Note: Due to this being copy-pasted off the website and having all of its HTML elements removed the formatting may not always be great. My apologies about that. Other than that it should all mostly check out.

Note: This exam is for if you are going for your Module 13 certificate but already have your certificate for Module 11!!!

1: (Q33) What is autorotation?
- o A: spinning of the helicopter fuselage due to the loss of anti-torque.
- • B: descent of the helicopter with power off.
- o C: loss off directional control.

2: (Q41) How do the rotors turn on a co-axial rotor system?
- o A: Both rotate in the same direction on a common shaft.
- • B: They counter-rotate on a common shaft.
- o C: They counter-rotate on separate masts.

3: (Q397) If go-around has been initiated after auto-land has been selected, the aeroplane will
- o A: rotate nose up.
- • B: increase speed and rotate nose up.
- o C: increase speed.

4: (Q403) When being engaged, and without selecting a particular mode, an automatic pilot enables....
- o A: a constant speed on track, wings horizontal.
- o B: all aeroplane piloting and guidance functions except maintaining radio-navigation course lines.
- • C: aeroplane stabilisation with attitude hold.

5: (Q377) To carry out an autopilot check first
- • A: ensure all control surfaces are unobstructed.
- o B: switch on NAV receivers.
- o C: switch off all power.

6: (Q429) LNAV is an ...(1)..... input to the.....(2)..... channel using data from the ...(3).....
- o A: (1) outer loop - (2) pitch - (3) FMC
- o B: (1) inner loop - (2) pitch - (3) ADC
- • C: (1) outer loop - (2) roll - (3) FMC

7: (Q389) The Altitude Select System:
- o A: Disengages autopilot Auto Trim at selected altitude.
- o B: Engages autopilot Auto Trim at selected altitude.
- • C: Is annunciated by light and/or sound when airplane is approaching selected altitude.

8: (Q391) What controls in a closed loop system the flight control movement?
- o A: An amplifier.
- o B: A rate gyro.
- • C: A servomechanism.

9: (Q392) With the autopilot engaged in the ALT mode the Captain alters the barometric setting. The aircraft:
- o A: trips out of altitude hold.
- o B: changes its altitude in accordance with the change in pressure setting.
- • C: maintains its altitude.

10: (Q388) Coordinated autopilot turns are achieved by
- • A: yaw rate gyro signals.
- o B: aileron to rudder crossfeed.
- o C: aileron to elevator crossfeed.

11: (Q411) An aircraft has yaw damping included in its auto stabilisation system. An essential requirement of such system is:
- o A: series connected servo motors.
- o B: INS inputs to the CADC.
- • C: a three axis autopilot system.

12: (Q407) Which airplane behavior will be corrected by a yaw damper?
- • A: Dutch roll.
- o B: Tuck under.
- o C: Spiral dive.

13: (Q412) A triplex system loses one channel, the pilot….
- • A: can continue with autoland.
- o B: must make a full manual approach and land.
- o C: can use auto approach only.

14: (Q414) A dual-dual stability augmentation system:
- • A: can survive the first failure and reverts to manual control in the event of a second failure.
- o B: ensures that a lane failure results in that the actuators remains at their position when the failure occurred.
- o C: disengages when a failure occurs and the system reverts to manual control.

15: (Q418) In the automatic trim control system of an autopilot, automatic trimming is normally effected about the :
- o A: pitch and roll axes only.
- o B: pitch, roll and yaw axes.
- • C: pitch axis only.

16: (Q419) The purpose of an airplane automatic trim system is to trim out the hinge moment of the :
- • A: elevator(s).
- o B: elevator(s), rudder(s) and ailerons.
- o C: elevator(s) and rudder(s).

17: (Q416) Automatic trim is used to….
- o A: allow full authority to be regained by the aileron.
- o B: prevent loads on the elevator trims.
- • C: maintain level flight.

18: (Q426) Mode 'Localizer ARM' active on Flight Director means:
- o A: Localizer is armed and coupling will occur when flag warning disappears.
- • B: System is armed for localizer approach and coupling will occur upon capturing center line.
- o C: Coupling has occurred and system provides control data to capture the centerline.

19: (Q433) Auto-throttle engaged mode can be checked by the pilot, using:
- o A: thrust control computer.
- • B: primary flight display.
- o C: position of throttles.

20: (Q430) The flight director is displayed on the….
- o A: bearing indicator
- • B: EADI
- o C: EHSI

21: (Q425) When the altitude select mode is engaged on a jet transport airplane equipped with autopilot (AP) and auto-throttle (ATS) systems the….
- o A: calibrated airspeed (CAS) is maintained constant by the autopilot by means of elevator.
- • B: indicated airspeed (IAS) is maintained constant by the autopilot by means of elevator.
- o C: true airspeed (TAS) is maintained constant by the auto-throttle system.

