed hold is a

Option A: pitch mode
Option B: lateral mode
Option C: heading mode

Correct Answer is. pitch mode

Question Number. 651. When servicing an RVSM aircraft

Option A: all pitot/static instruments must be serviceable

Option B: the alt alert must be serviceable **Option C:** the alt hold must be serviceable

Correct Answer is. the alt alert must be serviceable

Question Number. 652. An ASI compressibility error correction will be

Option A: Positive Option B: Negative Option C: Both

Correct Answer is. Negative

Question Number. 653. A GNS satellite system transmis

Option A: vertically polarise **Option B:** horizontally polarise **Option C:** right hand circular

Correct Answer is. right hand circular

Question Number. 654. An anti-servo tab

Option A: assists the pilot to move the controls back to neutral

Option B: moves in the same direction as the control surface to assist the pilot **Option C:** moves in the opposite direction to the control surface to assist the pilot

Correct Answer is. assists the pilot to move the controls back to neutral

Question Number. 655. A typical Ratiometer indicating system would use

Option A: 3 phase AC

Option B: Single phase AC for the indicator and transmitter

Option C: Single phase AC for the indicator and DC for the transmitter **Correct Answer is.** Single phase AC for the indicator and transmitter

Question Number. 656. Cat 2 RVR if the alert height is 100 feet will be

Option A: 300 m **Option B:** 400 m **Option C:** 800 m

Correct Answer is. 400 m

Question Number. 657. ADF quadrantal error will be at

Option A: 0 Degrees Option B: 45 Degrees Option C: 90 Degrees

Correct Answer is. 45 Degrees

Question Number. 658. Slats, when stowed, make up part of the wing

Option A: trailing edge

Option B: leading edge lower surface **Option C:** leading edge upper surface

Correct Answer is. leading edge upper surface

Question Number. 659. A plain flap

Option A: When stowed makes up part of the wing trailing edge lower surface **Option B:** When stowed makes up part of the wing trailing edge upper surface

Option C: when deployed increases the camber of the wing

Correct Answer is. when deployed increases the camber of the wing

Question Number. 660. Compass error Q corrections correct

Option A: A error **Option B:** B error **Option C:** C error

Correct Answer is. C error

Question Number. 661. ICAO Standard atmosphere is **Option A:** taken from data measured at the equator **Option B:** taken from data measured at 45 degrees North

Option C: relevant to set parameters

Correct Answer is. taken from data measured at 45 degrees North

Question Number. 662. In a triplex system, if an ILS receiver fails before localizer capture

Option A: No auto land **Option B:** Reverts to cat II

Option C: Continues to auto land

Correct Answer is. Continues to auto land

Question Number. 663. a receiver having an IF of 465 KHz .is tuned to 1300 KHz, which of the following signals could interact with the L O second harmonics to produce a receiver output if no RF amplifier was used

Option A: 3995 KHz Option B: 2230 KHz Option C: 465 KHz

Correct Answer is. 3995 KHz

Question Number. 664. On the ASP how many Rx and Tx can be selected at any one time?

Option A: multiple Rx and only one Tx **Option B:** multiple Rx and multiple Tx **Option C:** only one Rx and only one Tx

Correct Answer is. 3995 KHz

Question Number. 665. The frequency range 300KHz-3 MHz. is called the

Option A: LF band **Option B:** MF band **Option C:** VHF band

Correct Answer is. MF band

Question Number. 666. DME squitter comes from

Option A: DME station Option B: interrogator Option C: test set

Correct Answer is. DME station

Question Number. 667. The decision height on the Radio Altimeter system is adjusted by

Option A: moving a bug on the Radio Altitude indication

Option B: selecting a switch on the control panel **Option C:** moving a bug on the Barometric altimeter

Correct Answer is. moving a bug on the Radio Altitude indication

Question Number. 668. How does the crew select decision height?

Option A: selected on the main altimeter

Option B: Selected on the radio al

Option C: selecting a switch on the control panel **Correct Answer is.** Selected on the radio al

Question Number. 669. What type of signal is used for trigger height trip signals?

Option A: Switchable d.c Option B: Switchable a.c Option C: variable d.c

Correct Answer is. Switchable d.c

Question Number. 670. The AFCS remains in control:

Option A: until 2 seconds after touchdown **Option B:** until reverse thrust is selected **Option C:** until disengaged by flight crew

Correct Answer is. until disengaged by flight crew

Question Number. 671. The plane of polarisation is defined as the plane in which the

Option A: E field lies **Option B:** H field lies

Option C: E and H fields are parallel **Correct Answer is.** E field lies

Question Number. 672. A typical ratiometer indicating system would use

Option A: 3-phase AC

Option B: single phase AC for indicator and transmitter

Option C: single phase AC for indicator and dc for transmitter **Correct Answer is.** single phase AC for indicator and transmitter

Question Number. 673. The stability of an RF oscillator can be improved by

Option A: direct coupling to an RF amplifier

Option B: a buffer amplifier

Option C: tight coupling to an RF amplifier **Correct Answer is.** a buffer amplifier

Question Number. 674. What does a current limiter fuse do?

Option A: Limit current to a predetermined level to prevent circuit damage

Option B: Allow high current to flow for 5 seconds

Option C: React when the circuit gets warm

Correct Answer is. Allow high current to flow for 5 seconds

Question Number. 675. How can ambiguity be avoided during the test of a microwave landing system?

Option A: Reverse the phases

Option B: TO/FRO

Option C: Note scan cycle start time

Correct Answer is. Note scan cycle start time

Question Number. 676. When terminating an aluminum cable, what preparations would be carried out before crimping?

Option A: Just terminate

Option B: Apply a mixture of 50% petroleum jelly and zinc oxide

Option C: Degrease spripped cable

Correct Answer is. Apply a mixture of 50% petroleum jelly and zinc oxide

Question Number. 677. The distance over which VHF communication may be achieved is limited

Option A: by local weather conditions in the troposphere

Option B: to radio line of sight

Option C: to conditions in the ionosphere **Correct Answer is.** to radio line of sight

Question Number. 678. Where is zone 320 on an aircraft according to the ATA 100 system?

Option A: Fin

Option b: Horizontal Stabilizer

Option C: Fuselage Correct Answer is. Fin

Question Number. 679. A Mach meter

Option A: compensates for square law

Option B: does not compensate for square law

Option C: uses a spring and bar

Correct Answer is. compensates for square law

Question Number. 680. An aircraft increases in altitude, the ASI indication remains constant, what will happen to the True airspeed value?

Option A: Increase

Option B: Decrease **Option C:** Remain the same

Correct Answer is. Increase

Question Number. 681. At its resonant frequency, a parallel tuned circuit has

Option A: maximum impedance **Option B:** minimum impedance

Option C: the same impedance as at any other frequency

Correct Answer is. maximum impedance

Question Number. 682. Crystals operate reliably at fundamental frequencies up to

Option A: 1000 MHz.
Option B: 100 MHz.
Option C: 30 MHz.

Correct Answer is. 100 MHZ.

Question Number. 683. The RF resistance of an inductor

Option A: decreases as frequency is increased **Option B:** increases as frequency is increased **Option C:** is independent of frequency

Correct Answer is. is independent of frequency

Question Number. 684. At its resonant frequency, a parallel tuned circuit

Option A: offers minimum impedance

Option B: has minimum voltage developed across it

Option C: has maximum circulating currents

Correct Answer is. has minimum voltage developed across it

Question Number. 685. The aircraft is programmed to leave the glideslope at

Option A: 300 ft

Option B: the decrab phase **Option C:** the start of flare

Correct Answer is. the start of flare

Question Number. 686. In a dual FMS, a failure of one computer will result in

Option A: COMPLETELY blank display on one CDU

Option B: down-grade of the landing category

Option C: no effect on the CDU

Correct Answer is. no effect on the CDU

Question Number. 687. When can the FMS be engaged with the auto throttle?

