Procedures questions

1. At the commencement of final approach, if the controller possesses wind information in the form of components, significant changes in the mean surface wind direction and speed shall be transmitted to aircraft. The mean head-wind component significant change is:

   a) 5 KT
   b) 10 KT
   c) 8 KT
   d) 4 KT

2. Lights on and in the vicinity of aerodromes may be turned off, provided that they can be again brought into operation:

   a) At least 30 minutes before the expected arrival of an aircraft
   b) At least 15 minutes before the expected arrival of an aircraft
   c) At least 5 minutes before the expected arrival of an aircraft
   d) At least one hour before the expected arrival of an aircraft

3. You are the pilot of an aircraft departing VFR from FAVG (Virginia airport) which has an elevation of 20 ft. The flight will be conducted at FL 65 to a rural airfield 116 nm way. FAVG is 15 nm from FAEL (elevation 304 ft) which has a transition altitude of 5500 ft. After take-off, at which altitude must you change the altimeter sub-scale setting to 1013.25 hPa?

   a) 5920 ft
   b) 5800 ft
   c) 2420 ft
   d) 5500 ft

4. The system minima for a NDB/VOR approach is:

   a) 250 ft.
   b) 300 ft.
   c) 350 ft.
   d) Nil

5. On a return to the IAF from a missed approach, the correct action is to:

   a) Enter the holding pattern.
   b) Commence a further let down
   c) The pilot will decide whether to do another approach or to divert.
   d) Ask ATC for further instructions.

6. Aerodrome Operating Minima, the Category III A Operation, is a precision instrument approach and landing using ILS or MLS with a decision height lower than 100 feet an RVR (runway visual range) no less than:

   a) 200 m
   b) 250 m
   c) 230 m
   d) 300 m

Procedures questions

7. An approaching aircraft may descent below the MSA if :

a) the pilot has the field and the underlying terrain in sight and will keep it in sight;
b) the aircraft gets radar vectors ;
c) the pilot is following the published approach procedure

8. Runway-lead-in lighting should consist:

a) of group of at least three white lights flashing in sequence towards the runway;
b) always of a straight row of lights towards the runway
c) of flashing lights only;
d) of an arbitrary amount of green lights;

9. A GBAS provides guidance relative to the:

a) En route track accuracy in areas with low satellite coverage
b) Final approach course and glide path
c) Vertical flight path during a Baro-VNAV approach
d) LNAV portion of a RNAV approach

10. An airport has no approach lighting, but has runway lighting. The MDA is 5 085 ft and the threshold elevation is 4 500 ft, the required RVR for a category A aircraft is:

a) 1 500 m.
b) 1 000 m
c) 2 400 m.
d) 2000 m

11. The speeds used to establish the five approach categories of aircraft in accordance with ICAO Doc 8168 and the RSA AIP are referenced to:

a) Calibrated airspeed
b) Indicated airspeed
c) True airspeed
d) Ground speed

12. A category II precision approach (CAT II) is an approach with:

a) a decision height of at least 100 ft
b) a decision height of at least 200 ft
c) a decision height of at least 50 ft
d) no decision height

13. Which of the following factors is unlikely to cause a loss of RAIM?

a) Unsuitable satellite geometry
b) GBAS failure
c) Antenna locators on the aircraft
d) Changes in the aircraft pitch or bank angle

14. Runway centre line lights shall be provided:

a) On precision approach runways, CAT II and III.
b) On other given runways, when it is necessary for operational reasons.
c) Both (a) and (b) are correct.
d) Nil

15. The MDH for a VOR instrument approach procedures shall never be less than:

a) 250 ft
b) 500 ft
c) 300 ft
d) 200 ft

16. A Category B aeroplane is inbound to Welkom for the NDB approach. The aeroplane operator has determined a MDH of 730ft. The required RVR will be:

a) 1 300 m.
b) 1 500 m.
c) 2 500 m.
d) Nil

17. What is the difference between a fly-by waypoint and a flyover waypoint.

a) A flyover waypoint requires electronic (GNSS) turn anticipation
b) A flyby waypoint is one at which a turn is initiated in order to join the next segment of a route or procedure
c) A flyover waypoint is not compulsory point
d) A fly-by waypoint allows interception of the next leg without directly overflying the point

18. On a RNAV instrument approach chart, the intermediate approach fix is indicated by:

a) The letters IAF
b) Adding the suffix "I" to the ICAO aerodrome locator code
c) The letters IF
d) Adding the suffix F to the RNAV chart name and runway designator

19. The "PAPI" shall consist of:

a) Two wing bars of 4 sharp transition multi-lamp or paired units equally spaced.
b) Two wing bars of 6 sharp transition multi-lamp or paired units equally spaced.
c) A wing bar of 4 sharp transition multi-lamp or paired units equally spaced.
d) A wing bar of 2 sharp transition multi-lamp equally spaced.

20. The Aircraft Autonomous Integrity Monitoring (AAIM) function of an aircraft receiver is performed using:

a) Information from other on board navigation equipment in addition to satellite signals
b) Satellite signals only
c) Differential GPS
d) Ground relay station

21. You are on final approach to a runway with a PAPI lighting system. You observe the left bank of

lights indicating three white lights and one red, and the right hand bank of lights indicating three red and one white. Your actions would be:

a) Obey the left hand set of lights, since it is better to be too high.
b) Obey the right hand set of lights, since you are only slightly low.
c) Ignore the PAPI system altogether
d) Nil

22. System Minima for a VOR approach is:

a) 300 feet.
b) 250 feet.
c) 350 feet.
d) 200 ft

23. In terms of RNAV instrument approach procedures, a standard TAA arrangement consists of three areas. These are:

a) CTA, TMA and CTR
b) Racetrack or reversal procedure, approach and missed approach segments
c) Initial approach, intermediate approach and final approach segments
d) Straight in, left base and right base areas

24. The letters "SALS" appear under aerodrome lighting in the AIP. This is the abbreviation for:

a) Short approach light system
b) Simple approach light system.
c) Sectional approach light system.
d) Nil

25. Which of the following options is most correct? You are the pilot of an aircraft departing VFR for a cross country flight from a local gravel runway called DUPONT (FADP). Your planned cruising level is FL 65. FADP has an elevation of 3900 ft. The runway is 8 nm from Wonderboom (FAWB) aerodrome (elevation 4095 ft) but is not inside the CTR. FAWB has a transition altitude of 8000 ft. After take-off, when must you change the altimeter sub-scale setting to 1013.25 hPa?

a) When you exit the circuit pattern at FADP
b) When you are not flying in the vicinity of the aerodrome any longer
c) Passing 5900 ft
d) When you pass a distance of 25 nm from FAWB

26. Aerodrome Operating Minima, an operator must ensure that system minima for "non-precision approach procedures", which are based upon the use of ILS without glidepath (LLZ only), VOR and NDB, are no lower than MDH following value with:

a) NDB facility, lowest MDH=300 ft
b) ILS facility without glidepath (localizer) lowest MDH=200 ft
c) VOR facility, lowest MDH=250 ft
d) VOR/DME facility, lowest MDH=300 ft

27. Missed approach point means:

a) The point in an instrument approach procedure at or before which the prescribed missed approach procedure shall be initiated.
b) A defined point on the final approach of a non-precision approach procedure from which a normal descent from the MDA to the runway touchdown point may be commenced, provided that the visual references are present.
c) The point in an instrument approach procedure after which the prescribed missed approach procedure shall be initiated.

28. A " RNAV" distance based separation minimum may be used at the time the level is crossed, provided that each aircraft reports its distance to or from the same " on track" way-point. This minimum is:

a) 60 NM.
b) 50 NM.
c) 20 NM.
d) 80 NM.

29. The main differences between precision and non-precision approaches is that:

a) Non-precision approaches use neither localiser nor glideslope information for guidance
b) Only precision approaches use vertical guidance
c) No electronic glide path guidance is provided in the case of non-precision approaches
d) Lower heights may be descended to using precision approach guidance installations

30. DH for a category 1 ILS approach shall never be less than:

a) 150 ft.
b) 200 ft.
c) 250 ft.
d) 300 ft

31. When is a Terminal Arrival Altitude used?

a) To provide a transition from the en route structure to an RNAV approach procedure
b) The term 'minimum sector altitude' applies to departing aircraft and the term 'terminal arrival altitude' applied to arriving aircraft
c) It replaces the MSA when an aircraft is under radar control in a TMA
d) It is used in RVSM airspace because the standard MSA terrain clearance is excessive and causes air traffic congestion.

32. A GBAS landing system (GLS) is:

a) An approach and landing system using ground based installations e.g: ILS and VOR/DME
b) A GNSS precision approach and landing system using correction signals from your VHF ground-based station
c) Any GNSS approach flown using satellite guidance signals from the Russian GLONASS system
d) An approach and landing operation using standard ILS glideslope information for vertical guidance and a GNSS SBAS for enhanced lateral guidance

33. During an ILS approach, category 1, the RVR must be at least:

a) 1 000 m.
b) 550 m.
c) 800 ft.
d) 750 ft

34. During an approach the PAPI displays four white lights on either side of the runway. That means that:

a) The approach slope is not yet intercepted. Level flight should be maintained.
b) The correct approach slope has been intercepted and should be maintained
c) The aircraft is too close to the runway in relation to its height.
d) Nil

35. A Category III B operations, is a precision instrument approach and landing using ILS or MLS with, a decision height lower than 50 ft, or no decision height and a runway visual range lower than 200 m but no less than:

a) 75 m
b) 150 m
c) 100 m
d) 50 m

36. During an approach the PAPI displays four white lights on both sides of the runway.

a) The approach slope is not yet intercepted. Level flight should be maintained.
b) The correct approach slope has been intercepted and should be maintained.
c) The aircraft is too close to the runway in relation to its height

37. On an approach to Tzaneen, comply with the cloud break NDB RWY 24 Approach, you descend to MDA/H. Cloud base is last reported as 350 ft, visibility 1500 m. What will you see first?

a) Runway lights
b) Approach lights
c) PAPI
d) Runway surface

38. Select the option that contains the ICAO definition of the term "minimum sector altitude" according to ICAO Doc 8168

a) The minimum altitude for a defined segment that provides the required obstacle clearance
b) The minimum altitude to be used under instrument met conditions (IMC) that provides a minimum obstacle clearance within a specified area, normally formed by parallels and meridians
c) The lowest altitude which may be used which will provide a minimum clearance of 450 m (1500 ft) above all objects located in an area contained within a sector of a circle of 46 km (25 nm) radius centred on a radio aid to navigation.
d) The lowest altitude which may be used which will provide a minimum clearance of 300 m (1000 ft) above all obstacles located in an area contained within a sector of 46 km (25 nm) radius centred on a radio aid to navigation.

39. In a Precision Approach (ILS) the final approach segment begins:

a) FAF
b) FAP
c) MAP
d) IF

40. Which of the different approach techniques listed below does the following definition from ICAO Doc 8168 refer to?
"A technique, consistent with stabilised approach procedures, for flying the final approach segment of a non-precision instrument approach procedure as a continuous descent without level off, from an altitude/height at or above the final approach fix altitude/height to a point approximately 15 m (50 ft) above the landing runway threshold or the point where the flare manoeuvre should begin for the type of aircraft flown "

a) Circling approach
b) Precision approach (PA) procedure
c) Procedure turn
d) Continuous descent final approach (CDFA)

41. All procedures contained in ICAO Doc 8168 depict tracks. What are pilots expected to do in this regard?

a) Supplement all raw flight data with GNSS data to ensure compliance with published tracks
b) Be knowledgeable about the requirements of doc 8168 Volume II to ensure obstacle clearance
c) Attempt to maintain the track by applying corrections to heading for known wind
d) Ensure the heading flown corresponds to the depicted track to within 5°

42. Within the Annex to the ICAO convention that specifies dimensions of aerodromes is a specific dimension given for the approach light system for CAT 1 ILS. What should be the length of this approach light system?

a) 420 metres
b) 900 metres
c) 1000 metres
d) 1200 metres

43. In an Instrument Approach the segment in which alignment and descent for landing are made is:

a) Initial approach
b) Final approach
c) Intermediate approach
d) Arrival

44. A departure procedure where no track guidance is provided, is called:

a) An operator specific departure
b) A free departure
c) An omnidirectional departure
d) A VMC departure

45. Taxiway centre line lights other than an exit taxiway shall be:

a) Fixed lights showing blue.
b) Fixed lights showing yellow.
c) Fixed lights showing white.
d) Fixed lights showing green.