22: (Q424) When the bank angle limit is applied to the autopilot , it means
- o A: maximum rudder deflection.
- • B: the max roll angle that can be demanded by the autopilot.
- o C: the max aileron angle that can be commanded.

23: (Q437) Auto throttle can hold: 1. speed. 2. flight path. 3. altitude. 4. Mach. 5. EPR / N1. 6. Attitude. The combination regrouping all the correct statements is:
- o A: 1, 2 and 6.
- o B: 1, 2, 3 and 4.
- • C: 1, 4 and 5.

24: (Q434) The auto throttle system is: 1. able to catch and maintain the N1 RPM. 2. able to catch and maintain the N2 RPM. 3. able to catch and maintain an airplane indicated airspeed IAS. 4. always engaged automatically at the same time as the autopilot. The combination regrouping all the correct statements is:
- o A: 2 and 3.
- o B: 1 and 4.
- • C: 1 and 3.

25: (Q423) The flare manoeuvre may be controlled by signals from
- • A: radio altimeter.
- o B: the localiser receiver.
- o C: the glide slope receiver.

26: (Q459) An aircraft will capture the auto land system at
- o A: 2500 ft.

- o B: 3500 ft.
- • C: 1500 ft.

27: (Q447) On an autopilot coupled approach, GO AROUND mode is engaged:
- • A: By the pilot pushing a button located on the throttles.
- o B: By the pilot selecting G.A. mode on the thrust computer control panel.
- o C: If the aircraft reaches the decision height selected on the radio altimeter at a higher speed than the one selected.

28: (Q80) Varying which of the following wave characteristics will cause the length of sound waves to vary?
- • A: Frequency.
- o B: Amplitude.
- o C: Phase.

29: (Q75) Radio waves travel at what speed?
- o A: Speed of the Earth's rotation.
- • B: Speed of light.
- o C: Speed of sound.

30: (Q82) An increase in the frequency of a radio wave will have what effect, if any, on the velocity of the radio wave?
- o A: Increase.
- o B: Decrease.
- • C: None.

31: (Q79) Which of the following statements about a wave is the law of reflection?
- o A: The angle of incidence is equal to the refracted wave.
- o B: The angle of incidence is not equal to the refracted wave.
- • C: The angle of incidence is equal to the angle of reflection.

32: (Q107) A squelch circuit disables the receiver output, ...
- • A: when no signals are being received so preventing noise being fed to the crew headsets between ground transmissions.
- o B: when a SELCAL is received from ground stations equipped with a coding device.
- o C: when satcom is selected.

33: (Q108) The HF (high frequency) range of the radio spectrum is the band extending from
- o A: 30 MHz to 300 MHz.
- o B: 300 MHz to 3 GHz
- • C: 2 - 30 MHz

34: (Q105) The mode of operation of the VHF comms transceiver is
- o A: double channel duplex.
- o B: single channel duplex.
- • C: single channel simplex.

35: (Q110) The Selcal (Selective Calling) can be used by....

- o A: HF system only.
- o B: VHF system only.
- • C: VHF and HF systems.

36: (Q114) When activated, the battery of an ELT must be capable of furnishing power for signal transmission for at least ...

- • A: 48 hours.
- o B: 28 days.
- o C: 24 hours.

37: (Q117) The Cockpit Voice Recorder of a large transport aircraft will always store the last....

- o A: 120 minutes.
- o B: 60 minutes.
- • C: 30 minutes.

38: (Q116) The Cockpit Voice Recorder (CVR) records : 1. conversations between pilot and co-pilot. 2. conversations between cockpit crew and air traffic controllers. 3. passenger announcements. 4. ambient cockpit sounds for example deployment of the landing gear.

- o A: 1, 2 and 3.
- • B: 1, 2, 3 and 4.
- o C: only 1 and 2.

39: (Q121) ILS is subject to false glide paths resulting from:

- o A: false signals reflected by nearby obstacles.
- • B: multiple lobes of radiation patterns in the vertical plane.
- o C: ground returns ahead of the antennas.

40: (Q122) The aircraft DME receiver is able to accept replies to its own transmissions and reject replies to other aircraft interrogations because:

- o A: pulse pairs are amplitude modulated with the aircraft registration.
- • B: pulse pairs are discreet to a particular aircraft.
- o C: transmission frequencies are 63 MHz different for each aircraft.