Option A: Before takeoff **Option B:** After takeoff

Option C: Only with the autopilot engaged

Correct Answer is. Before takeoff

Question Number. 688. Tx output stages are normally run in class C

Option A: because the efficiency is high

Option B: so that the output is rich in harmonics

Option C: as higher gains can be obtained

Correct Answer is. because the efficiency is high

Question Number. 689. Which of the following has the best frequency stability?

Option A: Hartley **Option B:** Colpitts

Option C: Tuned collector tuned base

Correct Answer is. Colpitts

Question Number. 690. A quartz crystal has the characteristics of a

Option A: resistive bridge network **Option B:** high 'Q' resonant circuit **Option C:** pair of tuned circuits

Correct Answer is. high 'Q' resonant circuit

Question Number. 691. Air density compensation requires

Option A: OAT **Option B:** altitude

Option C: altitude and OAT

Correct Answer is. altitude and OAT

Question Number. 692. Time base of PPI display is

Option A: a ramp

Option B: a square wave **Option C:** a trapezoid

Correct Answer is. a trapezoid

Question Number. 693. The image channel ratio is

Option A: response at image channel frequency over response at wanted signal frequency **Option B:** response at image channel frequency over response at 2 nd channel frequency **Option C:** response at wanted channel frequency over response at image channel frequency

Correct Answer is. response at image channel frequency over response at wanted signal frequency

Question Number. 694. Second channel interference could occur if the I/P frequency was at twice the

Option A: L O frequency away from the selected frequency

Option B: I F away from the selected frequency **Option C:** I F away from the L O frequency

Correct Answer is. I F away from the selected frequency

Question Number. 695. The maximum acceptable tuning ratio of an RF amplifier is

Option A: 9:1
Option B: 6:1
Option C: 3:1
Correct Answer is.

Question Number. 696. Single Side Band filters are

Option A: 3 KHz Option B: 1 KHz Option C: 6 KHz

Correct Answer is. 3 KHz

Question Number. 697. Delayed Automatic Gain Control is inoperative, the sensitivity of the receive

Option A: decrease for low signal **Option B:** increase for low signal **Option C:** increase for high signal

Correct Answer is. decrease for low signal

Question Number. 698. Rollout guidance by the rudder is effective to about

Option A: 80 knots Option B: 110 knots Option C: 30 knots

Correct Answer is. 80 knots

Question Number. 699. Go-around mode can be initiated

Option A: after glideslope capture

Option B: at any time **Option C:** below 2000 ft

Correct Answer is. below 2000 ft

Question Number. 700. An integrated auto land system has been selected to Go-around during the auto land

phase, the aircraft will **Option A:** increase speed

Option B: increase speed and rotate nose up

Option C: rotate nose up

Correct Answer is. increase speed and rotate nose up

Question Number. 701. The integrity of an autopilot must be increased when the aircraft is flying at

Option A: higher speeds **Option B:** lower speeds

Option C: approach and landing phases

Correct Answer is. approach and landing phases

Question Number. 702. Vortex ring start requires

Option A: retreating blade stall **Option B:** advancing blade stall **Option C:** power on descent

Correct Answer is. power on descent

Question Number. 703. A receiver with a high I F will successfully reject

Option A: the adjacent/image frequency **Option B:** the 2nd channel/image frequency **Option C:** the 2nd channel/adjacent frequency

Correct Answer is. the 2nd channel/image frequency

Question Number. 704. An I F amplifier unit consist of four amplifiers. The amplifiers are normally coupled

by

Option A: resistor/capacitor coupling **Option B:** pure resistor coupling **Option C:** transformer coupling

Correct Answer is. transformer coupling

Question Number. 705. Manmade noise

Option A: mainly above 12MHz. Option B: only in the LF band Option C: mainly below 12 MHz.

Correct Answer is. mainly below 12 MHz.

Question Number. 706. A receiver having an IF of which of the following signals coulharmonics to produce a

received

Option A: 3995 KHz.
Option B: 2230 KHz.
Option C: 465 KHz

Correct Answer is. 3995 KHz

Question Number. 707. With a Vertical Gyro simulate scanner in left hand position

Option A: tilt up Option B: tilt down Option C: tilt right

Correct Answer is. tilt down

Question Number. 708. Signals used during the flare are

Option A: GS and rad alt

Option B: GS and integrated pitch **Option C:** Rad alt and integrated pitch

Correct Answer is. Rad alt and integrated pitch

Question Number. 709. An auto land is carrid out in which sequence

Option A: GS capture, LOC capture, attitude hold, flare **Option B:** LOC capture, GS capture, Attitude hold, Flare **Option C:** LOC capture, GS capture, Flare, Attitude hold

Correct Answer is. LOC capture, GS capture, Attitude hold, Flare

Question Number. 710. If a fault is detected during an auto land approach, the system will totally disconnect

if it is a

Option A: triplex system
Option B: duplex system
Option C: dual/dual system

Correct Answer is. duplex system

Question Number. 711. A single side b

Option A: High level modulation **Option B:** Low level modulation **Option C:** One half of the high le

Correct Answer is. Low level modulation

Question Number. 712. Three RF amplifiers of is the output?

Option A: 30 dB and 10 KHz Option B: 10 dB and 1000 KHz Option C: 30 dB and 1000 KHz

Correct Answer is. 30 dB and 10 KHz

Question Number. 713. What aircraft system supplies horizon?

Option A: Generator bus

Option B: Normal power, then switches to emergency supply in an emergency

Option C: Battery Bus

Correct Answer is. Battery Bus

Question Number. 714. Flight Director bars controls move up in slow increments, what controls their rate/speed?

Option A: Rate feedback

Option B: Position feedback

Option C: Instrument amplifier gain

Correct Answer is. Instrument amplifier gain

Question Number. 715. Voice clipping

Option A: increases the depth of modulation

Option B: decreases the depth of modulation of high amplitude voice signals

Option C: maintains an average depth of modulation

Correct Answer is. decreases the depth of modulation of high amplitude voice signals

Question Number. 716. A padder capacitor has most efficiency at

Option A: the lowest frequency of the L O **Option B:** the middle frequency of the L O **Option C:** the highest frequency of the L O

Correct Answer is. the lowest frequency of the L O

Question Number. 717. The ATC aerial has a polar diagram which is

Option A: directional
Option B: omnidirectional
Option C: limacon shaped
Correct Answer is. Directional

Question Number. 718. The speech clipping modulating circuit

Option A: increases the average depth of modulation

Option B: clips high amplitude signals **Option C:** cuts out high tone sounds

Correct Answer is. cuts out high tone sounds

Question Number. 719. The Glide-slope signal integrator

Option A: maintains the glide-slope signal **Option B:** increases the glide-slope signal **Option C:** decreases the glide-slope signal

Correct Answer is. decreases the glide-slope signal

Question Number. 720. If the static pressure is varied at too great a rate, the instrument that s most affected

is the

Option A: rate of change indicator

Option B: altimeter

Option C: airspeed indicator

Correct Answer is. rate of change indicator

Question Number. 721. Glide slope gain programming is based on

Option A: pressure altitude

Option B: altitude above MSL and radio altitude

Option C: radio altitude

Correct Answer is. radio altitude

Question Number. 722. Radio waves are said to have line-of-sight propagation

Option A: above about 100 MHz. **Option B:** not below 1000 MHz.

Option C: from about 10 MHz. upwards **Correct Answer is.** above about 100 MHz.

Question Number. 723. API Trim pointers are fed by

Option A: a synchro **Option B:** an RVDT **Option C:** an LVDT

Correct Answer is. an LVDT

Question Number. 724. VHF transmitter output impedance to match with antenna for maximum power

transfer is

Option A: 50 ohms

Option B: 25 to 75 ohms
Option C: 129 ohms

Correct Answer is. 50 ohms

Question Number. 725. A valid interrogation will

Option A: disable the RX, enable the encoder and disable the DME **Option B:** enable the RX, disable the encoder and disable the DME

Option C: disable the R

Correct Answer is. disable the RX, enable the encoder and disable the DME

Question Number. 726. When calibrating an electronic fuel capacitance indicating system, what piece of test

equipment would you use?