46. "Clearway" is defined rectangular area established to:

a) Reduce the risk of damage to aircraft running off a runway.
b) Protect aircraft during take-off or landing operations.
c) Permit aircraft to make a portion of its initial climb to a specific height.
d) Permit the aircraft to stop if it fails the take-off.

47. Refer to ICAO Doc 8168 Volume 1: As far as the construction of instrument departure procedures at an aerodrome is concerned, how is the problem addressed in cases where obstacles cannot be cleared by the appropriate margin when an aircraft is flown on instruments?

a) Aircraft take-off weight is adjusted until compliance with the departure climb gradient is possible
b) A straight departure is specified which is aligned with the runway centre line
c) This situation is not allowed in terms of the requirements for aerodrome design and placement
d) Aerodrome operating minima are established to permit visual flight clear of obstacles

48. A 45°/180° procedure turn starts at a fix or facility is followed by a straight leg with track guidance, a 45° turn, a straight leg without track guidance and a 180° turn in the opposite direction to intercept the inbound track. The straight leg without track guidance is:

a) 1 min 15 sec from the start of the turn for Category C, D and E aircraft
b) 1 min from completion of the turn for Category A to D aircraft
c) 1 min from the completion of the turn for Category A and B aircraft or when reaching the limiting radial or DME distance, whichever happens earlier
d) 1 min from the start of the turn or reaching the limiting DME distance, whichever happens earlier

49. The final approach of an instrument approach procedure is the segment where:

a) The outer marker has been passed
b) The localiser, inbound radial or NDB bearing are intercepted
c) The aircraft is aligned with the runway centre line
d) Alignment and descent for landing are made

50. "TODA" take-off distance available is:

a) The length of the take-off run available plus the length of clearway available (if provided).
b) The length of the runway available plus the length of clearway available (if provided).
c) The length of the take-off run available plus the length of the stopway and clearway (if provided).
d) The length of the take-off run available plus the length of the stopway.

51. In terms of aircraft operations conducted in accordance with ICAO Doc 8168, when flying a departure procedure with a specified track, a pilot is expected to:

a) Compensate for drift only
b) Compensate for known or estimated wind effects
c) Fly the specified heading within 5°
d) Fly a heading only

52. What does the abbreviation DER mean?

a) Distance end of route.
b) Departure end of route.
c) Departure end of runway.
d) Distance end of runway.

53. What is the range of speeds for an initial approach for a Category B aircraft that is used in instrument approach procedures design?

a) 120 kts to 180 kts
b) 121 kts or more but less than 141 kts IAS
c) 91 kts or more but less than 121 kts IAS
d) The indicated airspeed at threshold which is equal to the stall speed V_{SO} multiplied by 1.3

54. The MSA, which must be established around a navigation facility, is in general valid within a sector of:

a) 25 NM
b) 10 NM
c) 15 NM
d) 30 NM

55. Which of the following is a characteristic of the intermediate approach segment?

a) It requires positive radar identification
b) The commencement of descent on final approach
c) It allows uninterrupted descents from higher altitudes
d) The descent gradient is kept as shallow as possible

56. During an ILS approach the pilot should, on reaching the DH and still being IMC:

a) Carry out the MAP
b) Maintain DH until the missed approach point
c) Obtain ATC approval before going around
d) Ask for a CAT II Approach

57. A continuous descent final approach is flown:

a) Either with VNAV guidance or by manual calculation of the required rate of descent
b) With precision vertical guidance
c) By helicopters only
d) Using a MLS (microwave landing system) installation

58. The descent on the inbound track may only be started when:

a) Inbound turn has been completed
b) Within full scale deflection for the ILS/VOR
c) Within 5° of the required bearing for the NDB
d) Once overhead the OM

59. In general, when may a pilot descend to MDA if executing a non-precision approach without a final approach fix?

a) Once he receives a clearance from ATC
b) It is impossible to determine the descent point without further information
c) Once the beacon marking the IAF is crossed
d) Once the aircraft is established inbound on the final approach track.

60. The Final Approach Segment (instrument) is defined as:

a) Part of an Instrument Approach Procedure in which alignment and descent for landing are accomplished
b) The section of an Instrument Approach between the Final Approach Fix and the Decision Altitude
c) The segment of an Instrument Approach Procedure between the middle marker and the MAP
d) The segment of the Instrument Approach Procedure from the Initial Fix to the Intermediate Fix

61. ICAO PANS-OPS refer: A holding area:

a) Is sufficiently large to allow deceleration from cruise speed
b) Has additional protection around the entry area to accommodate the entry procedure
c) Has a safety buffer of 5 nm which guarantees 1000 ft of obstacle clearance to its border
d) Has an additional 1969 ft of obstacle clearance over high terrain or in mountainous areas

62. What is a Terminal Approach Altitude (TAA)?

a) An altitude that provides obstacle clearance and replaces the MSA for RNAV approaches
b) The highest altitude indicated in a STAR procedure
c) The term that replaces the outdated term "initial approach altitude"
d) The altitude that an inbound aircraft is at when it enters a TMA on a radar vector

63. Which of the terms listed below is described in the following definition from ICAO Doc 8168?
"The altitude for an en route segment that provides adequate reception of relevant navigation facilities and TAS communications, complies with the airspace structure and provides the required obstacle clearance"

a) Minimum obstacle clearance altitude (MOCA). The minimum altitude for a defined segment that provides the required obstacle clearance
b) Area minimum altitude (AMA)
c) Obstacle clearance altitude (OCA)
d) Minimum en route altitude (MEA)

64. If in an instrument departure procedure the track to be followed by the aeroplane is published, the pilot is expected:

a) To request from ATC different heading for wind correction.
b) To ignore the wind and proceed on an heading equal to the track.
c) To request clearance from ATC for applying a wind correction.
d) To correct for known wind to remain within the protected airspace.

65. As far as the entry into a holding pattern is concerned, the still air time for flying the outbound entry heading should not exceed:

a) 1 min if at or below 14 000 ft
b) 2 mins if above 14 000 ft
c) 1 ½ mins if at or below 14 000 ft
d) 1 min at any altitude

66. In an instrument departure procedure the minimum obstacle clearance at the departure end of runway equals:

a) 3.3 % gradient.
b) 35 ft.
c) 0.8 % gradient.
d) 0 ft.

67. ICAO Doc 8168 PANS-OPS refers: As far as departure procedures are concerned, what is a responsibility of the operator?

a) Liaison with ICAO for approval of operator-specific departure procedures
b) The implementation of all procedures described in PANS-OPS, Vol II, Part I, section 3
c) Compensation for known or estimated wind effects
d) The development of contingency procedures in case of engine failure or an emergency in flight which occurs after V_1

68. Select the correct statement:

a) SID clearances are issued only if requested by the pilot
b) A pilot must accept a SID if issued
c) At the discretion of ATC
d) SIDs are established at certain airports primarily to simplify clearance delivery procedures

69. If an instrument approach procedure does not have an intermediate fix, where will the intermediate approach segment be?

a) Between the end of the reversal, racetrack or dead reckoning track procedure and the final approach fix / point
b) After the entry into the hold has been completed
c) Intermediate approach segments are only applicable to standard routes or vectored approaches
d) After the descent on the final outbound leg is commenced

70. The protection areas associated with instrument approach procedures are determined with the assumption that turns are performed at a bank angle of:

a) 25° or the bank angle giving a 3°/s turn rate, whichever is lower, for departure and approach

instrument procedures, as well as circle-to-land, and 15° for missed approach procedures.

b) The bank angle giving a 3°/s turn rate for all procedures with airspeed limitation related to aeroplane categories.

c) 25° or the bank angle giving a 3°/s turn rate, whichever is lower, for departure and approach instrument procedures, 25° for circling-to-land with prescribed flight tracks and 15° for missed approach procedures.

d) 25° or the bank angle giving a 3°/s turn rate, whichever is lower, for departure, approach or missed approach instrument procedures, as well as circling-to-land (with or without prescribed flight tracks).

71. ICAO Doc 8168 recommends that pilots should not accept radar vectors during departure unless:

a) They are above the minimum altitude required to maintain obstacle clearance in the event of engine failure

b) There is no published MSA or TAA

c) Low visibility procedures are in force

d) They are established on a SID

72. Closed runways and taxiways are indicated by:

a) Displaying crosses in the centre of the unserviceable part as well as at each end of the unserviceable part.

b) Crosses of a single contrasting colour, yellow or white, displayed horizontally on runways and taxiways or parts thereof indicate an area unfit for movement of aircraft.

c) Double crosses at each end of the unserviceable part as well as in the centre of the unserviceable part.

73. If a pilot loses visual contact with the runway while circling to land from an instrument approach he must do the following:

a) Initiate a go-around immediately, maintaining a minimum climb gradient of 2.5%. climb straight ahead. At the first point where 50 m (164 ft) obstacle clearance is obtained, start a climbing turn with a track change of a maximum of 15°

b) If a turn is prescribed, start it as soon as operationally possible, maintaining an IAS as slow as for the intermediate missed approach segment. Comply with all annotations on approach charts and execute the appropriate manoeuvres without undue delay

c) Proceed to the missed approach point (or to the middle marker fix or specified DME distance for precision approach procedures) and then follow the published missed approach procedure

d) Initiate a climbing turn, within the circling area, towards the landing runway. Return to cruising altitude or higher, immediately followed by interception and execution of the missed approach procedure

74. A Category C aircraft can carry out an indirect approach followed by a visual manoeuver only if the horizontal visibility is higher than or equal to:

a) 2400 m

b) 3600 m

c) 1600 m

d) 1500 m

75. During an ILS procedure, if the information transmitted by the appropriate services and received by the crew contains parameters below the crew's operational minimums, the point beyond which the approach must not be continued is:

a) the outer marker (OM).
b) the FAF.
c) the middle marker.
d) the start final descent point (glide slope intersection).

76. During circling-to-land (with or without prescribed flight tracks), the maximum allowed airspeed for a Cat B aeroplane, in order to remain within the protection envelope, is:

a) 135 kt
b) 120 kt
c) 125 kt
d) 150 kt

77. In the ILS-approach, the OCA is referenced to:

a) Aerodrome reference point.
b) Relevant runway threshold.
c) Aerodrome elevation.
d) Mean sea level.

78. What is the maximum speed for reversal and racetrack procedures for a Category B aircraft?

a) 140 kts
b) 180 kts
c) 91 kts
d) 120 kts

79. What should a pilot do when an instrument approach chart does not specify speed limits?

a) Comply with airspace speed limitations only
b) If ATC cancels speed restrictions the pilot may fly at any speed
c) Fly at the speed used to calculate the category of aircraft
d) Adhere to the calculated speeds used in the design of PANS-OPS approach procedures

80. A category III C precision approach (CAT III C) is an approach with:

a) no runway visual range limits
b) a runway visual range of at least 50 m
c) a runway visual range of at least 200 m
d) a runway visual range of at least 350 m

81. How many separate segments does an instrument approach procedure have.

a) 3.
b) 4.
c) Up to 5.
d) Up to 4.