41: (Q120) What is the glide slope frequency range?

- o A: 108 - 112 Ghz.
- o B: 108 - 112 Mhz.
- • C: 329 - 335 Mhz.

42: (Q119) On an ILS approach what will cause the aircraft to fly onto the beam?

- o A: Glideslope deviation.
- o B: Radio deviation.
- • C: Course deviation.

43: (Q132) In an ADF system, night effect is most pronounced:

- o A: when the aircraft is at high altitude.
- o B: during long winter nights.
- • C: at dusk and dawn.

44: (Q125) The BFO (Beat Frequency Oscillator) selector on an ADF receiver is used to....
- A: hear the IDENT of some NDB stations radiating a continuous wave signal.
- B: find the loop 'null' position.
- C: display the ident on display.

45: (Q140) The IRS position can be initialized....
- A: at designated positions en-route and on the ground.
- B: on the ground only.
- C: on the ground and in flight with VOR/DME.

46: (Q144) Which of the following is the FMS normal operating condition in the cruise?
- A: LNAV and VNAV.
- B: LNAV or VNAV.
- C: LNAV only

47: (Q145) If there is no (navigation) radio updating, what effect will this have on the FMS?
- A: this FMS will automatically update the system.
- B: this will have no effect on the FMS.
- C: this may cause the FMS to deviate from the desired track.

48: (Q146) In the FMS vertical navigation (VNAV) climb mode the throttles are used for
- A: controlling to a maximum thrust.
- B: correction for minor speed deviations.
- C: maintaining a computed EPR.

49: (Q156) Which of the following lists all the parameters that can be determined by a GPS receiver tracking signals from 4 different satellites?
- A: Latitude, longitude and altitude.
- B: Latitude, longitude, altitude and time.
- C: Latitude and longitude.

50: (Q152) The space segment of GPS consists of a minimum of....
- A: 21 satellites.
- B: 24 satellites.
- C: 27 satellites.

51: (Q154) What is the pseudo-random code used by all civilian GPS users?
- A: the P code.
- B: the C/A code.
- C: the Y code.

52: (Q517) Doppler operates on the principle that .(1)..between a transmitter and receiver will cause the received frequency to .(2)..if the transmitter and receiver are moving .(3)..
- A: (1) the distance - (2) increase - (3) at the same speed.
- B: (1) relative motion - (2) decrease - (3) apart.
- C: (1) apparent moving - (2) decrease - (3) together.

53: (Q519) The Doppler Navigation System is based on....

- o A: radio waves refraction in the ionosphere.
- • B: radar principles using frequency shift.
- o C: pulse shift transmission.

54: (Q470) What is the correct response to a TCAS RA?
- o A: Pilots turn 90° and they follow the climb or descent commands smoothly and immediately.
- • B: Pilots follow the climb or descent commands smoothly and immediately.
- o C: Pilots have to follow ATC instructions as these override TCAS RA's.

55: (Q473) A 'resolution advisory' (RA) is represented on the display system of the TCAS 2 (Traffic Collision Avoidance System) by a....
- o A: blue or white full lozenge.
- o B: red full circle.
- • C: solid red square.

56: (Q481) Weather radar domes are protected from lightning strikes by
- o A: the use of special conductive paint.
- • B: bonding strips.
- o C: special conducting or non-conducting grease.

57: (Q489) During the approach, a crew reads on the radio altimeter the value of 650ft. This is an indication of the true height of the....
- • A: lowest wheels with regard to the ground at any time.
- o B: aircraft with regard to the runway.
- o C: aircraft with regard to the ground at a given barometric pressure.

58: (Q488) Modern low altitude radio altimeters emit waves in the following frequency band:
- • A: SHF (Super High Frequency).
- o B: UHF (Ultra High Frequency).
- o C: HF (High Frequency).

59: (Q496) ADS-B: 1. broadcasts information about aircraft, such as identification, current position, altitude and velocity. 2. provides air traffic controllers with real-time position information. 3. receives Flight Information data. 4. receives Traffic Information Service data. 5. receives other ADS-B Out broadcasting aircraft.
- o A: 1, 3 and 5.
- o B: 2, 4 and 5
- • C: 1, 2, 3, 4 and 5.

60: (Q500) ARINC 629 current mode couplers are
- o A: resistive.
- o B: capacitive.
- • C: inductive.

61: (Q502) In an ARINC 429 wordstring, bits 1 to 8 represent the
- • A: information contained in the data word.
- o B: source of message.
- o C: destination LRU address.