Option A: a bridge **Option B:** a decade

Option C: a potentiometer **Correct Answer is.** a bridge

Question Number. 727. To check side lobe suppression

Option A: select ATC on ASP **Option B:** use a ramp test set **Option C:** carry out a self-test

Correct Answer is. select ATC on ASP

Question Number. 728. On an FMCS CDU, you can select

Option A: N 1 Thrust **Option B:** VNAV **Option C:** VOR

Correct Answer is. N 1 Thrust

Question Number. 729. What is an Ideal VSWR on a Radio Transmission line?

Option A: 1:1 **Option B:** 2:1 **Option C:** 1.5:1

Correct Answer is. 1:1

Question Number. 730. What is Track angle?

Option A: The angle, measured clockwise, between true north and the aircraft ground track **Option B:** The angle, measured clockwise, between true north and the aircraft longitudinal axis

Option C: The angle between true heading (HGD) and ground track

Correct Answer is. The angle, measured clockwise, between true north and the aircraft ground track

Question Number. 731. RNAV accuracy is

Option A: +/- 5nm **Option B:** +/- 5nm 95% **Option C:** +/- 1nm 85%

Correct Answer is. +/- 5nm 95%

Question Number. 732. In colour WXR AGC is set

Option A: in workshop

Option B: automatically on receiver noise level

Option C: by operator on manually adjusted gain control **Correct Answer is.** automatically on receiver noise level

Question Number. 733. Tail rotor effects the helicopter in

Option A: Vertical
Option B: Horizontal
Option C: Pitch and Roll

Correct Answer is. Horizontal

Question Number. 734. With an ATC code of 0600 selected, the pulses transmitted are

Option A: B 2 and B 4 Option B: B 1 and B 5 Option C: B 0 and B 6

Correct Answer is. B 2 and B 4

Question Number. 735. What is needed for RHO-RHO navigation?

Option A: 2 DME signals **Option B:** 1 VOR and

Option C: 1 VOR /DME signal Correct Answer is. B 2 and B 4

Question Number. 736. The relationship between LORAN master and slave transmitters.

Master frequency

Option A: higher than slave **Option B:** lower than slave **Option C:** same as slave

Correct Answer is. same as slave

Question Number. 737. The loop aerial polar diagram is a

Option A: c ardioid Option B: figure 8 Option C: c ircle

Correct Answer is. figure 8

Question Number. 738. Single Side Band filtersare

Option A: 3 KHz Option B: 1 KHz Option C: 6 KHz

Correct Answer is. 3 KHz

Question Number. 739. Delayed Automatic Gain Control is inoperative, the sensitivity of the receiver will

Option A: decrease for lowsignal **Option B:** increase for low signal **Option C:** increase for high signal

Correct Answer is. decrease for lowsignal

Question Number. 740. A radar pulse takes 308 microseconds to return, what is the target distance

Option A: 12.5 Nautical miles Option B: 25 Nautical miles Option C: 30 Nautical miles

Correct Answer is. 25 Nautical miles

Question Number. 741. A receiver in which selected converted to a single frequen

Option A: Wideband TRF

Option B: Multi-channel receive

Option C: superhet rece

Correct Answer is. superhet rece

Question Number. 742. The noise factor of a receiveis 15:1 and O/P signal to

Option A: 0.8 Option B: 1.25 Option C: 2.5

Correct Answer is. 1.25

Question Number. 743. A receiver with a high IF will successfully reject

Option A: the adjacent/image frequency **Option B:** the 2nd channel/image frequency **Option C:** the 2nd channel/adjacent frequency

Correct Answer is. the 2nd channel/image frequency

Question Number. 744. The frequency spectrum of noise is

Option A: infinitely wide

Option B: restricted to the audio band Option C: restricted to the HF band Correct Answer is. infinitely wide

Question Number. 745. Man made noise causes interference

Option A: mainly above 12 MHz. Option B: only in the LF band Option C: mainly below 12 MHz.

Correct Answer is. mainly below 12 MHz.

Question Number. 746. The capacitance fuel contents system works on the principle of

Option A: capacitive reactance

Option B: resistance **Option C:** capacitance

Correct Answer is. Capacitance

Question Number. 747. Rad Alt failure effects which system?

Option A: Mode S transponder

Option B: GPWS

Option C: nav management systems

Correct Answer is. GPWS

Question Number. 748. A Mode S equipped aircraft has its RA area breached by a Mode A only equipped aircraft. What warning does the Mode S aircraft get?

Option A: TA visual and Traffic aural warning

Option B: RA visual and climb or descend aural warning

Option C: ATA visual warning only

Correct Answer is. TA visual and Traffic aural warning

Question Number. 749. A blade of a Helicopter Main Rotor is

Option A: highly cambered
Option B: symmetrically camber
Option C: reverse camber

Correct Answer is. symmetrically camber

 $\textbf{Question Number.}\ 750.\ What is the maximum value of installation tester that may be used on a fuel contents$

system?
Option A: 300 Volt

Option A: 300 Volt

Option C: You cannot use one on the fuel contents system

Correct Answer is. You cannot use one on the fuel contents system

Question Number. 751. The glideslope signal integrator

Option A: maintains glideslope signal **Option B:** increases glideslope signal **Option C:** decreases glideslope signal

Correct Answer is. maintains glideslope signal

Question Number. 752. On a Cat 3 B landing the localizer signal is used at which phase?

Option A: Rollout
Option B: Flare
Option C: Touchdown
Correct Answer is. Rollout

Question Number. 753. ARINC 429 operates at which speed?

Option A: 13 kb/s or 100 kb/s

Option B: 2 Mb/s **Option C:** 1.3 Mb/s

Correct Answer is. 13 kb/s or 100 kb/s

Question Number. 754. An aircraft landing on QFE the altimeter will

Option A: read zero on touchdown
Option B: read airfield height on landing

Option C: read local area pressure

Correct Answer is. read zero on touchdown

Question Number. 755. A rate gyro has

Option A: one degree of freedom along the lateral axis

Option B: a calibrated spring to restrain movement about longitudinal axis

Option C: a calibrated spring bet

Correct Answer is. a calibrated spring to restrain movement about longitudinal axis

Question Number. 756. Using the fast erection switch on a standby horizon prior to the flag clearing may cause

Option A: the instrument to erect false datum

Option B: application of a large torque to the control phase windings causing failure

Option C: You must use the Fast erection switch to clear the flag

Correct Answer is. application of a large torque to the control phase windings causing failure

Question Number. 757. Water contamination in a capacitance fuel system will

Option A: cause contents to overhead **Option B:** cause contents to under read

Option C: short out capacitance probe and trip CB **Correct Answer is.** cause contents to overhead

Question Number. 758. A Loran C transmission consists of

Option A: 6 pulses each 270 microseconds long **Option B:** 8 pulses each 270 microseconds long

Option C: 6 pulses with a total pulse train length of 8.27 ms **Correct Answer is.** 8 pulses each 270 microseconds long

Question Number. 759. ARINC 629 operates at which speed?

Option A: 1300 Kb/s Option B: 1000 Kb/s Option C: 2000 Kb/s

Correct Answer is. 2000 Kb/s

Question Number. 760. With an increase in fwd velocity of a helicopter the increase in parasitic drag will

cause the fuselage attitude to

Option A: remain level Option B: pitch up Option C: pitch down

Correct Answer is. pitch down

Question Number. 761. On a helicopter rotor disc lift happens

Option A: immediately
Option B: 90 degrees later
Option C: 180 degrees later
Correct Answer is. Immediately

Question Number. 762. Transmission line losses have what effect on VSWR

Option A: Increase
Option B: Decrease
Option C: Do not affect

Correct Answer is. Do not affect

Question Number. 763. GPS L 1 and L 2 signals are

Option A: Bi phase 50 bit/ sec **Option B:** 10.2 KHZ send rate **Option C:** 1KHz send rate

Correct Answer is. Bi phase 50 bit/sec

Question Number. 764. ILS indicator is

Option A: parallel to filters Option B: series with filters Option C: across filters

Correct Answer is. series with filters

Question Number. 765. Voice/Range switch selected to range

Option A: allows NAV/ADF and DME through cancelling out voice spectrum

Option B: allows NAV/ADF and cancels out voice spectrum

Option C: allows noise spectrum through

Correct Answer is. allows NAV/ADF and cancels out voice spectrum

Question Number. 766. Altitude hold mode, what signal is washed out?