82. Generally in which conditions does ICAO Doc 8168 recommend that reduced power should not be required for take-off?

a) It should preferably never be used
b) Airport noise abatement procedures take priority in terms of reduced power take-offs
c) Adverse operating conditions including contaminated runways, visibility restriction, stronger tailwinds and reported windshear
d) Adverse operating conditions such as engine failures

83. You are the PIC of an aircraft inbound to FAOR at FL 140. Due to airspace congestion ATC gives you holding instructions for the PNV radio beacon. The duration of the holds which you will fly should be:

a) 5 mins
b) 6 mins
c) 3 mins
d) 4 mins

84. What does the term "way point" mean:

a) A specified geographical position used to define an area navigation route or the flight path of an aircraft employing area navigation
b) A defined position on an aerodrome used for the calibration of the inertial navigation system
c) A signal indicating the direction of the runway-in-use
d) A general term meaning the taxiway- and the runway-system of an international airport

85. Aerodrome Operating Minima, it is established, among other considerations, that an Operator must take full account of Aeroplane Categories. The criteria taken into consideration for classification of Aeroplanes by Categories is the indicated airspeed at threshold (Vat), which is equal to the stalling speed at the maximum landing mass (Vso) multiplied by 1,3.
Corresponding Aeroplane Category when Vat is from 141 kt to 165 kt is:

a) D
b) B
c) C
d) E

86. When establishing an instrument approach procedure, 5 aircraft categories according to their speed at the threshold (Vat) are established. This speed is equal to the stalling speed in the landing configuration at the maximum certified landing weight multiplied by a factor of:

a) 1.3
b) 1.45
c) 1.5
d) 1.15

87. Reversal procedure timing of the leg after the 45 degree turn for CAT C and D aircraft:

a) 45 seconds
b) 1 minute
c) 1 minute 15 seconds
d) 1 minute 30 seconds.

88. Under which conditions may an aircraft on a straight-in-VOR approach continue its descend below the OCA?

a) When the aircraft has the control tower in sight

b) When the aircraft is in contact with the ground but not with the runway in sight yet
c) When the aircraft is in visual contact with the ground and with the runway lights in sight
d) When seems possible to land

89. ICAO PANS-OPS refers: What are the 2 different types of instrument approach and landing operations that can be conducted using Baro-VNAV equipment

a) Straight in and circling approaches
b) Approaches with vertical guidance and non-precision approaches
c) IFR and VFR operations
d) Precision and non-precision approaches

90. In general, which is the main factor that dictates the design of an instrument departure procedure?

a) The terrain surrounding the airport.
b) ATC requirements.
c) Navigation aids.
d) Airspace restrictions.

91. The lowest RVR minima to be used for a Category I precision approach is:

a) 1200 m
b) 800 m
c) 550 m
d) 200 ft

92. If a step down fix is established on the final approach track, a descend shall be made so as to:

a) follow approximately 50 feet above the nominal glide path.
b) pass the fix at the rate of descent of 500 feet/min, which is obligatory.
c) leave the intermediate approach altitude, step by step until reaching the MAPt.
d) pass the fix not below the specified crossing altitude.

93. Which of the following options are incorrect? An RNAV (GNSS) approach may not be flown unless:

a) The avionics database presents the waypoints in the same sequence as the published procedure chart
b) Any incomplete waypoint information in the database has been updated by manual pilot input
c) The operator, aircraft, equipment and flight crew have been state approved
d) The avionics database contains all the waypoints depicted in the planned approach

94. What is a " barrette" ?

a) three or more ground lights closely spaced together to appear as a bar of lights.
b) a high obstacle near the runway and/or taxiway.
c) a CAT II or III holding position.
d) a frangible structure on which approach lights are fixed.

95. In an offset entry into an omnidirectional racetrack procedure, the time on the 30° offset track is limited to:

a) 1 minute.
b) 1 minute 30 seconds.

c) 2 minutes.
d) 3 minutes.

96. When a pilot conducts an instrument approach procedure using a racetrack pattern, descent after the inbound turn may not be started until.

a) The aircraft is established on the inbound track
b) The outer marker has been passed
c) The wings are level on the inbound heading
d) His position has been reported to ATC and he has been cleared to MDA/H or DA/H

97. A turn executed by the aircraft during the initial approach between the end of the outbound track and the beginning of the intermediate or final approach track is a:

a) Base turn
b) Procedure turn
c) Reversal procedure
d) Race track

98. The DA for a CAT I ILS approach is reference to:

a) The threshold – if this is specified on the chart
b) Threshold elevation if this is more than 7 ft lower than airfield elevation
c) The airfield elevation unless the threshold is moe than 7 ft lower than this
d) Threshold elevation

99. The MEA (Minimum En Route Altitude) assures acceptable navigational signal coverage and:

a) Intersection identification.
b) DME response.
c) Meets obstacle clearance requirements.

100. Which is the obstacle clearance in the primary area of the initial approach segment in an instrument approach procedure?

a) 150m (492 ft).
b) 300m (984 ft).
c) At least 150m (492 ft).
d) At least 300m (984 ft).

101. Aerodromes signs should be in the following configuration :

a) mandatory instruction signs ; red background with black inscriptions.
b) information signs; yellow or black background with black or yellow inscriptions.
c) information signs; orange background with black inscriptions.
d) mandatory instruction signs; black background with red inscriptions.

102. On final approach after executing a circling approach visual contact is lost. Your actions would be:

a) Initiate an immediate climb towards the initial approach fix on which the Instrument approach is based, then climb to initial approach altitude in the hold
b) Execute climbing turn through 180° and carry out the MAP for that approach

c) Climb straight ahead towards the initial approach fix to the MDA for circling approach and join downwind for the active runway
d) Continue the approach

103. If a turn of more than 15° is required to avoid obstacles on an IFR departure then:

a) Max speed for Cat B aircraft is 165 kts
b) Max speed for Cat A aircraft is 165 kts
c) Max speed not specified. Only the area in which rhe aircraft is to reamin is specified in terms of DME or GPS distance
d) Wind effect must be compensated for whilst under radar control to ensure the required track is made good.

104. What is meant by Aircraft Approach Category:

a) Based on the mass of the aircraft and is reference to on all approach charts
b) Based on the speed of the aircraft – the stall speed in the landing configuration (V_{SO}) at max landing weight and referred to on all charts
c) Category based on performance of the aircraft
d) Depends on whether the approach is a Precision / Non-Precision Approach and is listed on the approach chart

105. You are on an IFR flight executing a circling approach. A descent below the MDA should not be made until:
1. the pilot has the landing threshold in sight
2. visual reference has been established and can be maintained
3. the required obstacle clearance can be maintained and a landing can be made

The combination regrouping all the correct answers is:

a) 1, 2.
b) 2, 3.
c) 1, 2, 3.
d) 1, 3.

106. The minimum RVR for single engine IFR operations for a precision approach without autopilot is:

a) 550m
b) 200m
c) 800m
d) 1 500m

107. The lights shown by an aerodrome identification beacon at a land aerodrome shall be

a) White colour identification given by morse code
b) Green colour identification given by morse code
c) Red flashing lights
d) Yellow flashing lights

108. Racetrack / Reversal Procedure:

a) Reversal procedure for a racetrack pattern for Cat B aircraft is 140 kts
b) Reversal procedure, otherwise known as a Procedure Turn is applicable for joining the holding pattern and speeds are the same as for holding pattern speeds and depend on

altitude / flight level of the aircraft

c) Reversal procedure is used to join the holding pattern from sector I / II.

d) Speed limitations for Racetrack pattern laid down by ICAO – for Cat B aircraft as 135 KIAS

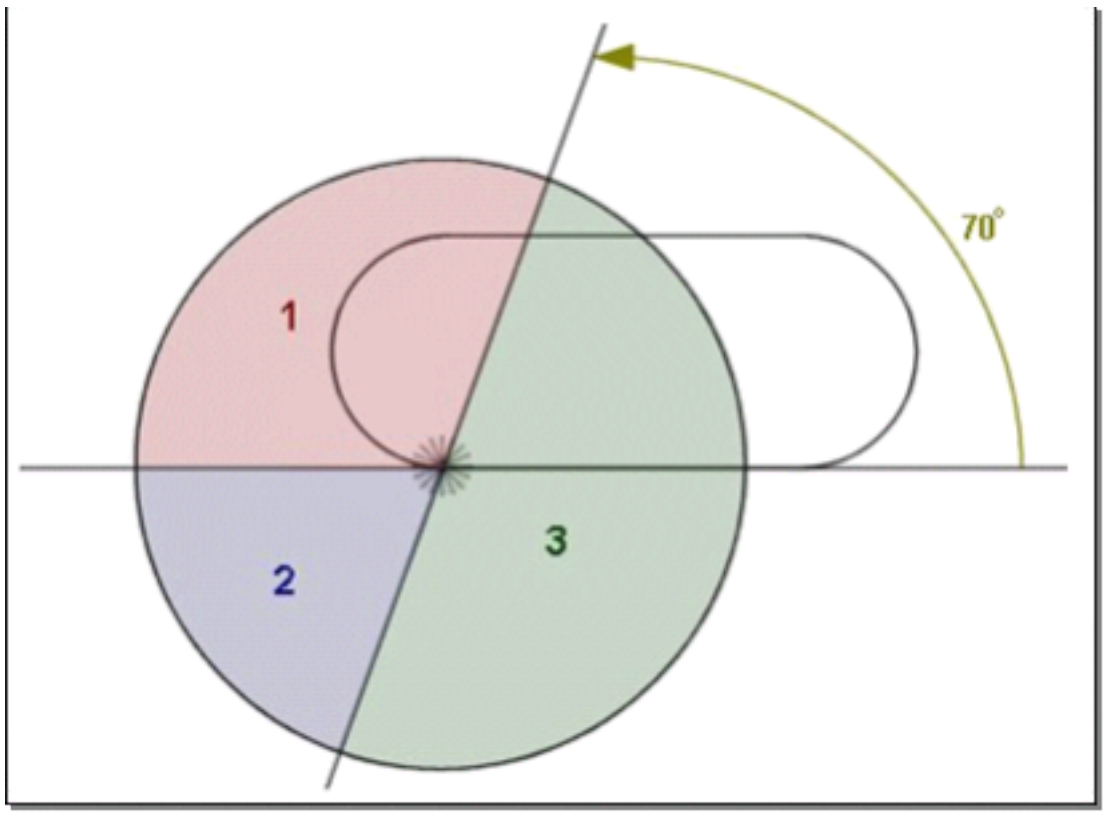
109. Refer to figure below - entry sectors:
When proceeding to the final segment of the approach procedure, a pilot entering a racetrack pattern from sector 1 shall:

a) Either intercept the inbound track or return directly to the fix

b) Descend on the outbound track for at least one minute before starting the procedure turn

c) First intercept the inbound track

d) Return directly to the fix



110. During a conventional approach, the Minimum Descent Height (MDH) is referred to the runway threshold altitude and not to the aerodrome altitude if the runway threshold is at more than:

a) 2 m (7 ft) below the airdrome altitude

b) 2 m (7 ft) above the airdrome altitude

c) 4 m (14 ft) below the airdrome altitude

d) 4 m (14 ft) above the airdrome altitude

111. Concerning to RNP (Required Navigation Performance) types, the indication RNP 4, represents a navigation accuracy of

a) plus or minus 4 NM on a 90 per cent containment basis

b) plus or minus 4 NM on a 95 per cent containment basis

c) plus or minus 4 NM on a 98 per cent containment basis

d) plus or minus 4 miles on a 90 per cent containment basis

112. Aerodrome Operating Minima, the lowest minima to be used by an operator in a category B aeroplane for circling are:

a) MDH=500 ft and visibility=1600 m

b) MDH=400 ft and visibility=1500 m

c) MDH=600 ft and visibility=2400 m

d) MDH=700 ft and visibility=2600 m

113. CAT I RVR minima for an approach at an airfield with a full approach light system, and the associated lighting and markings on the runway is:

a) 500 m
b) 550 m
c) 600 m
d) 1 000 m.

114. A precision approach runway CAT II is an instrument runway served by ILS and visual aids intended for operations down to:

a) a RVR of 250 meters and a DH of not less than 200 ft.
b) a RVR of 550 meters and a DH of not less than 200 ft.
c) a RVR of 200 meters and a DH of not less than 100 ft.
d) a RVR of 300-450 meters and a DH of not less than 100 ft.

115. In a procedure turn (45°/180°), a 45° turn away from the outbound track is performed from the start of turn for categories A and B aircraft for:

a) 1 minute 15 seconds.
b) 1 minute.
c) 1minute 30 seconds.
d) 2 minutes.