62: (Q525) The PA amplifier sets the priority for the audio inputs. Which has the highest priority?
- o A: Boarding Music.
- • B: Announcement from the flight compartment.
- o C: Announcement from an attendant.

63: (Q529) How is communication from the In Flight Entertainment System to a ground station achieved?
- o A: Automatic Terminal Information System (ATIS).
- o B: Selective Calling System (SELCAL).
- • C: Aircraft Communications Addressing and Reporting System (ACARS).

64: (Q706) One of the advantages of the OMS (Onboard Maintenance System) is ...
- o A: to replace the tech log.
- o B: to help the pilots do a minor maintenance task.
- • C: to detect and report failure.

65: (Q714) Information updates to the airborne system and communications between the ground based and airborne systems are accomplished ...
- o A: automatically by update from the ECAM.
- • B: through the Gate-link concept.
- o C: by an aircraft engineer updating the system either by a floppy disc, a CD or even a hard disk.

66: (Q709) Where is the loaded software held?
- o A: On the flight deck, ready to be reinstalled should something happen that corrupts a particular program.
- • B: CMC (Central Maintenance Computer) storage device, ready to be reinstalled should something happen that corrupts a particular program.
- o C: In a centralized maintenance cabinet, ready to be send and reinstalled should something happen that corrupts a particular program.

67: (Q715) An Electronic Library System consists of : 1. a LCD. 2. an optical disk drive. 3. a printer. 4. a workstation platform. 5. capacitive touch screen overlay. 6. A keyboard.
- o A: 1, 3, 4 and 5.
- o B: 1, 2, 3 and 6.
- • C: 1, 2, 3, 4 and 5.

68: (Q717) Information to be printed is sent to the printer ...
- • A: from the CMC (Central Maintenance Computer).
- o B: from the FMC (Flight Management Computer).
- o C: from the CDU (Control Display Unit).

69: (Q721) Helicopter rotor track and balance is done by
- • A: the 'HUMS' (Health and Usage Monitoring System).
- o B: the 'Damage Tolerance Monitoring System'.
- o C: the 'Low Cycle Fatigue Counter'.

70: (Q723) Maintenance Information at an out-station can be read from the....

- o A: FMS (Flight Management system).
- o B: Electronic library system.
- • C: CDU (Control Display Unit).

71: (Q738) 'Some LRMs (Line Replaceable Modules) from the Integrated Modular Avionics communicate with each other through the ADCN (Avionics Data Communication Network) by the means of communication technology developed from a non-aeronautical standard.' This technology is called....

- • A: AFDX (Avionics Full Duplex Switched Ethernet).
- o B: Automatic Dependent Surveillance Broadcast (ADS-B).
- o C: Controller Pilot Data Link communications (CPDLC).

72: (Q731) For IMA, a faster and duplex data communication protocol was required than the ARINC 429 standard. The new standard is ..

- o A: AFDX (Avionics Full DupleX).
- • B: ARINC 664.
- o C: ARINC 429 duplex.

73: (Q744) The passengers can listen to the selected audio and video channels by connecting a headset to ...

- o A: the IFES SEB (Seat Electronic Box).
- o B: the IFES SDU (In-Flight Entertainment System Smart Display Unit).
- • C: the IFES RJU (Remote Jack Unit).

74: (Q752) The external communication (IFE) system provides communication with the aircraft while grounded through ...

- • A: a cell modem component and a terminal receiving station..
- o B: an ethernet connection in the aircraft.
- o C: a cell modem component and an antenna located in the aircraft.

75: (Q766) A pre-departure clearance or PDC is given to the pilots via....

- o A: the datalink system.
- • B: an ACARS message.
- o C: voice (from ATC).

76: (Q767) Recording capability of aircraft parameters is part of the ...

- o A: Flight Operations Domain.
- • B: Avionics Domain.
- o C: Communication & Cabin Domain.

77: (Q770) What will be shown when the fault tolerant system has a fault but has not generated a caution or a warning on the flight deck?

- o A: A specific status message.
- • B: A maintenance memo.
- o C: A scheduled fault message.

78: (Q768) On which system are scheduled maintenance tasks shown when a time or cycle limit occurs in an airplane system?

- o A: on the maintenance laptop and the electronic flight bags.

- B: on the multifunction displays, the electronic flight bags and the maintenance laptop.
- C: only on the maintenance laptop.

79: (Q773) Which communication system let the flight crew request and obtain information about meteorological parameters (weather, wind, visibility, clouds,....)?

- A: FANS (Future Air Navigation Systems).
- B: ATIS (Automatic Terminal Information System).
- C: Automatic Dependent Surveillance Broadcast