Option A: Altitude **Option B:** Pitch angle **Option C:** Rate of climb

Correct Answer is. Pitch angle

Question Number. 767. Audio select panel voice switch

Option A: allows NAV, and ADF through

Option B: allows NAV, ADF, and DME through **Option C:** allows NAV, and DME through

Correct Answer is. allows NAV, ADF, and DME through

Question Number. 768. ADF, quadrature error are eliminated by placing attenuators

Option A: Across loop aerial

Option B: Across sense aerial **Option C:** Across goniometer

Correct Answer is. Across loop aerial

Question Number. 769. With AGC inop, sensitivity will be effected to signals with

Option A: low signal strength **Option B:** High signal strength

Option C: Both

Correct Answer is. low signal strength

Question Number. 770. Lift in a helicopter is a result of

Option A: Angle of attack X velocity squared and forward speed

Option B: Angle of attack X velocity squared **Option C:** Pitch X square root of speed

Correct Answer is. Angle of attack X velocity squared

Question Number. 771. The versine signal is used in the

Option A: pitch channel only

Option B: roll channel

Option C: pitch and roll channel

Correct Answer is. pitch channel only

Question Number. 772. The stall margin mode is controlled by

Option A: EPR limits

Option B: Speed bug cursors

Option C: A O A and flap position sensors

Correct Answer is. A O A and flap position sensors

Question Number. 773. In a dual FMS, a failure of one computer will result in

Option A: a blank display on one CDU

Option B: a down grade of the landing category

Option C: no effect on the CDU di

Correct Answer is. a blank display on one CDU

Question Number. 774. When a compass is in the slave mode

Option A: the azimuth gyro will wander uncompensated

Option B: azimuth gyro will be corrected by long term monitoring of the flux valve **Option C:** the azimuth gyro is slaved to the annunciator or synchronizer circuit

Correct Answer is. azimuth gyro will be corrected by long term monitoring of the flux valve

Question Number. 775. Versine signal is governed by

Option A: roll **Option B:** pitch **Option C:** yaw

Correct Answer is. Roll

Question Number. 776. Compass error remaining after all the corrections, which is used for entry on the

deviation

Option A: 2 degrees Option B: 3 degrees Option C: 5 degrees

Correct Answer is. 3 degrees

Question Number. 777. Anti cross-talk network for unwanted signals uses

Option A: attenuation first then amplification

Option B: amplification first the

Option C: no attenuation but amplification

Correct Answer is. attenuation first then amplification

Question Number. 778. In audio clipping

Option A: vowels are strengthened relative to the remaining signal **Option B:** vowels are attenuated relative to the remaining signal **Option C:** there is no change in relative strength of vowels

Correct Answer is. vowels are attenuated relative to the remaining signal

Question Number. 779. For a Vertical Gyro which is moved in pitch, which gimble would be moved to correct

the pitch movement?

Option A: Lateral

Option B: Longitudinal

Option C: Normal

Correct Answer is. Longitudinal

Question Number. 780. If one FMS fails in a dual system

Option A: system operation will not be affected **Option B:** FMS CDU on fail side goes blank

Option C: FMS display transfers automatically from serviceable computer

Correct Answer is. FMS CDU on fail side goes blank

Question Number. 781. After a change in pitch of a rotor blade the blade will be at maximum flap at

Option A: 90 ° Option B: 180° Option C: 0 °

Correct Answer is. 90 °

Question Number. 782. When approaching the speed of s

Option A: pressure above the wing the wing in places

Option B: pressure above the wing equals the pressure below the wing

Option C: pressure above the wing can never exceed the pressure below the wing

Correct Answer is. pressure above the wing the wing in places

Question Number. 783. A Mode S transponder makes a Mode A/C only call, what is the length of the P 2

pulse?

Option A: 0.8 ps **Option B:** 1.6 ps **Option C:** 2 p s

Correct Answer is. 0.8 ps

Question Number. 784. ATCRBS reply pulses are

Option A: 0.8 ps wide **Option B:** 0.45 p s wide **Option C:** 1.45 p s wide

Correct Answer is. 0.45 p s wide

Question Number. 785. What is the time between the F2 framing pulse and the SPI?

Option A: 1.45 ps Option B: 2 ps Option C: 4.35 ps

Correct Answer is. 4.35 ps

Question Number. 786. Range resolution in a radars

Option A: shorter Pulse Option B: longer Pulse Option C: narrower Beam

Correct Answer is. shorter Pulse

Question Number. 787. What is the time between the ATCRBS reply

Option A: 21 p s Option B: 20.3 ps Option C: 21.7 ps

Correct Answer is. 20.3 ps

Question Number. 788. Rear navigation lights have

Option A: steady white light with a viewing angle of 60 degrees **Option B:** flashing white light with a viewing angle of 60 degrees **Option C:** steady white light with a viewing angle of 140 degrees

Correct Answer is. steady white light with a viewing angle of 140 degrees

Question Number. 789. Runway turn off lights have a viewing angle of

Option A: 50 degrees Option B: 110 degrees Option C: 160 degrees

Correct Answer is. 50 degrees

Question Number. 790. Using the following: FS 345, RWS 45, where is this located?

Option A: 345" back from the nose, 45" from the longitudinal center line of the right wing

Option B: 345" back from the datum line, 45" from the longitudinal center line of the right wing

Option C: 345" back from the nose and 45" along the right wing

Correct Answer is. 345" back from the nose and 45" along the right wing

Question Number. 791. When carrying out an insulation resistance test of a pitot probe you would expect

Option A: 1 Megohms when cold

Option B: 3 Megohms when hot and when cooled down

Option C: 5 Megohms

Correct Answer is. 3 Megohms when hot and when cooled down

Question Number. 792. Slewing of the INS gimballed platform simulates in-flight attitude changes up to

Option A: 360 deg in roll and 85 deg in pitch **Option B:** 71 deg in pitch and 180 deg in azimuth **Option C:** 110 deg in pitch and 360 deg in azimuth

Correct Answer is. 71 deg in pitch and 180 deg in azimuth

Question Number. 793. Cyclic shift of the stator connections in a torque synchro results in

Option A: output datum advanced 180 deg

Option B: data to coincide

Option C: output datum advanced 240 deg

Correct Answer is. output datum advanced 240 deg

Question Number. 794. Gimbal lock in a displacement gyro occurs when

Option A: spin axis becomes coincident with any of the axis of freedom

Option B: gimbal rings are mutually not at right angles to each other

Option C: bearing friction causes gimbal system to unbalance

Correct Answer is. spin axis becomes coincident with any of the axis of freedom

Question Number. 795. In a turn co-ordinator the output axis of the rate gyro is

Option A: parallel to the longitudinal axis of the aircraft

Option B: set at 30 deg to the

Option C: parallel to the lateral axis to make the gyro sensitive to rolling and banking as well as turning

Correct Answer is. set at 30 deg to the

Question Number. 796. All fly to information in an EFIS System is displayed in

Option A: White **Option B:** Magenta **Option C:** Green

Correct Answer is. Magenta

Question Number. 797. In an EICAS display all scales, normal operating range of pointers and digital

readouts a

Option A: White Option B: green Option C: Magenta

Correct Answer is. White

Question Number. 798. The scratch pad in an FMS CDU occupies

Option A: 24 character spaces of the bottom line

Option B: the last 12 character spaces of the bottom line **Option C:** first 12 character spaces of the bottom line