116. Terminal Arrival Altitude (TAA) is referenced to:

a) Radio Nav Aid for that aerodrome
b) Usually the Intermediate Fix (IF) or some case the IAF
c) Usually the Initial Approach Fix (IAF) or some cases the IF
d) Usually the Final Approach Fix (FAF) or some cases IAF

117. The minima for a VOR approach is called a:

a) Minimum Decision altitude
b) Minimum Descent altitude
c) Decision altitude
d) Descent altitude

118. How is CDFA carried out?

a) Precision with localiser / glide path to control rate of descent
b) Non-precision with visual guidance / manual calculated to control rate of descent
c) Non-precision with aircraft electronic guidance for the descent
d) RNAV / GNSS approach with SBAS to monitor rate of descent

119. In a procedure turn (45°/180°), a 45° turn away from the outbound track is performed from the start of the turn for categories C, D, E aircraft for:

a) 1 minute 15 seconds.
b) 1 minute.
c) 1 minute 30 seconds.

d) 2 minutes.

120. Which is the obstacle clearance in the primary area of the intermediate approach segment in an instrument approach procedure?

a) 150m (492 ft).
b) 300m (984 ft).
c) 450m (1476 ft).
d) 600m (1968 ft).

121. A category I precision approach (CAT I) is an approach which may be carried out with a runway visual range of at least:

a) 350 m
b) 550 m
c) 800 m
d) 500 m

122. In an instrument approach procedure, the segment in which alignment and descent for landing are made is called:

a) Initial approach segment.
b) Intermediate approach segment.
c) Arrival segment.
d) Final approach segment.

123. An Intermediate Approach Fix is abbreviated as ……on RNAV / GNSS approach charts?

a) IAF
b) Int F
c) FAF
d) IF

124. Cat A aircraft at FL 150 in a hold at SLV (S32° 27 'E20° 37)' will "

a) Fly below 170 kts with 1.5 min legs
b) Fly below 175 kts with 1 min legs
c) Fly below 175 kts with 1.5 min legs
d) Fly below 170 kts with 1 min legs

125. Where does the initial approach segment in an instrument approach procedure commence?

a) At the IAF.
b) At the IF.
c) At the FAF.
d) At the final en-route fix.

126. According to ICAO 8168 that requires a pilot to be within 5° of track:

a) The pilot should attempt to maintain track by adjusting heading to offset drift at all times
b) The pilot should attempt to maintain track by off-setting drift when being given radar vectors
c) Pilot should attempt to maintain track by off-setting drift only when required to maintain a track given in the chart

d) Pilot should never offset drift but just maintain heading given on the chart or by ATC

127. When ‘Holding Area’ is referred to on an en route chart, this refers to:

a) Area covered by Holding pattern as well as the surrounding area which allows a clearance of ± 1000 ft above all objects
b) Area outside Holding Pattern which also gives a clearance above all objects, starting at 1000 ft and going to 0 at the edge of the buffer area.
c) Area where aircraft wait before entering RWY demarcated by double yellow lines, one of which is dashed (nearest runway surface)
d) Area on runway surface where aircraft usually do the line up on centre line before take-off – this distance is included in the TORR.

128. The characteristics of Intermediate Approach Segment are:

a) The segment in which the landing configuration is set in preparation for landing
b) The segment during which the aircraft speed and configuration should be adjusted to prepare aircraft for final approach. Descent gradient kept as shallow as possible.
c) The segment where the major portion of descent required is done in preparation for final approach
d) The segment where the aircraft is slowed down to the approach speed + 10 to 20 kts, to prepare for landing.

129. Definition of GBAS is:

a) Ground Based Approach System
b) Ground Based Augmentation System
c) GNSS before approach specification
d) Graded by active Satellite

130. In a precision approach (ILS), generally glide path intersection occurs at heights above runway elevation from:

a) 300m (984 ft) to 600m (1968 ft).
b) 150m (492 ft) to 300m (984 ft).
c) 150m (492 ft) to 900m (2955 ft).
d) 300m (984 ft) to 900m (2955 ft).

131. In a precision approach (ILS), obstacle clearance surfaces assume that the pilot does not normally deviate from the centreline, after being established on track, more than:

a) A quarter of scale deflection.
b) Half a scale deflection.
c) One scale deflection.
d) One and a half of scale deflection.

132. Which are the phases of a missed approach procedure?

a) Initial, intermediate and final.
b) Arrival, initial, intermediate and final.
c) Arrival, intermediate and final.
d) Initial and final.

133. If at or below 14 000 ft the timing for the outbound leg in a holding pattern should not exceed:

a) 2 mins
b) 1.5 mins
c) 1 min
d) Whatever distance is required by the chart

134. The term used to describe the visual phase of flight after completing an instrument approach, to bring an aircraft into position for landing on runway which is not suitably located for straight-in approach, is:

a) Visual approach.
b) Visual manoeuvring (circling).
c) Contact approach.
d) Aerodrome traffic pattern.

135. When the visual manoeuvring (circling) area has been established the obstacle clearance Altitude / height (OCA/H) is determined:

a) Only for categories A and B aircraft.
b) Only for categories C, D and E aircraft.
c) For all categories of aircraft, and it is the same for all of them.
d) For each category of aircraft, and it may be different for each one of them.

136. A circling approach is:

a) A visual manoeuvre to be conducted only in IMC.
b) A flight manoeuvre to be performed only under radar vectoring.
c) A visual flight manoeuvre keeping the runway in sight.
d) A contact flight manoeuvre.

137. In general, during a straight-in approach, the MDH cannot be below:

a) the OCH
b) 200 ft
c) 350 ft
d) 400 ft

138. If visual reference is lost while circling to land from an instrument approach, it is expected that the pilot will make an initial climbing turn towards the:

a) MAP.
b) FAF.
c) Landing runway.
d) Final missed approach track.

139. If contact is lost with the runway on the down-wind leg of a circling manoeuvre, what actions should be taken?

a) Turn 90 degrees towards the runway and wait for visual contact
b) If you have other visual cues, continue with ground contact
c) Turn towards the inner marker for the runway in use, maintaining circling altitude

d) Initiate a missed approach

140. During an instrument approach, the minimum obstacle clearance (MOC) of the initial approach segment primary area is equal to :

a) 120 m (394 ft)
b) 150 m (492 ft)
c) 210 m (690 ft)
d) 300 m (984 ft)

141. The primary area of an instrument approach segment is:

a) the most critical part of the segment where the minimum altitude should be kept very carefully;
b) the first part of the segment ;
c) the outside part of the segment where the obstacle clearance increases from 0 ft to the appropriate minimum
d) A defined are symmetrically disposed about the nominal flight track in which full obstacle clearance is provided

142. You have received holding instructions for a radio fix. The published holding procedure is: all turns to the right, 1 minute outbound, inbound MC 052°. You are approaching the fix on an inbound Magnetic Track 232°. Select the available entry procedure.

a) Off set.
b) Parallel.
c) Direct.
d) Either "off set" or " parallel"

143. During an instrument approach, followed by a missed approach, the minimum obstacle clearance (MOC) in the intermediate phase of this missed approach is :

a) 30 m (98 ft)
b) 50 m (164 ft)
c) 90 m (295 ft)
d) 120 m (384 ft)

144. A "precision approach" is a direct instrument approach...

a) using at least one source of bearing information and one source of elevation or distance information.
b) using bearing, elevation and distance information, providing the pilot uses a flight director or an autopilot certified to a height below 200 ft.
c) using bearing, elevation and distance information.
d) carried out by a crew of at least two pilots trained with a specific working method.

145. Unless otherwise indicated, the missed approach procedures published on the IAC charts are based on a minimum climb gradient of:

a) 2%
b) 2.5%
c) 3.3%
d) 5%

146. Minimum sector altitudes are determined by the inbound radial in relation to the IAF. These sectors are established for a distance from the IAF of:

a) 5 NM
b) 10 NM
c) 20 NM
d) 25 NM

147. Unless otherwise published or instructed by ATC, all turns after initial entry into the holding pattern shall be made into which direction?

a) To the right.
b) To the left.
c) First right and then to the left.
d) Teardrop to the left and then to the right.

148. During an instrument approach, followed by a missed approach, the minimum obstacle clearance (MOC) in the final phase of this missed approach is :

a) 30 m (98 ft)
b) 50 m (164 ft)
c) 90 m (295 ft)
d) 120 m (384 ft)

149. In a holding pattern all turns are to be made at a:

a) rate of 3°per second.
b) rate of 3°per second or at a bank angle of 20°, which ever requires the lesser bank.
c) rate of 3°per second or at a bank angle of 25°, which ever requires the lesser bank.
d) maximum bank angle of 25°.

150. Entering a holding pattern at FL 110 with a jet aircraft, which will be the maximum speed?

a) 230 kt IAS.
b) 230 kt TAS.
c) 240 kt IAS.
d) 240 kt TAS.

151. What is the outbound timing in a holding pattern above FL 140?

a) 1 minute.
b) 1 minute 30 seconds.
c) 2 minutes.
d) 2 minutes 30 seconds.

152. In relation to the three entry sectors, the entry into the holding pattern shall be according to:

a) Heading.
b) Course.
c) Bearing.
d) Track.

153. How far beyond the boundary of the holding area extends the buffer area?

a) 3 NM.
b) 5 NM.
c) 5 km.
d) 3 km.

154. According with the "noise abatement take-off and climb procedure B" , as established in DOC 8168 - Ops Volume 1, part V, aircraft must climb at V2 + 10 to 20 kt, until reaching:

a) 500 ft
b) 1 500 ft
c) 3 000 ft
d) 1 000 ft

155. Is it possible that a DH is lower than OCH for an approach?

a) No
b) Yes, if so directed by ATC
c) Yes, if published by an aircraft operator
d) Yes, when the system minima is lower

156. Clearance received to do a non-standard hold east of 5 DME fix on radial 086° from a VOR station, 5 mile legs. You arrive at 15 DME fix on heading 166°(M). What is the entry procedure?

a) Teardrop
b) Direct
c) Parallel
d) Either I or II

157. The maximum speed in the holding pattern up to and including 14 000 ft for Cat B aircraft is:

a) 175 KIAS
b) 180 KIAS
c) 170 KIAS
d) 160 KIAs

158. What timing procedure should be used when performing a VOR holding pattern at 8000 ft?

a) Time for 1.5 mins on outbound leg, which begins abeam fix or wings level, whichever comes later
b) Time for 1 min when overhead the VOR
c) Time when leaving the VOR and arrange to be back overhead VOR after 4 mins
d) Time for 1 min on outbound leg, which begins abeam fix or wings level whichever comes later

159. Required Navigation Performance (RNP) shall be prescribed

a) by states but not on the basis of regional air agreements
b) by ICAO on the basis of regional air navigation agreements
c) by states on the basis of regional air navigation agreements
d) by regional air navigation agreements

160. DH is reference to?

a) Aerodrome elevation
b) Runway threshold elevation
c) ARP
d) Nil

161. The information to consider for a standard straight-in approach is:
1 - the horizontal visibility
2 - the ceiling
3 - the minimum descending altitude (MDA)
4 - the decision altitude (DA)
Which of the following combinations contains all of the correct statements?

a) 1 - 3
b) 1 - 4
c) 1 - 2 - 3
d) 1 - 2 - 4

162. The Initial Approach segment of an Instrument Approach Procedure:

a) Commences at the Initial approach fix and terminates at the Intermediate fix
b) Commences at the Intermediate approach fix and terminates at the Initial fix
c) Commences at the Initial approach fix and terminates at the Final approach fix
d) Commences at the Intermediate approach fix and terminates at the Final approach fix

163. The determination of the aerodrome minimum operating conditions must take the following into account :
1. equipment available for navigation
2. dimensions and characteristics of the runways
3. composition of the flight crew
4. obstacles in the vicinity of approach and missed approach areas
5. facilities for determining and communicating the weather conditions
The combination regrouping all the correct statements is:

a) 1,2,3,4,5
b) 1,2,4,5
c) 2,4,5
d) 2,3,5

164. The MSA in RSA is:

a) Clearance of 1500 ft within a radius of 25 km
b) Clearance of 1000 ft within a radius of 25 km
c) Clearance of 1500 ft within a radius of 25 nm
d) Clearance of 1000 ft within a radius of 25 nm

165. Aerodrome Operating Minima, the lowest minima to be used by an operator in a category B aeroplane for circling are :

a) MDH=600 ft and visibility=2400 m
b) MDH=700 ft and visibility=2600 m
c) MDH=500 ft and visibility=1600 m
d) MDH=400 ft and visibility=1500 m

166. The criteria taken into consideration for classification of Aeroplanes by Categories is the indicated airspeed at threshold (Vat), which is equal to the stalling speed at the maximum landing mass (Vso) multiplied by 1,3. Corresponding Aeroplane Category when Vat is from 141 kt to 165 kt is:

a) C
b) E
c) D
d) B

167. If the crew on an arriving aircraft approaching a controlled aerodrome will report 'field in sight', a clearance for 'visual approach' may be given under certain conditions

a) The meteorological visibility must not be less than 8 km
b) The air traffic controller will provide separation to other controlled traffic
c) Continued approach will be according to VFR
d) The approach must be passing the FAF

168. "Clearway" is defined rectangular area established to:

a) Reduce the risk of damage to aircraft running off a runway.
b) Protect aircraft during take-off or landing operations.
c) Permit the aircraft to stop if it fails the take-off.
d) Permit aircraft to make a portion of its initial climb to a specific height.