Correct Answer is. first 12 character spaces of the bottom line

Question Number. 799. The term oblate spheroid refers to

Option A: tilting of the earth about the axis **Option B:** flattening at the Polar Regions

Option C: the network of meridians imagined to cover the earth

Correct Answer is. flattening at the Polar Regions

Question Number. 800. The horizontal angle contained between the true and the magnetic meridian at any

place is

Option A: inclination
Option B: declination
Option C: angle of dip

Correct Answer is. Declination

Question Number. 801. Thermocouple combination mostly used for exhaust gas temperature indications are

Option A: Copper-Constantan
Option B: Iron-Constantan
Option C: Chromel-Alumel

Correct Answer is. Chromel-Alumel

Question Number. 802. Wing loading of an aircraft

Option A: varies with dynamic loading due to air currents

Option B: is independent of altitude **Option C:** decreases with density

Correct Answer is. is independent of altitude

Question Number. 803. Glide slope frequency is

Option A: 108.10-119.95 **Option B:** 328.6-335.4 **Option C:** 108.00-118

Correct Answer is. 328.6-335.4

Question Number. 804. ADF operation range is at

Option A: MF band
Option B: HF band
Option C: VHF band

Correct Answer is. MF band

Question Number. 805. ADF system sense aerial is

Option A: null

Option B: null Cardioid
Option C: rotating figure of 8
Correct Answer is. null Cardioid

Question Number. 806. Outer marker frequency is

Option A: 3000 hz Option B: 1300 hz Option C: 400 hz

Correct Answer is. 400 hz

Question Number. 807. Tripping the GCR will

Option A: trip the GCB

Option B: de-excite the generator

Option C: both A & B

Correct Answer is. Both A & B

Question Number. 808. In a synchronous motor the rotor is

Option A: excited by DC Option B: excited by AC Option C: self excited

Correct Answer is. excited by DC

Question Number. 809. the difference between synchronous speed and rotor speed is called

Option A: differential speed

Option B: loss
Option C: slip

Correct Answer is. Slip

Question Number. 810. A squirrel cage rotor will be found in

Option A: an induction motor Option B: a synchronous motor Option C: a hysteresis motor

Correct Answer is. an induction motor

Question Number. 811. Airspeeds above the speed of sound, but not exceeding 4 times the speed of sound are

Option A: hypersonic

Option B: supersonic **Option C:** hyposonic

Correct Answer is. Supersonic

Question Number. 812. If the pilot reports auto land failure, and no fault found during ground checks. What action do you take?

Option A: Sign off as no fault found

Option B: Ask Pilot to carry out CAT 1 auto land

Option C: Ask pilot to carry out CAT 1 or CAT 2 auto land **Correct Answer is.** Ask Pilot to carry out CAT 1 auto land

Question Number. 813. What is a fairlead?

Option A: A guide for control cables running through bulkheads etc

Option B: A guard to prevent control cables coming off pulleys

Option C: An extension to a control cable

Correct Answer is. A guide for control cables running through bulkheads etc

Question Number. 814. FMC provides data envelope for

Option A: ATC
Option B: TCAS
Option C: GPWS

Correct Answer is. GPWS

Question Number. 815. In a capacitive fuel contents system changes in temperature are compensated by

Option A: placing a capacitor in parallel with the tank unit capacitance

Option B: adjustment of a potentiometer

Option C: placing a resistor in series with the tank unit capacitance

Correct Answer is. placing a capacitor in parallel with the tank unit capacitance

Question Number. 816. In an EICAS system, operation of the cancel switch

Option A: removes all messages from the display **Option B:** removes caution and advisory messages

Option C: removes advisory messages

Correct Answer is. removes caution and advisory messages

Question Number. 817. The true airspeed output from a CADC will be determined by information fed from

Option A: The Pitot and Static sensors

Option B: The Mach unit

Option C: The Mach unit and Temperature Sensor

Correct Answer is. The Mach unit and Temperature Sensor

Question Number. 818. The alignment position of an IR Mode Selector unit enables

Option A: the accelerometers to correct the axes

Option B: sets the start co- ordinates

Option C: Gyro run up, levelling, azimuth determination

Correct Answer is. Gyro run up, levelling, azimuth determination

Question Number. 819. Pin Programming is allowed

Option A: under CAA Rules

Option B: to provide reference to FMS computer as to which side of datum it is fitted to

Option C: to enter aircraft performance data base

Correct Answer is. to provide reference to FMS computer as to which side of datum it is fitted to

Question Number. 820. The Janus beam is for

Option A: working out acceleration **Option B:** levelling the aerial

Option C: to compensate for attitude changes

Correct Answer is. to compensate for attitude changes

Question Number. 821. Absolute pressure of 25 psi is

Option A: 39.7 PSI Option B: 14 PSI Option C: 10.3 PSI

Correct Answer is. 10.3 PSI

Question Number. 822. JAR OPS states that the time an FDR recording must be kept after accident or incident

Option A: 30 days after incident 60 days after accident

Option B: 60 days **Option C:** 30 Days

Correct Answer is. 60 days

Question Number. 823. Coefficient A correction is carried out

Option A: before C after B
Option B: after B and after C
Option C: before B and after C

Correct Answer is. after B and after C

Question Number. 824. A combined ASI indicates Mach

Option A: above 0.15 **Option B:** above 10000 feet

Option C: all the time airspeed present

Correct Answer is. all the time airspeed present

Question Number. 825. Compass compensator units have greatest effect when the magnets are

Option A: Parallel
Option B: 45 degrees
Option C: 90 degrees

Correct Answer is. 90 degrees

Question Number. 826. Sonar Locator Beacons are a

Option A: ICAO Requirement Option B: ANO Requirement Option C: Company Requi

Correct Answer is. ICAO Requirement

Question Number. 827. INS power is provided by

Option A: DC normal and DC emerge Option B: AC normal and DC emergency Option C: AC normal and AC emergen y

Correct Answer is. AC normal and DC emergency

Question Number. 828. Aircraft is 9000 ft. When is it out of VHF range

Option A: 100 nm Option B: 120 nm Option C: 140 nm

Correct Answer is. 140 nm

Question Number. 829. CVR is unserviceable

Option A: The aircraft cannot fly unless required data is recorded by FDR

Option B: The aircraft can fly for 72 hours since unserviceability

Option C: The aircraft can fly for 4 days since unserviceability

Correct Answer is. The aircraft can fly for 72 hours since unserviceability

Question Number. 830. A semi monocoque structure is one which has

Option A: an external load bearing skin with no internal load bearing structure **Option B:** an external load bearing skin with internal load bearing structure

Option C: a tubular internal structure fabric covered

Correct Answer is. an external load bearing skin with internal load bearing structure

Question Number. 831. Which of the following is correct?

Option A: feedback = error - demand Option B: error = demand - feedback Option C: demand = feedback - error

Correct Answer is. error = demand – feedback

Question Number. 832. A member designed to take mainly compressive load is called a

Option A: tie
Option B: beam
Option C: strut

Correct Answer is. Strut

Question Number. 833. Longitudinal members in a semi-monocoque fuselage supporting the skin between longerons are called

Option A: ribs
Option B: stringers

Option C: frames

Correct Answer is. Stringers

Question Number. 834. A modern large transport aircraft fuselage would be normally be constructed from

Option A: warren truss structure **Option B:** semi monocoque structure

Option C: geodetic structure

Correct Answer is. semi monocoque structure

Question Number. 835. If the common portion of the winding of a autotransformer used to supply a 26 vac light bulb from a 115 vac busbar goes open circuit the light bulb will

Option A: flicker Option B: go dim Option C: blow

Correct Answer is. Blow

Question Number. 836. MCDUs

Option A: are used to transmit dat to ground

Option B: enable dialog with cent

Option C: store fault data

Correct Answer is. enable dialog with cent

Question Number. 837. The uploading function on a on -board maintenance system enables

Option A: data to be taken from on-board maintenance system

Option B: the on-board data base to be updated

Option C: the on-board maintenance system to be interrogated by the engineer

Correct Answer is. the on-board data base to be updated

Question Number. 838. If the output of the generator starts to fall, a pulse width modulated field supply will

Option A: increase the mark-to -space ratio **Option B:** decrease the mark-to-space ratio **Option C:** double the mark-to-space ratio

Correct Answer is. increase the mark-to -space ratio

Question Number. 839. In a starter generator which coil is used for starting?

Option A: Shunt, series and compensating windings

Option B: series compensating windings **Option C:** Shunt compensating windings

Correct Answer is. Shunt, series and compensating windings

Question Number. 840. A gate valve is installed in a vacuum system is to prevent

Option A: back pressure due to engine surge **Option B:** oil entering gyro when shut down **Option C:** reverse flow due to engine backfire

Correct Answer is. oil entering gyro when shut down

Question Number. 841. Normal vertical minimum separation allowed is

Option A: 800 ft Option B: 1000 ft Option C: 2000 ft

Correct Answer is. 2000 ft

Question Number. 842. The venturi tubes in a vacuum instrument are measured in

Option A: Millibars

Option B: Inches of Mercury

Option C: PSI

Correct Answer is. Inches of Mercury

Question Number. 843. Before processing an AM USB signal what needs to be done?

Option A: Carrier added
Option B: Carrier removed
Option C: Carrier integrated
Correct Answer is. Carrier added

Question Number. 844. On power up, IRS

Option A: obtains latitude from previous position **Option B:** compares longitude from previous position

Option C: obtains both from previous position

Correct Answer is. compares longitude from previous position

Question Number. 845. The instrument supplied with pitot and is affected by altitude is a

Option A: ASI Option B: VSI

Option C: Mach Meter

Correct Answer is. Mach Meter

Question Number. 846. Speed mode stall margins are governed by

Option A: AOA and flap position Option B: Pitch angle and speed Option C: AOA and speed

Correct Answer is. AOA and flap position

Question Number. 847. When performing an ADF bearing check, commercial stations

Option A: can be used

Option B: can be used in addition to ADF nav stations
Option C: can not be used as they are the wrong frequency
Correct Answer is. can be used in addition to ADF nav stations

Question Number. 848. A fuel system that corrects fuel SG is calibrated in

Option A: Pounds or KGs

Option B: Litres
Option C: Gallons

Correct Answer is. Pounds or KGs

Question Number. 849. DME interrogation is carried out

Option A: 63 KHz above transmitted frequency **Option B:** 63 KHz below transmitted frequency

Option C: 63 KHz above or below transmitted frequency

Correct Answer is. 63 KHz above or below transmitted frequency

Question Number. 850. In ground mode the FMS uses which of the following for velocity calculations?

Option A: IRS

Option B: RHO-RHO
Option C: RHO-THETA
Correct Answer is. IRS

Question Number. 851. Component P relates to

Option A: coefficient A
Option B: coefficient B
Option C: coefficient C

Correct Answer is. coefficient B

Question Number. 852. During take off with auto throttle engaged, the auto throttle sensor fails, THR CLP is annunciated on the mode annunciator panel when

Option A: aircraft leaves ground

Option B: a pre-determined rad alt setting

Option C: V 2, as determined by the autothrottle computer

Correct Answer is. aircraft leaves ground

Question Number. 853. Confirmation of the correct operation of an ATC transponder ident function, is verified by

Option A: use of a ramp test set

Option B: observation of the ATC transponder control head ident light

Option C: telephone contact with the receiving ATC cell

Correct Answer is. use of a ramp test set

Question Number. 854. IRS serviceability for in-service drift is ascertained by

Option A: 3+3t

Option B: CDU fault code interrogation

Option C: apparent drift divided by flight time

Correct Answer is. 3+3t

Question Number. 855. In a IRS system the accelerometer is double interrogated for

Option A: distance
Option B: acceleration
Option C: velocity

Correct Answer is. Distance

Question Number. 856. During an ACARS transmission a 1 is generated by

Option A: the +ve half of a 1200 hz waveform **Option B:** the -ve half of a 1200 hz waveform

Option C: a 2400 hz waveform

Correct Answer is. the -ve half of a 1200 hz waveform

Question Number. 857. ACARS transmits it's data using

Option A: hexadecimal code
Option B: binary code
Option C: octal code

Correct Answer is.

Question Number. 858. In flight mode, the FMS preference of data source is

Option A: IRS, RHO-RHO, RHO-THETA **Option B:** RHO-RHO, IRS, RHO-THETA **Option C:** RHO-THETA, RHO-RHO, IRS

Correct Answer is. IRS, RHO-RHO, RHO-THETA

Question Number. 859. In aileron control

Option A: the up going aileron moves further than down going aileron **Option B:** the down going aileron moves further than up going aileron

Option C: it is assisted by the rudder

Correct Answer is. the up going aileron moves further than down going aileron

Question Number. 860. RNAV uses which inputs?

Option A: IRS, ADF, VOR, DME Option B: ADF, GPS, VOR Option C: IRS, VOR, GPS, DME

Correct Answer is. IRS, VOR, GPS, DME

Question Number. 861. To calibrate a temp bulb **Option A:** connect decade box in series with bulb **Option B:** connect decade box to power supply

Option C: disconnect temp bulb and install decade box in its place

Correct Answer is.

Question Number. 862. Janus in doppler radar Option A: Adjusts signal for overwater flight Option B: allows adjustment for antenna pitch Option C: adjusts for lateral and vertical steering

Correct Answer is. allows adjustment for antenna pitch

Question Number. 863. ATC altitude readout is

Option A: series Tx with binary encoding Option B: series Tx with octal encoding Option C: parallel Tx with binary encoding

Correct Answer is.

Question Number. 864. If radio deviation is fed only to the autopilot roll hannel what will happen?

Option A: Aircraft will fly in circles

Option B: Aircraft will drift from centreline **Option C:** Aircraft will fly parallel to centreline **Correct Answer is.** Aircraft will fly in circles

Question Number. 865. Attenuation in a co-axial cable

Option A: increases with frequency increase **Option B:** decreases with frequency decrease **Option C:** is not affected by frequency

Correct Answer is. increases with frequency increase

Question Number. 866. Stab trim goes into high speed mode when

Option A: Flaps are extended
Option B: Flaps are retracted
Option C: cruise altitude is reached
Correct Answer is. Flaps are retracted

Question Number. 867. A standby artificial horizon is a

Option A: space gyro Option B: earth gyro Option C: free gyro

Correct Answer is. earth gyro

Question Number. 868. Pitot static lines in helicopters

Option A: are made of stainless steel, and must withstand twice normal working pressure

Option B: must provide an accurate indication of the flight regime below 20 knots

Option C: must provide accurate information over the helicopter certified flight envelope **Correct Answer is.** must provide an accurate indication of the flight regime below 20 knots

Question Number. 869. EGPWS mode 2 announces

Option A: sink rate

Option B: whoop whoop pull up

Option C: too low flaps

Correct Answer is. whoop whoop pull up

Question Number. 870. The maximum power developed in a radar system waveguide is controlled by

Option A: the minimum size of the slot **Option B:** the maximum size of the slot **Option C:** It is not affected by slot size

Correct Answer is.

Question Number. 871. Altitude hold, when engaged, provides a washout input to the?

Option A: vertical gyro **Option B:** roll channel

Option C: autopilot pitch servo

Correct Answer is. autopilot pitch servo

Question Number. 872. An electro-magnetic microphone requires which type of input

Option A: dc
Option B: ac
Option C: none

Correct Answer is. none

Question Number. 873. Leakage of a static line during a pitot static test (altitude increasing) would be indicated by

Option A: VSI showing rate of climb
Option B: VSI showing rate of descent
Option C: VSI remaining in a fixed position
Correct Answer is. VSI showing rate of climb

Question Number. 874. Alpha angle relates to which system?