169. Circling to land MDA refers to:

a) Aerodrome elevation
b) Relevant runway threshold
c) Mean sea level.
d) Flight levels

170. When carrying out a NPA the MDA refers to:

a) Mean sea level.
b) The RWY THR elevation
c) Aerodrome reference point
d) Aerodrome elevation

171. If a stepdown fix is established on the final approach track, a descend shall be made so as to:

a) leave the intermediate approach altitude, step by step until reaching the MAPt.
b) pass the fix not below the specified crossing altitude.
c) follow approximately 50 feet above the nominal glide path.
d) pass the fix at the rate of descent of 500 feet/min, which is obligatory.

172. During an ILS procedure, if the reported RVR/visibility is less than the applicable minima, the approach shall not be continued beyond:

a) the FAF, or 1500 ft above the aerodrome / heliport if there is no FAF.
b) the outer marker or equivalent, or 1000 ft above the aerodrome / heliport if there is no outer marker or equivalent.
c) the middle marker, or 500 ft above the aerodrome / heliport if there is no middle marker.

d) the glide slope intersection.

173. The aerodrome operating minima for a VOR/DME approach are: MDH = 360 ft Required RVR = 1500 metres. Reported RVR is 1800 metres. The pilot may continue the final approach:

a) if the ceiling reported is higher than 360 ft.
b) if the ceiling reported is higher than 240 ft.
c) regardless of the ceiling reported.
d) if the ceiling reported is higher than 240 ft during the day and 360 ft at night.

174. The descent is normally initiated prior to FAF in order to achieve the prescribed descent gradient angle. Delaying the descent until reaching the FAF at the procedure altitude height will cause a descent gradient angle to be greater than 3°. Identify:

a) Continuous descent Final approach (CDFA)
b) ILS final approach on the glide slope
c) RNAV/GNSS final approach
d) Circling Approach

175. If an aircraft is being vectored to intercept a localiser for an ILS approach and experiences RCF what should the pilot ṡ next actions be:

a) Continue to intercept the localiser and complete the ILS approach and landing
b) Initiate the MAP and return to IAF
c) Established on the localiser and expect light signals to indicate the clearance to land
d) Initiate the MAP and divert to nearest alternate.

176. A manoeuvre in which a turn is made away from a designated track followed by a turn in the opposite direction to permit an aircraft to intercept and proceed along the reciprocal track of the designated track is called:

a) Base Turn
b) Off set entry
c) Procedure Turn
d) Direct entry

177. ICAO PAN OPS - What should a pilot do when instrument departure chart does not specify a maximum flight speed for turning departure

a) There are maximum speeds for turning departures for each category of aircraft that must still be complied with.
b) Comply with the speeds for controlled airspace
c) The PIC may decide which speed he wants to fly at
d) Use the holding speeds

178. Aerodromes signs should be in the following configuration:

a) mandatory instruction signs; black background with red inscriptions.
b) information signs; yellow or black background with black or yellow inscriptions.
c) mandatory instruction signs ; red background with black inscriptions.
d) information signs; orange background with black inscriptions

179. When is the MDA in a NPA not related to the RWY THR:

a) When the RWY THR is less than 2 m (7ft) higher than the airfield elevation
b) When the RWY THR is more than 2 m (7ft) higher than the airfield elevation
c) When the RWY THR is less than 2 m (7ft) lower than the airfield elevation
d) When the RWY THR is more than 2 m (7ft) lower than the airfield elevation

180. Regarding SIDs: SIDs are established at certain airports primarily to

a) Simplify clearance delivery procedures
b) Make the pilot feel comfortable
c) Assist the pilot
d) Ensure the pilot follows the correct procedure

181. Categories of aeroplanes are established in order to calculate different minima for different aircraft based on:

a) Aircraft stalling speed x 1.23 in landing configuration at maximum landing mass
b) Aircraft stalling speed x 1.23 in landing configuration at maximum certificated landing mass
c) Aircraft stalling speed x 1.3 in landing configuration at maximum landing mass
d) Aircraft stalling speed x 1.3 in landing configuration at maximum certificated landing mass

182. ASDA is

a) The length of the take-off run available plus the length of the stopway and clearway
b) The length of the take-off run available plus the length of the stopway
c) The length of the take-off distance available plus the length of the stopway
d) The length of the take-off distance available plus the length of the stopway and clearway

183. Turning departures provide track guidance within

a) 10 km
b) 5 km
c) 15 km
d) 25 nm

184. TODA is

a) The length of the take-off run available
b) The length of the take-off run available plus the length of the stopway
c) The length of the take-off run available plus the length of the displaced threshold
d) The length of the take-off run available plus the length of the clearway

185. During an instrument approach followed by a missed approach the main obstacle clearance in the intermediate phase of this approach is ⋯:.

a) 30 m (98 ft)
b) 50 m (164 ft)
c) 90 m (295 ft)
d) 120 m (384 ft)

186. Information that is not given in an AIP approach and landing charts

a) Lighting
b) Visibility minima
c) OCH
d) Frequencies

187. Longitudinal separation minima based on time for aircraft at the same cruising level when navigation aids permit frequent the termination of position and speed will be

a) 2 mins
b) 5 mins
c) 10 mins
d) 20 mins

188. In a precision approach CAT I lighting system, the single 2 & 3 light sources on the centre line have a length of

a) 200 m
b) 300 m
c) 500m
d) 1000 m

189. A "balked landing

a) A landing from an instrument approach
b) A landing manoeuvre that is unexpectedly discontinued at any point below OCA/H
c) A landing from a visual approach
d) A landing manoeuvre that ends in a landing

190. Which info is not included in instrument approach charts in the AIP

a) OCH
b) MSA
c) Any addition to minima when the aerodrome is used as an alternate
d) Frequencies

191. The aerodrome category for rescue and fire fighting is based on:

a) The length of the longest runway
b) The aircraft category speed
c) The overall length of the longest aeroplane normally using the aerodrome and its max fuselage weight

192. The width of the corridor around a specified arrival route is

a) 2 nm
b) 5 nm
c) 3 nm
d) 7 nm

193. An information sign other than a location sign consists of an inscription of:

a) Black on yellow background
b) Yellow on black background
c) Red on white background
d) White on red background

194. When a single set of PAPI lights is installed at an aerodrome you would expect the installation to be on:

a) The right side of the runway
b) Both sides of the runway
c) The left side of the runway

195. Displaced threshold:

a) Located at the end of the runway
b) Used for turning of aircraft
c) Part of a runway which is fir for the movement of aircraft
d) A threshold not located at the extremity of a runway

196. ICAO DOC - the maximum speed for category B aeroplane during a turning departure

a) 91 knots
b) 121 knots
c) 140 knots
d) 165 Knots

197. How is the missed approach point on an APV/Baro VNAV indicated:

a) The MAP is defined by a navigational facility or a fix,
b) By the point where the electronic glide path intersects with the applicable DA/H
c) Begins at the point where 50m (164 ft) obstacle clearance is first obtained and can be maintained.
d) A missed approach holding fix (MAHF)

198. Baro VNAV approach may never be flown without:

a) The RNAV/baro-VNAV equipment being unserviceable
b) A remote altimeter setting source
c) An out-of-date altimeter setting
d) The current local altimeter setting (QNH/QFE) set on the aircraft ś altimeter

199. Where is the initial approach segment of an Instrument approach procedure situated?

a) At the end of the reversal, race track or dead reckoning track procedure and the final approach fix or point
b) Begins when the aircraft is on the inbound track of the procedure turn, base turn or final inbound leg of the racetrack procedure.
c) After the en route phase between the initial approach fix and the intermediate fix / final approach fix or point

d) Begins at the missed approach point (MAPt) and ends at the point where the climb is established.

200. "Minimum descent altitude" means

a) A specified altitude or height in the precision approach or approach with vertical guidance at which a missed approach must be initiated if the required visual reference to continue the approach has not been established.
b) A specified altitude in a non-precision approach below which descent may not be made without the required visual reference
c) The vertical distance of a level, a point or an object considered as a point, measured from a specified datum.
d) The vertical distance of a level, a point or an object considered as a point, measured from mean sea level (MSL).

201. Procedures contained in ICAO Doc 8168 assume:

a) That all pilots are trained to fly RNAV
b) That all engines are operating
c) That all aircraft are equipped with GPS
d) That pilots will calculate for obstacle clearance

202. According to ICAO Doc 8168: Minimum descent height is applicable to:

a) Aerodrome elevation or the threshold elevation if more than 7 ft below the aerodrome elevation
b) Only the threshold elevation
c) Only the aerodrome elevation
d) All instrument approach procedures

203. There is an additional buffer area that extends 5.0 nm beyond the boundary of the holding area. This buffer area guarantees a minimum obstacle clearance over flat terrain of:

a) 984 ft
b) 2000 ft
c) 492 ft
d) 1500 ft

204. Minimum length of HI/MI approach lighting:

a) 900m
b) 900 m
c) 720 m

205. The maximum speed for a category A aircraft during a turning departure is

a) 120 Kts
b) 130 kts
c) 140 kts
d) 150 kts

Procedures questions

206. If an instrument approach does not have an intermediate fix, where will the intermediate approach segment begin?

a) Between the end of the reversal, race track or dead reckoning track procedure and the final approach fix or point
b) Between the initial approach fix and the intermediate fix or, where applicable, the final approach fix or point.
c) Before which the prescribed missed approach procedure must be initiated in order to ensure that the minimum obstacle clearance is not infringed.
d) Begins at a facility or fix, called the final approach fix (FAF) and ends at the missed approach point (MAPt).