Option A: Angle of attack system
Option B: Mach trim system
Option C: Flap blowback system

Correct Answer is. Angle of attack system

Question Number. 875. When a standby compass is replaced, on installation the compensator magnets should be set to

Option A: the same setting as the removed compass

Option B: the neutral setting on the new unit **Option C:** maximum setting on the new unit

Correct Answer is. the neutral setting on the new unit

Question Number. 876. Compensator magnets in a standby compass exert greatest influence at

Option A: 90 degrees Option B: 45 degrees

Option C: when parallel to each other

Correct Answer is.

Question Number. 877. If the static vent is leaking into cabin pressurised space when the aircraft is at altitude, mach meter will indicate

Option A: an increase Option B: a decrease Option C: no change Correct Answer is.

Question Number. 878. The FBW system uses two elevator and aileron computers

(ELACs)

Option A: this is to provide redundancy

Option B: they provide alternate control of the elevators if spoiler and elevator computers (SECs) fail

Option C: each computer achieves control and monitoring of the three electric motors which power the trim able horizontal stabilizer (THS)

Correct Answer is.

Question Number. 879. In a minimum speed protection mode the auto throttle uses signals derived from the angle of attack (AOA) sensors and

Option A: landing gear position sensors to maintain the aircraft speed above stall

Option B: flap position sensors to maintain the minimum safe approach speed

Option C: flap and computer stall margin speed circuits to maintain the correct angle of attack within the stall margin **Correct Answer is.**

Question Number. 880. A versine signal is typically fed from the roll channel

Option A: to adjust the roll angle to suit the approach turn during auto land

Option B: and modified by True Air Speed (TAS) and flap position signals to adjust for loss of lift during a turn

Option C: and modified by aircraft attitude and pitch rate signals to limit the pitch angle during approach

Correct Answer is.

Question Number. 881. What is the main operating principle of MLS?

Option A: phase shift between Tx and Rx

Option B: time difference between TO and FRO pulse

Option C: signal strength (mV) difference between left and right beam

Correct Answer is. time difference between TO and FRO pulse

Question Number. 882. How does a Rx know whether an ILS or a VOR frequency has been selected?

Option A: Manually selected by operator

Option B: Logic control circuit in control unit

Option C: A different receiver is used

Correct Answer is. Logic control circuit in control unit

Question Number. 883. What is the purpose of the current transformer on a Neutral phase of an AC generator?

Option A: Negative phase sequencing

Option B: Open phase

Option C: Differential protection

Correct Answer is. Differential protection

Question Number. 884. An aircraft is on course on an ILS Localizer. What is the depth of modulation?

Option A: zero Option B: 20% Option C: 50%

Correct Answer is.

Question Number. 885. What is the term used for the amount of water in the atmosphere?

Option A: Relative humidity **Option B:** Absolute humidity

Option C: Dew point

Correct Answer is. Absolute humidity

Question Number. 886. How is the flight deck informed of an ACARS transmission?

Option A: SELCAL

Option B: ONSIDE VHF T/R **Option C:** A double chime

Correct Answer is. ONSIDE VHF T/R

Question Number. 887. EFIS display ,SG 1 + SG 2 are for captain and FO displays what is the purpose of SG 3?

Option A: Backup for SG 1 and 2 **Option B:** ECAM upper display **Option C:** ECAM lower display

Correct Answer is. Backup for SG 1 and 2

Question Number. 888. The compensator tank unit in a fuel system adjusts fuel readings for

Option A: SG of fuel Option B: permittivity Option C: zero reading Correct Answer is.

Question Number. 889. How do you reset a GCR trip?

Option A: Manually from the flight deck

Option B: Automatically once the fault goes away

Option C: Manually at the GCU

Correct Answer is.

Question Number. 890. Peak power = 10 kW, duty cycle = 2.4 ms, pulse duration =6 microseconds. What is mean power?

Option A: Approx .4 W

Option B: 14 W Option C: 24 W Correct Answer is.

Question Number. 891. In a FBW system, a complete failure of the electronic flight control system in pitch

Option A: is not possible because of the built-in redundancy for all elements

Option B: would require the aircraft to be manually controlled in pitch using pitch trim wheel

Option C: would cause the captain's sidestick controller to take over pitch functions

Correct Answer is. would require the aircraft to be manually controlled in pitch using pitch trim wheel

Question Number. 892. Capture of a localizer beam is normally dependent on a change of bank angle command based on

Option A: airspeed, deviation and altitude

Option B: attitude, distance from transmitter and runway heading

Option C: ground speed, intercept angle and distance form beam

Correct Answer is. attitude, distance from transmitter and runway heading

Question Number. 893. A control wheel action in roll, with the autopilot engaged, operates a transducer which outputs a signal

Option A: via a force level detector, which on changeover, cancels attitude hold and feeds a supply allowing the pilot gradual and increasing bank angle control

Option B: which disengages the autopilot allowing total manual freedom of operation and requires no re-engage action on completion

Option C: which on changeover, causes the aircraft to roll wings level through a supply feeding to a point between the roll rate limiter and the EHSV, allowing the pilot total freedom of control

Correct Answer is. via a force level detector, which on changeover, cancels attitude hold and feeds a supply allowing the pilot gradual and increasing bank angle control

Question Number. 894. The roll-down solid state switch in a typical flight control computer is designed to

Option A: roll down the trim integrator output to zero allowing the aircraft to wings level from an angle of up to ten degrees

Option B: roll down the attitude integrator output to zero allowing the aircraft to wings level from an angle of up to five degrees

Option C: apply a nose down signal to the aircraft within two seconds of main wheel touchdown during auto land **Correct Answer is.**

Question Number. 895. Engaging an autopilot to command with the flight director on causes the autopilot to engage to the existing flight director roll mode except if the flight director is in

Option A: go-around, the command mode is heading hold

Option B: glide-slope, the command mode is flight level change

Option C: take-off, the command mode is speed

Correct Answer is.

Question Number. 896. The Dutch roll filter used on most yaw damper systems operates with a demodulator and modulator in series, between which is an electronic circuit. this circuit is a

Option A: wide band pass filter featuring an integrated output

Option B: wide band pass filter featuring a differentiate

output

Option C: narrow band filter featuring a differentiate output

Correct Answer is. narrow band filter featuring a differentiate output

Question Number. 897. During tests on the yaw damper servo actuator, the output shaft constantly over-runs its desired displacement. A probable cause is that the

Option A: detent spring has lost its tension

Option B: position LVDT (linear variable differential transformer) is out of tolerance

Option C: the rate feedback circuit is open-circuit

Correct Answer is. position LVDT (linear variable differential transformer) is out of tolerance

Question Number. 898. In a typical lateral central control actuator, the pressure regulator module is designed to

Option A: allow manual control inputs to override the autopilot inputs

Option B: limit the amount of detent piston movement so that the controls remain within safe working limits

Option C: allow control of the input crank backdrive so that excessive stick movement is limited

Correct Answer is. allow manual control inputs to override the autopilot inputs

Question Number. 899. The flight data recorder underwater locator beacon operates at a frequency of thirty seven kilohertz

Option A: with an operational time of at least thirty days

Option B: and has a maximum detection range of two thousand to four thousand feet

Option C: and is able to withstand immersion to twenty thousand meters

Correct Answer is. with an operational time of at least thirty days

Question Number. 900. The flight recorder accelerometer used in the DFDR system measures vertical acceleration as one of its parameters to values between

Option A: plus four $\Box g \Box$ and minus two g with a null output of one point

six to plus or minus twenty eight millivolts dc

Option B: plus six \Box g \Box and minus three \Box g with a null output of one point eight volts plus or minus twenty five millivolts dc

Option C: plus eight g \square to minus four DgD with a null output of two volts plus or minus twenty millivolts

Correct Answer is. plus six \Box g \Box and minus three \Box g with a null output of one point eight volts plus or minus twenty five millivolts dc

Question Number. 901. Panels that are attached to the aircraft by answered question fasteners are:

Option A: tertiary structure
Option B: secondary structure
Option C: primary structure

Correct Answer is. tertiary structure

Question Number. 902. As part of the checks on the DFDR system, you are required to carry out a check using the self-Start page and Bookshop the aircraft integrated data system (AIDS) printer. Actuation of the switch causes the printer to print in

Option A: eighty column mode
Option B: sixty six column mode
Option C: forty column mode

Correct Answer is. sixty six column mode

Question Number. 903. When the busy indicator lamp flashes on the QAR in a DFDR system, this indicates that the:

Option A: cartridge is loaded correctly and the QAR is ready for use **Option B:** data is being received and the cartridge cannot be ejected **Option C:** data is not being received and the cartridge can be ejected

Correct Answer is. data is being received and the cartridge cannot be ejected

Question Number. 904. In digital flight data recorder (DFDR) system, low speed playback of currently received data can be achieved at

Option A: the flight compartment test connector through the digital flight data acquisition unit (DFDAU)

Option B: the electronic bay test connection at the quick access recorder (QAR)

Option C: the DFDAU built in test equipment (BITE)

Correct Answer is. the electronic bay test connection at the quick access recorder (QAR)

Question Number. 905. During a change to a lower altitude the piston unit in an IVSI

(instantaneous vertical speed indicator) will create, for an instant more

Option A: more pressure to the capsule only **Option B:** pressure to both case and capsule **Option C:** more suction to the capsule only

Correct Answer is. more pressure to the capsule only

Question Number. 906. Movement of the collective control will

Option A: increase the pitch of the tail rotor
Option B: tilt the disc and increase engine power
Option C: increase the pitch of the main rotor blades

Correct Answer is. increase the pitch of the main rotor blades

Question Number. 907. Gust Load Alleviation Function in a FBW system

Option A: may be controlled by the elevators

Option B: uses the high speed computer responses to compensate for sudden gusts

Option C: is achieved by the weight saving from elimination of cables, feel units and other conventional items

Correct Answer is. uses the high speed computer responses to compensate for sudden gusts

Question Number. 908. Active load control on a large transport aircraft's aileron system is fitted to

Option A: increase roll control authority of the autopilot

Option B: improve trim control due to lateral center of gravity changes **Option C:** improve fatigue life, due to aero elasticity and high lift loads

Correct Answer is. improve fatigue life, due to aero elasticity and high lift loads

Question Number. 909. When attaching more than one jumper or ground lead terminal to structure with a single fastener **Option A:** place the smallest terminal nearest the structure, covered by a spacer, with the others, to a maximum of six, stacked in increasing size

Option B: install the largest terminal nearest the structure, with the others, to a maximum of four, stacked and fanned in decreasing size

Option C: connect the largest terminal nearest the structure with the others, to a total of three, stacked symmetrically in any order

Correct Answer is. install the largest terminal nearest the structure, with the others, to a maximum of four, stacked and fanned in decreasing size

Question Number. 910. If earthing jumper leads terminate to a connector strain clamp, the expected resistance value when

carrying out a check should be **Option A:** 0.5 milliohms

Option B: 1.5 milliohms

Option C: 2.5 milliohms

Correct Answer is. 0.5 milliohms

Question Number. 911. An extruded or rolled aluminum sheet channel section that runs normally the length of the

fuselage is known as

Option A: intercostal

Option B: stringer

Option C: cleat

Correct Answer is. stringer

Question Number. 912. A panel at STN + 88 /WL -12 is located 88 units

Option A: rearward of the aircraft datum and 12 units above the water line datum

Option B: forward of the aircraft vertical center and 12 units below the water line datum

Option C: rearward of the datum and 12 units below the waterline

Correct Answer is. rearward of the datum and 12 units below the waterline

Question Number. 913. Cantilever construction is structure supported at

Option A: each end and in the center

Option B: one end only

Option C: each end

Correct Answer is. one end only

Question Number. 914. A fuselage construction where the skin carries all of the loads is known as:

Option A: semi-monocoque

Option B: semi-stressed

Option C: monocoque

Correct Answer is. monocoque

Question Number. 915. The purpose of the mercury switch in the rotating platform system is to

Option A: always ensure that the platform is maintained level in space when the autopilot is engaged

Option B: level the platform when the autopilot is disengaged

Option C: level the platform system when installing

Correct Answer is. level the platform when the autopilot is disengaged

Question Number. 916. When the rotor of an ac tacho-generator is stationary, the rotor has

Option A: no circulating currents

Option B: circulating currents

Option C: no magnetic field

Correct Answer is. circulating currents

Question Number. 917. An AC tacho-generator stator has

Option A: two windings 180 apart

Option B: three windings 120 apart

Option C: two windings 90 apart

Correct Answer is. two windings 90 apart

Question Number. 918. The sense of a control surface feedback signal will

Option A: assist the signal displacing the servo

Option B: reverse when the control surface limit is reached

Option C: oppose the signal causing the displacement of control surface

Correct Answer is. oppose the signal causing the displacement of control surface

Question Number. 919. A servo tach-generator feedback signal is required to

Option A: assist the demand applied to servo-motor

Option B: ensure proportional control movement for a given command signal

Option C: damp out oscillations of a control movement

Correct Answer is. damp out oscillations of a control movement

Question Number. 920. One basic requirement of a synchronizing loop is that it must **Option A:** disengage on A/P engagement

Option B: be engaged at all times

Option C: disengage as soon as hard over is detected

Correct Answer is. be engaged at all times

Question Number. 921. When the autopilot is disengaged, moving the control column forward will cause the pitch CWS sensor

Option A: to produce only a small pitch down signal

Option B: to produce a significant signal which has pitch down sense

Option C: to produce a significant signal witch has a pitch up sense

Correct Answer is. to produce a significant signal which has pitch down sense

Question Number. 922. To increase the gain of an amplifier it is necessary to

Option A: reduce the tach-generator feedback

Option B: increase the tach-generator feedback

Option C: increase to position feedback

Correct Answer is. reduce the tach-generator feedback

Question Number. 923. The advantage of a force-balanced rate gyro over a simple mechanically restrained gyro is

Option A: the gyro can be self-monitored

Option B: the gyro can have a larger signal output **Option C:** cross channel feedback is not required

Correct Answer is.

Question Number. 924. The outputs of a slaved directional gyro to an autopilot consist of

Option A: pitch and roll angles **Option B:** azimuth rate signals

Option C: azimuth direction information

Correct Answer is. azimuth direction information

Question Number. 925. The type of amplifier used to over come difficult in amplifying DC or very low frequency signals and to prevent drift is

Option A: buffer amplif
Option B: chopper ampli
Option C: integrator amplifier

Correct Answer is. integrator amplifier

Question Number. 926. In the electro pneumatic servo-motor using dual poppet valves and dual roll-fram command output from the autopilot servo amplifier

Option A: both valves will be closed

Option B: both valves will be open for an equal period of time

Option C: both roll fram actuators will fully retract

Correct Answer is. both valves will be open for an equal period of time

Question Number. 927. A resistance capacitor low pass filter will have

Option A: both resistance and cap

Option B: the output taken across the resistor **Option C:** the out put taken across the capacitor

Correct Answer is. the out put taken across the capacitor

Question Number. 928. The maximum level output of a series limiter using switch diode is set by

Option A: voltage of the signal

Option B: the dc bias passing through the diodes

Option C: diode reverse resistance

Correct Answer is. the dc bias passing through the diodes

Question Number. 929. When DC motors are used as servomotors they are usually Option A: high current low voltage

type

Option B: split field type

Option C: high torque heavy armature type

Correct Answer is. split field type

Question Number. 930. Buffer amplifiers are used when **Option A:** an impedance change (low to high) is required **Option B:** an impedance change (high to low) is required

Option C: high amplification factors are required

Correct Answer is. an impedance change (high to low) is required