207. In terms of the GNSS flight operation turn anticipation is always used

a) When entering a holding pattern
b) For a fly-by waypoint
c) For a fly over waypoint
d) at an altitude/height

208. What will be the effect of temperature on a Baro VNAV approach?

a) A go around becomes compulsory when the OAT exceeds the limiting temperature on the approach chart
b) Does not affect it at all
c) It necessitates that the pilot contact ATC
d) The pilot must downgrade to a non-precision approach

209. An Instrument approach procedure includes:
    1. Non precision Approach
    2. Approach procedure with Vertical Guidance
    3. Precision Approach
    4. Circling Approach

The combination regrouping all the correct statements is:

a) 1 & 2
b) 1, 2 & 3
c) 2 & 3
d) 1, 2, 3 & 4

210. Maximum speed for reversal procedure for Cat B aircraft:

a) 120 kts
b) 140 kts
c) 150 kts
d) 160 kts

211. Transition altitude means:

a) The altitude at which the vertical position of the aircraft is controlled by reference to Altitude
b) The altitude at which the vertical position of the aircraft is controlled by reference to flight levels
c) The altitude where the pilot must put QFE into the altimeter
d) The altitude where the pilot must put QNHE into the altimeter

212. If the reported RVR or visibility for runway or touchdown zone area is lower than the operating minima, the PIC shall:

a) Continue the approach beyond the FAF
b) Continue the approach to the MAPt
c) Not continue the approach beyond the inbound turn
d) Not continue an approach beyond the FAF or equivalent or below 1000 ft above the aerodrome

213. An owner or operator shall not use a navigation system based on electronic data unless the source of the data is:

a) Anyone who sells the navigation system
b) The supplier of the navigation system
c) A supplier satisfactory to the manufacturer of the aircraft or navigation system or the Director
d) Any maintenance organisation

214. The development of contingency procedures in case of a system failure or an emergency in flight which occurs after V1

a) The operator
b) The Regulator
c) ICAO
d) The PIC

215. An ATS airspace where IFR and VFR flights are permitted, all flights are subject to air traffic control service and IFR flights are separated from other IFR flights and from VFR flights VFR flights are separated from IFR flights and receive traffic information in respect of other VFR flights, is classified as:

a) Airspace B
b) Airspace C
c) Airspace D
d) Airspace E

216. ICAO Doc 8168 recommends that pilots should not accept radar vectors during departures unless:

a) The aircraft is equipped with a GPS
b) The pilots are trained to fly RNAV routes
c) They are operating on a SID
d) They are above the minimum Altitude required to maintain obstacle clearance in the event of an engine failure

217. What should a pilot do when an instrument approach chart does not specify speed limits:

a) Fly at the speed restriction for controlled airspace
b) Fly at the speed used to calculate the category of aircraft
c) Fly at the speed restriction for uncontrolled airspace
d) Fly the aircraft at minimum control speed plus 50 kts

218. A RNAV GBAS approach may not be flown unless:

a) The pilot can update the waypoints manually while flying
b) The pilot is happy to accept the aircraft with an out of date database
c) Any incomplete waypoint information in the database has been updated by manual pilot input
d) ATC gives permission

219. ICAO Doc 8168 recommends that reduced power should not be required for take-off:

a) In adverse operating conditions, including contaminated runway or visibility
b) At any stage
c) When operating a turbine aircraft
d) During noise abatement procedures

220. PAN OPS – what are the two different types of approach and landing operations that can be conducted using Baro VNAV?

a) Approach with Vertical Guidance and Non-Precision approach
b) Precision Approach and APV
c) Precision Approach and Non-precision approach

221. Which of the following glide path angles represent the maximum to be used in the design of a standard Category II and III ILS instrument approach procedure in accordance with ICAO PANS-OPS?

a) 3 degrees
b) degrees
c) degrees
d) 4 degrees

222. The AAIM function of an aircraft is performed using:

a) Only information from onboard navigation equipment
b) Only information from satellite signals
c) Information from ground based equipment
d) Information from other onboard navigation equipment in addition to satellite signals

223. When a missed approach climb gradient other than ⋯⋯:is used, this must be indicated on the instrument approach chart

a) 2.5 %
b) 2.8 %
c) 3%
d) 3.2%

224. ICAO procedures are developed for:

a) Contingency procedures
b) Standard procedures
c) Non-standard Procedures
d) Normal procedures

225. If the glide path is lost in a precision approach, it becomes a:

a) Non Precision approach
b) Approach procedure with Vertical Guidance
c) Straight in Approach
d) Turning Approach

226. The minimum sector altitude provides 1500 ft obstacle clearance within how many miles radius from the navigation facility upon which the instrument approach procedure is predicated:

a) 15 NM (28 km).
b) 20 NM (37 km).
c) 25 NM (46 km).
d) 30 NM (55 km).

227. Would you expect a delay if no EAT has been given?

a) Could be delayed by up to 10 minutes.
b) Yes, in any case.
c) No, provided that I am number one in approach.
d) Nil

228. Class G airspace. IFR and VFR flights are permitted and all the flights receive:

a) Air Traffic Control Services.
b) Only Traffic Information.
c) Flight Information Services, if permitted.
d) Terrain clearance from information services

229. In Class F and G airspace, the pilot maintains radio contact with an information or advisory service, these services:

a) Issue clearance, which must be strictly adhered to.
b) Give information regarding other traffic, and weather if possible.
c) Only offer information if the pilot requests it.
d) Will give instructions to avoid other IFR traffic.

230. A lower limit of a Control Area shall be established at a height above the ground level or water of not less than:

a) 200 metres.
b) 300 metres.
c) 150 metres.
d) 500 metres.

231. Airspace in which aircraft only receive Flight Information services is classified as:

a) Class A
b) Class F
c) Class G

232. Category IIIB (Cat IIIB) operation means:

a) A precision approach and landing with a decision height lower than 30 ft or no decision height and a RVR of not less than 200 m
b) A precision approach and landing with a decision height lower than 100 ft (30 m) or no decision height and a RVR of more than 200 m
c) A precision approach and landing with s decision height lower than 50 ft (15 m) or no decision height and a RVR of not less than 200 m but not less than 50 m

233. If an aircraft that has just descended under radar control through the MSA in IMC and loses contact with the ATC, what should the pilot do?

a) Climb immediately back to MSA, and plan for a diversion to nearest instrument approach or VMC conditions
b) Continue descent, since ATC did clear to a lower level, and hope for VMC before reaching cleared level
c) Maintain present level, and contact ATC on another frequency for further clearance
d) Climb back to MSA and use GNSS or other instruments to position clear of obstacles

234. On final approach after executing a circling approach visual contact is lost. Your actions would be:

a) Initiate an immediate climb towards the initial approach fix on which the Instrument approach is based, then climb to initial approach altitude in the hold
b) Execute climbing turn through 180° and carry out the MAP for that approach
c) Climb straight ahead towards the initial approach fix to the MDA for circling approach and join downwind for the active runway
d) Continue the approach

235. Uncontrolled airspace is classified as:
1. Class A
2. Class F
3. Class G

The combination that regroups all the correct statements is:

a) 1, 2, 3
b) 1, 3
c) 2, 3

236. At the commencement of final approach, if the controller possesses wind information in the form of components, significant changes in the mean surface wind direction and speed shall be transmitted to aircraft. The mean tail-wind component significant change is:

a) 5 KT
b) 4 KT
c) 3 KT
d) 2 KT

237. A Control Zone shall extend laterally to at least:

a) 5 nautical miles from the centre of the aerodrome or aerodromes concerned in the direction from which approaches may be made.
b) 10 miles from the centre of the aerodrome or aerodromes concerned in the direction from which approaches may be made.
c) 15 miles from the centre of the aerodrome or aerodromes concerned in the direction from which approaches may be made.

d) 20 miles from the centre of the aerodrome or aerodromes concerned in the direction from which approaches may be made.

238. A Control Zone shall extend laterally to at least:

a) 5 nautical miles from the centre of the aerodrome or aerodromes concerned in the direction from which approaches may be made.
b) 10 miles from the centre of the aerodrome or aerodromes concerned in the direction from which approaches may be made.
c) 15 miles from the centre of the aerodrome or aerodromes concerned in the direction from which approaches may be made.
d) 20 miles from the centre of the aerodrome or aerodromes concerned in the direction from which approaches may be made.

239. An aircraft is maintaining FL 150 within airspace class C. Another aircraft below at FL 140 is receiving a clearance to descend to FL 70. It is severe turbulence in the area.
When is the earliest that a clearance to descend to FL 140 or below can be expected?

a) When the other aircraft has reported that it has left FL 140
b) When the other aircraft has reported that it has reached FL70
c) When the other aircraft has reported that it has left FL 120
d) When the other aircraft has reported that it has descended through FL 130

240. Define MSA – Minim Sector Altitude:

a) Depicted on approach plates, SID and STAR procedures – defined as giving at least 1000 ft clearance above all obstacles within a radius of 25 nm from the Radio Nav Aid on which it is centred.
b) The lowest altitude which may be used which will provide clearance of 1500 ft above all objects located in an area contained within a sector of a circle of 25 nm radius centred on a Radio Nav Aid
c) The lowest altitude that an aircraft may descend to in a non-precision approach before visual contact is established of the airfield and its environs – it is calculated by the pilot using the system minima and OCH
d) The lowest altitude that clears all objects within the sector by at least 1000 ft if the object is 5000 ft amsl or less and clears all objects by 2000 ft that are more than 5000 ft amsl.

241. Given: AGL = above ground level AMSL = above mean sea level FL = flight level within uncontrolled airspace, the first usable level in IFR must provide a 500 ft margin above the following two levels:

a) 3 000 ft AMSL or 1 500 ft AGL.
b) FL 30 or 100 ft AGL.
c) FL 30 or 1 500 ft AGL.
d) 3 000 ft AMSL or 1 000ft AGL.

242. Air Traffic Control operates in:

a) Control zones, Aerodrome traffic zones and in upper airways.
b) Aerodrome traffic zones, Advisory airways and Terminal Control areas.
c) Advisory areas, Terminal Control Areas.
d) Control zones, aprons, Control areas

Procedures questions

243. A controlled airspace extending upwards from a specified limit above the earth is:

a) Control area.
b) Control zone.
c) Advisory airspace.
d) Flight Information Region.

244. A lower limit of a control area shall be established at a height above the ground or water level of not less than

a) 200m
b) 400m
c) 600m
d) 800m

245. The lower limit of a TMA shall be established at a height of at least:

a) 700 ft AGL
b) 500 ft AGL
c) 100 ft AGL
d) 1000 ft AGL

246. In flight region (FIR) is an airspace within which the following services are provided

a) Flight info service and alerting service
b) Advisory service
c) Air Traffic control
d) Separation between all flight

247. The primary area of an instrument approach segment is:

a) the first part of the segment;
b) the outside part of the segment where the obstacle clearance increases from o ft to the appropriate minimum
c) A defined are symmetrically disposed about the nominal flight track in which full obstacle clearance is provided.
d) the most critical part of the segment where the minimum altitude should be kept very carefully;

248. ATC operates in ···:.

a) Airways, general flying areas
b) Control zones, aerodrome traffic zones and upper airways
c) FIR regions
d) Advisory and flight information routes

249. An airfield with an AFIS, the AFIS···:.

a) Gives clearances to the PIC
b) Gives information to expedite traffic but leaves the decisions to the PIC
c) May not give any information to the PIC

250. Airspace in which aircraft only receive air traffic control services is classified as;

a) Class G
b) Class A
c) Class F

251. During an instrument approach, the minimum obstacle clearance (MOC) of the initial approach segment primary area is equal to :

a) 120 m (394 ft)
b) 150 m (492 ft)
c) 210 m (690 ft)
d) 300 m (984 ft)

252. One of the functions ensured by a radar control unit for the provision of approach control service is:

a) To conduct precision radar approach (PAR).
b) To apply a horizontal separation less than 5 NM.
c) To apply a reduced vertical separation of 500 feet between IFR and VFR flights.
d) To provide instructions to reduce the separation minima.

253. Which is the obstacle clearance in the primary area of the intermediate approach segment in an instrument approach procedure?

a) 450m (1476 ft).
b) 600m (1968 ft).
c) 150m (492 ft).
d) 300m (984 ft).

254. Lights on and in the vicinity of aerodromes may be turned off, provided that they can be again brought into operation:

a) At least 5 minutes before the expected arrival of an aircraft
b) At least one hour before the expected arrival of an aircraft
c) At least 30 minutes before the expected arrival of an aircraft
d) At least 15 minutes before the expected arrival of an aircraft

255. Under which conditions may an aircraft on a straight-in- VOR approach continue its descend below the OCA?

a) When seems possible to land
b) When the aircraft is in visual contact with the ground and with the runway lights in sight
c) When the aircraft has the control tower in sight
d) When the aircraft is in contact with the ground but not with the runway in sight yet

256. At what moment during the approach should the reported airfield altimeter setting be set?

a) When passing 3000 FT AMSL or 1000 FT AGL
b) When passing the transition level
c) When passing the transition altitude
d) Within the transition layer

257. Aerodromes signs should be in the following configuration:

a) mandatory instruction signs; black background with red inscriptions.
b) information signs; yellow or black background with black or yellow inscriptions.
c) mandatory instruction signs ; red background with black inscriptions.
d) information signs; orange background with black inscriptions

258. We can distinguish two types of departure routes. During a straight departure the initial departure track is within:

a) 5° of the alignment of the runway centre-line
b) 10° of the alignment of the runway centre-line
c) 25° of the alignment of the runway centre-line
d) 15° of the alignment of the runway centre-line

259. Controlled airspace is classified as:

1. Class A
2. Class F
3. Class G

The combination that regroups all the correct statements is:

a) 1, 2, 3
b) 1 only
c) 2,3

260. A Control Zone shall extend laterally to at least:

a) 10 miles from the centre of the aerodrome or aerodromes concerned in the direction from which approaches may be made.
b) 15 miles from the centre of the aerodrome or aerodromes concerned in the direction from which approaches may be made.
c) 20 miles from the centre of the aerodrome or aerodromes concerned in the direction from which approaches may be made.
d) 5 nautical miles from the centre of the aerodrome or aerodromes concerned in the direction from which approaches may be made.

261. Which procedure you follow if during an IFR flight in VMC you have two way communication failure?

a) Return to the aerodrome of departure.
b) Continue the flight maintaining VMC and land as soon as practicable.
c) Continue the flight at the assigned level and route; start approach at your ETA.
d) Maintain your assigned level and route and land at the nearest aerodrome that has VMC conditions.

262. The transition level:

a) Is published on the approach and landing chart for each aerodrome
b) Is calculated by the commander
c) Will be distributed via NOTAM
d) Is calculated by ATS

263. An approaching aircraft may descent below the MSA if:

a) the pilot is following the published approach procedure
b) all mentioned answers are correct
c) the pilot has the field and the underlying terrain in sight and will keep it in sight;
d) the aircraft gets radar vectors;

264. In an instrument departure procedure the minimum obstacle clearance at the departure end of runway equals:

a) 0 ft.
b) 3.3 % gradient.
c) 35 ft.
d) 0.8 % gradient.

265. The vertical position of an aircraft at or above the transition level will be reported:

a) as flight level.
b) as height.
c) as altitude.
d) according to pilot's choice.

266. How far beyond the boundary of the holding area extends the buffer area?

a) 3 km.
b) 5 NM.
c) 3 NM.
d) 5 km.

267. Required Navigation Performance (RNP) shall be prescribed

a) by states but not on the basis of regional air agreements
b) by ICAO on the basis of regional air navigation agreements
c) by regional air navigation agreements
d) by states on the basis of regional air navigation agreements

268. An ATS airspace where IFR and VFR flights are permitted, all participating IFR flights receive an air traffic advisory service and all flights receive flight information service if requested, is classified

a) Airspace D
b) Airspace E
c) Airspace F
d) Airspace G

269. The runway edge lights shall be:

a) white
b) blue
c) green
d) red

270. When a fixed-distance marking has to be provided this marking shall commence at:

a) 450 m from threshold
b) 600 m from threshold
c) 300 m from threshold
d) 150 m from threshold

271. "ASDA" (Acceleration Stop Distance Available) is:

a) The length of the take-off run available plus the length of stopway (if stopway provided)
b) The length of the runway plus the length of stopway available (if stopway provided).
c) The length of the take-off run available plus the length of stopway and clearway (if provided)
d) The length of the take-off run available plus the length of the clearway.

272. In a standard holding pattern turns are made:

a) to the left
b) in a direction depending on the entry;
c) in a direction depending on the wind direction
d) to the right

273. What will be your action if you cannot comply with a standard holding pattern?

a) Follow the radio communication failure procedure.
b) inform the ATC immediately and request a revised clearance.
c) a non-standard holding pattern is permitted.
d) it is permitted to deviate from the prescribed holding pattern at pilots discretion.

274. Flight information service shall be provided to all aircraft which are likely to be affected by the information and which are:

a) Provided with the air traffic control services and otherwise known to the relevant air traffic service units.
b) Provided with air traffic control services, only.
c) Known to the relevant air traffic services units.
d) Known to the relevant air traffic services units by a filed flight plan.

275. The Air Traffic control Services: do not prevent collisions with terrain.

a) Except when an aircraft is flying IFR in IMC.
b) Correct, expect when an IFR flight is vectored by radar.
c) Prevent collisions with terrain
d) Do not prevent collisions with terrain

276. Taxiway centre line lights other than an exit taxiway shall be:

a) Fixed lights showing blue.
b) Fixed lights showing yellow.
c) Fixed lights showing white.
d) Fixed lights showing green.

277. In general, during a straight-in approach, the MDH cannot be below:

a) the OCH
b) 200 ft
c) 350 ft
d) 400 ft

278. During circling-to-land (with or without prescribed flight tracks), the maximum allowed airspeed for a Cat B aeroplane, in order to remain within the protection envelope, is:

a) 120 kt
b) 125 kt
c) 150 kt
d) 135 kt

279. Runway threshold lights shall be:

a) Fixed lights showing green or white colours.
b) Fixed unidirectional lights showing green in the direction of approach to the runway.
c) Fixed unidirectional lights showing white in the direction of approach to the runway.
d) Fixed lights green colours.

280. In a precision approach category I lighting system, the centre line and crossbar lights shall be:

a) Flashing lights showing variable green.
b) Fixed lights showing variable white.
c) Flashing lights showing variable white.
d) Fixed lights showing variable green.

281. When "Secondary Radar" is used, an aircraft may be identified by one of the following procedures:

a) Observation of compliance with an instruction to operate transponder from "ON" to "STBY" and back to "ON".
b) To request pilot to set transponder on position "ON".
c) To request pilot to set transponder on position "OFF".
d) To request pilot to switch from "ON" to "STDBY".

282. When a RADAR operator says the following to an aircraft: "fly heading 030", the pilot must fly heading:

a) 030° true
b) 030° true, in still air conditions (thereby flying the true track)
c) 030° magnetic
d) 030° magnetic in still air conditions (thereby flying the magnetic track)

283. An ATS airspace where IFR and VFR flights are permitted, all flights are subject to air traffic control service and IFR flights are separated from other IFR flights and from VFR flights VFR flights are separated from IFR flights and receive traffic information in respect of other VFR flights, is classified as:

a) Airspace E
b) Airspace B
c) Airspace C
d) Airspace D

284. Which does ATC Term "Radar contact" signify?

a) ATC is receiving your transponder and will furnish vectors and traffic advisories until you are advised that contact has been lost.
b) Your aircraft has been identified on the radar display and radar flight instructions will be provided until radar identification is terminated.
c) Your aircraft has been identified and you will receive separation from all aircraft while in contact with this radar facility.
d) You will be given traffic advisories until advised that the service has been terminated or that radar contact has been lost.

285. The transition level:

a) shall be the lowest available flight level above the transition altitude that has been established
b) shall be the highest available flight level below the transition altitude that has been established
c) for the aerodrome is published in the AGA section of the AIP
d) is calculated and decided by the commander

286. A circling approach is:

a) A flight manoeuvre to be performed only under radar vectoring.
b) A contact flight manoeuvre.
c) A visual flight manoeuvre keeping the runway in sight.
d) A visual manoeuvre to be conducted only in IMC.

287. According to ICAO Doc 8168, the optimum descent gradient/angle in the final approach of a procedure with a FAF is:

a) 4.3% or 2.5°
b) 5.2% or 3.0°
c) 6,5% or 3.5°
d) 7%.

288. A minimum radar separation shall be provided until aircraft are established inbound on the ILS localizer course and/or MLS final approach track. This minimum is, when independent parallel approaches are being conducted:

a) NM
b) 2.0 NM
c) 3.0 NM
d) 5.0 NM

289. A manoeuvre in which a turn is made away from a designated track followed by a turn in the opposite direction to permit the aircraft to intercept and proceed along the reciprocal of the designated track is called a :

a) Procedure turn.
b) Base turn.
c) Race track.
d) Reversal track.

290. An ATS airspace where IFR and VFR are permitted and receive flight information service if requested, is classified as

a) Airspace C
b) Airspace E
c) Airspace G
d) Airspace F

291. "TODA" take-off distance available is:

a) The length of the take-off run available plus the length of clearway available (if provided).
b) The length of the runway available plus the length of clearway available (if provided).
c) The length of the take-off run available plus the length of the stopway and clearway (if provided).
d) The length of the take-off run available plus the length of the stopway.

292. During an arrival procedure under an IFR flight plan in VMC conditions, traffic avoidance is the responsibility of:

a) the pilot in command.
b) the approach controller.
c) the radar controller.
d) the airport controller.

293. When independent parallel approaches are being conducted and vectoring to intercept the ILS localizer course or MLS final approach track, the final vector shall be such as to enable the aircraft to intercept the ILS localizer course or MLS final approach track at an angle not greater than :

a) 20 degrees
b) 15 degrees
c) 30 degrees
d) 25 degrees

294. Which statement regarding approach control service is correct?

a) During a visual approach an aircraft is maintaining its own separation;
b) If it is anticipated that an aircraft has to hold for 10 minutes or more, an Expected Approach Time will be transmitted by the most expeditious means to the aircraft
c) Approach control have to advise the aircraft operators about substantial delays in departure in any event when they are expected to exceed 15 minutes;
d) An approach sequence shall be established according to the sequence of initial radio contact between aircraft and approach control;

295. The position reports shall contain the following elements of information in the order listed:

a) Aircraft identification, position, time, true air speed, flight level or altitude, next position and time over.
b) Aircraft identification, position, time, flight level or altitude, next position and time over.
c) Aircraft identification, position, time, flight level or altitude, next position and time over and ensuing significant point.
d) Aircraft identification, position, flight level or altitude, time, next position and time over and ensuing significant point.

296. The vertical IFR separation minimum being applied by ATC within a controlled airspace below FL 290 is:

a) 2000 feet (600 m).
b) 500 feet (150 m).
c) 2500 feet (750 m).
d) 1000 feet (300 m).

297. Were an operational advantage can be obtained, an ILS procedure may include a dead reckoning segment from a fix to the localizer. The DR track will:

a) Intersect the localizer at 30° and will not be more 5 NM in length.
b) Intersect the localizer at 45° and will not be more 5 NM in length.
c) Intersect the localizer at 30° and will not be more 10 NM in length.
d) Intersect the localizer at 45° and will not be more 10 NM in length.

298. When the transponder appears to be unserviceable prior to departure and restorage is impossible, then:

a) departure to the nearest suitable airport where repair can be effected is allowed
b) you must indicate the failure in the fight plan, after which the ATC will endeavour to provide for continuation of the flight;
c) the flight can only continue in the most direct manner;
d) you are not allowed to commence the flight

299. At the commencement of final approach, if the controller possesses wind information in the form of components, significant changes in the mean surface wind direction and speed shall be transmitted to aircraft. The mean cross-wind component significant change is:

a) 5 KT
b) 3 KT
c) 10 KT
d) 8 KT

300. During an instrument approach, followed by a missed approach, the minimum obstacle clearance (MOC) in the intermediate phase of this missed approach is:

a) 30 m (98 ft)
b) 50 m (164 ft)
c) 90 m (295 ft)
d) 120 m (384 ft)

301. During an instrument approach, the minimum obstacle clearance (MOC) of the initial approach segment primary area is equal to:

a) 300 m (984 ft)
b) 210 m (690 ft)
c) 120 m (394 ft)
d) 150 m (492 ft)

302. Related to the three entry sectors in a holding pattern, there is a zone of flexibility on either side of the sectors boundaries of:

a) 10°.
b) 15°.
c) 20°.
d) 5°.

303. Concerning to RNP (Required Navigation Performance) types, the indication RNP 4, represents a navigation accuracy of

a) plus or minus 4 NM on a 95 per cent containment basis
b) plus or minus 4 NM on a 90 per cent containment basis
c) plus or minus 4 NM on a 98 per cent containment basis
d) plus or minus 4 miles on a 90 per cent containment basis

304. What is a "barrette"?

a) a CAT II or III holding position.
b) a frangible structure on which approach lights are fixed.
c) three or more ground lights closely spaced together to appear as a bar of lights.
d) a lighted obstacle near the runway and/or taxiway.

305. Where does the initial phase of a missed approach procedure end?

a) At the missed approach point.
b) At the first point where 50m (164 ft) obstacle clearance is obtained and can be maintained.
c) At the point where a new approach, holding or return to enroute flight is initiated.
d) At the point where the climb is established.

306. Which statement is correct?

a) The lower limit of a TMA shall be established at a height of at least 700ft AGL;
b) The lower limit of a CTA shall be established at a height of at least 1500ft AGL;
c) The upper limit of a CTR shall be established at a height of at least 3000ft AMSL;
d) The lower limit of an UIR may coincide with an IFR cruising level

307. In a precision approach category I, lighting system, the single, two and three light sources on the centre line have a length of:

a) 200 m.
b) 250 m.
c) 300 m.
d) 150 m.

308. It is permissible to eliminate from consideration a particular sector where a prominent obstacle exists in the visual manoeuvring (circling) area outside the final approach and missed approach area. When this option is exercised, the published procedure:

a) Prohibits the circling approach to the affected runway.
b) Prohibits circling within the total sector in which the obstacle exists.
c) Permits circling only in VMC.
d) Recommends not to perform circling within the total sector in which the obstacle exists.

309. A so called "Visual Approach" can be performed:

a) during IFR and VFR flights in VMC;
b) during IFR flights, if the cloud base is 1000 ft more than the appropriate DA or MDA for that procedure;
c) as in above, but in addition there should be a visibility of 5,5 km or more
d) during IFR flights, if there is permanent sight on the movement area and the underlying ground;

310. The aerodrome category for rescue and fire fighting is based on:

a) The over-all length of the longest aeroplane.
b) The longest aeroplane maximum width only
c) The over-all length of the longest aeroplane normally using the aerodrome and its maximum fuselage width.
d) The over-all length of the longest aeroplane normally using the aerodrome and its maximum fuselage weight.

311. When the visual manoeuvring (circling) area has been established the obstacle clearance altitude/height (OCA/H) is determined:

a) For all categories of aircraft, and it is the same for all of them.
b) For each category of aircraft, and it may be different for each one of them.
c) Only for categories A and B aircraft.
d) Only for categories C, D and E aircraft.

312. A precision approach runway CAT II is an instrument runway served by ILS and visual aids intended for operations down to:

a) a RVR of 250 meters and a DH of not less than 200 ft.
b) a RVR of 550 meters and a DH of not less than 200 ft.
c) a RVR of 200 meters and a DH of not less than 100 ft.
d) a RVR of 300-450 meters and a DH of not less than 100 ft.

313. A "precision approach" is a direct instrument approach...

a) using bearing, elevation and distance information, providing the pilot uses a flight director or an autopilot certified to a height below 200 ft.
b) carried out by a crew of at least two pilots trained with a specific working method.
c) using bearing, elevation and distance information.
d) using at least one source of bearing information and one source of elevation or distance information.

314. When on a RNP 1 route is indicated B235 Y, means that all turns shall be made within the allowable RNP tolerance of a tangential arc between the straight leg segments defined with a radius of:

a) 22.5 NM between 30° and 90° at and above FL260
b) 20 NM on the route between 30° and 90° at and above FL200
c) 22.5 NM between 30° and 90° at and above FL200
d) 25.0 NM on the route between 30° and 90° at and above FL 250

315. On a non-precision approach a so-called "straight-in-approach" is considered acceptable, if the angle between the final approach track and the runway centreline is:

a) 30 degrees or less
b) 40 degrees or less
c) 20 degrees or less
d) 10 degrees or less

316. "Instrument runways" are the following runways intended for the operation of aircraft using instrument approach procedures.

a) Precision approach runways in general.
b) Non precision approach runways, precision approach runways category I, II and III.
c) Precision approach runways category I, II and III.
d) Instrument approach runways, precision approach runways category I, II and III.

317. Within the Annex to the ICAO convention that specifies dimensions of aerodromes is a specific dimension given for the approach light system for CAT 1 ILS. What should be the length of this approach light system?

a) 420 metres
b) 1000 metres
c) 1200 metres
d) 900 metres

318. Obstacle clearance for an ILS approach is based on the assumption that the pilot does not deviate from the centre line more than :

a) full scale deflection of the localizer indicator.
b) half scale deflection of the glidepath indicator and horizontal 35 ° off the centerline.
c) full scale deflection of the localizer indicator and half scale deflection of the glidepath indicator.
d) half scale deflection of the localizer indicator.

319. In an offset entry into an omnidirectional racetrack procedure, the time on the 30° offset track is limited to:

a) 2 minutes.
b) 3 minutes.
c) 1 minute 30 seconds.
d) 1 minute.

320. The minimum sector altitude provides 300 metres obstacle clearance within how many miles radius from the navigation facility upon which the instrument approach procedure is predicated:

a) 20 NM (37 km).
b) 30 NM (55 km).
c) 25 NM (46 km).
d) 15 NM (28 km).

321. Pilots shall not operate the SSR special position indicator (IDENT) feature unless:

a) They operate within non controlled airspace.
b) Requested by ATC.
c) They operate within controlled airspace.
d) They operate a transponder with Mode C.

322. What action should be taken if contact is lost with the aerodrome on the downwind leg?

a) Request an amended clearance
b) Initiate a missed approach
c) Descend to OCL/ACH and in the hope that the visibility is better at a lower altitude
d) Maintain your circling altitude and turn towards the aerodrome

323. What does the abbreviation DER mean?

a) Distance end of route.
b) Departure end of route.
c) Distance end of runway.
d) Departure end of runway.

324. Taxiway edge lights shall be:

a) Fixed showing blue.
b) Fixed showing green.
c) Fixed showing yellow.
d) Flashing showing blue.

325. Flight Information Region (FIR) is an airspace within which the following services are provided:

a) Flight Information Service, Alerting Service and Advisory Service.
b) Flight Information Service only.
c) Flight Information Service and Advisory Service.
d) Flight Information Service and Alerting Service.

326. What does the abbreviation OIS mean?

a) Obstacle identification surface.
b) Obstacle in surface.
c) Obstacle identification slope.
d) Obstruction in surface.

327. Unless otherwise published or instructed by ATC, all turns after initial entry into the holding pattern shall be made into which direction?

a) To the right.
b) To the left.
c) First right and then to the left.
d) Teardrop to the left and then to the right.

328. The STOPWAY is a defined rectangular area on the ground at the end of take-off run available prepared as a suitable area where:

a) An aircraft taking-off or landing can be stopped.
b) An aircraft can be stopped in the case of an abandoned take-off.
c) A landing aircraft can be stopped if overcoming the end of runway.
d) A landing aircraft can be stopped only in emergency.

329. In a precision approach (ILS), obstacle clearance surfaces assume that the pilot does not normally deviate from the centreline, after being established on track, more than:

a) Half a scale deflection.
b) One scale deflection.
c) A quarter of scale deflection.
d) One and a half of scale deflection.

330. A controlled airspace extending upwards from a specified limit above the earth is:

a) Advisory airspace.
b) Flight Information Region.
c) Control area.
d) Control zone.

331. Where an upper flight information region (UIR) is established, the procedures applicable there in:

a) have to be as indicated by ICAO council
b) have to be as agreed at the regional air navigation meetings
c) need not to be identical with those applicable in the underlying flight information region
d) has to be the same as the underlying flight information region

332. A controlled airspace extending upwards from the surface of the earth to a specified upper limit is:

a) Advisory airspace.
b) Control zone.
c) Control area.
d) Air traffic zone.

333. Normally missed approach procedures are based on a nominal missed approach climb gradient of:

a) 0.8%.
b) 3.3%.
c) 5%.
d) 2.5%.

334. One of the functions ensured by a radar control unit for the provision of approach control service is:

a) To conduct surveillance radar approaches.
b) To apply a reduced vertical separation of 500 feet between IFR flights and VFR flights.
c) To apply a horizontal separation less than 5 NM.
d) To provide instructions in order to reduce separations minima, if accepted by the pilots.

335. Which of the following alternatives describes the complete CAT 1 ('Calvert') type of approach light

system?

a) 4 crossbars, centre line with 3 or 2 lamps per light unit
b) 3 crossbars, centre line with 3, 2 or 1 lamp per light unit
c) 3 crossbars, centre line with 3 or 2 lamps per light unit
d) 5 crossbars, centre line with 3, 2 and 1 lamp per light unit

336. A lower limit of a Control Area shall be established at a height above the ground level or water of not less than:

a) 150 metres.
b) 500 metres.
c) 200 metres.
d) 300 metres.

337. Runway-lead-in lighting should consist:

a) always of a straight row of lights towards the runway
b) of flashing lights only;
c) of an arbitrary amount of green lights;
d) of group of at least three white lights flashing in sequence towards the runway;

338. When on a RNP 1 route is indicated A342 Z, means that all turns shall be made within the allowable RNP tolerance of a tangential arc between the straight leg segments with a radius of:

a) 15 NM on the route between 30° and 90° at and above FL 200
b) 22.5 NM on the route between 30° and 90° at and above FL 250
c) 25 NM on the route between 30° and 90° at and below FL190
d) 15 NM on the route between 30° and 90° at and below FL 190

339. Normally all turns, which are requested by a radar controller have to be executed as:

a) the weather permits.
b) Standard rate turns if not otherwise instructed by ATC.
c) Decided on pilot's discretion.
d) Prescribed by the aircraft operations.

340. During an instrument approach, followed by a missed approach, the minimum obstacle clearance (MOC) in the final phase of this missed approach is :

a) 90 m (295 ft)
b) 120 m (384 ft)
c) 50 m (164 ft)
d) 30 m (98 ft)

341. In an approach procedure, a descent or climb conducted in a holding pattern is called:

a) Racetrack pattern.
b) Procedure turn.
c) Shuttle.
d) Based turn.

342. In the vicinity of an aerodrome that is going to be used by the aircraft the vertical position of the

aircraft shall be expressed in:

a) flight level on or below the transition level
b) flight level on or below the transition altitude
c) altitude above sea level on or below the transition altitude
d) altitude above sea level on or above the transition altitude

343. In the "PAPI" system the pilot during an approach will see the two units nearest the runway as red and the two units farthest from the runway as white when:

a) Only on the approach slope.
b) On or close to the approach slope.
c) Above the approach slope.
d) Below the approach slope.

344. The width of the corridor around a specified arrival route is:

a) ± 10 NM
b) ± 12.5 NM
c) ± 2.5 NM
d) ± 5 NM

345. For an IFR flight to an airport equipped with navaids, the estimated time of arrival is the estimated time at which the aircraft:

a) will arrive overhead the initial approach fix.
b) will land.
c) will stop on the parking area.
d) will leave the initial approach fix to start the final approach.

346. How many separate segments has an instrument approach procedure.

a) Up to 4.
b) Up to 5.
c) 3.
d) 4.

347. What is the length of an approach lighting system of a precision-approach runway CAT II:

a) 900m
b) 150m
c) 300m
d) 600m

348. The air traffic control unit has reported 'radar contact', what does that mean to the pilot?

a) The radar identity of the aircraft has been established
b) The pilot does not have to follow up the position of the aircraft
c) The aircraft is subject to positive control
d) Position reports may be omitted

349. Where a "Secondary Surveillance Radar" (SSR) is not available, radar identification may be

achieved by one of the following procedures:

a) To instruct the pilot to execute one or more changes of 30° or more.
b) To instruct the pilot to execute one or more changes of 20° or more.
c) To instruct the pilot to execute one or more changes of 10°.
d) To instruct the pilot to execute one or more changes of 45°.

350. In the primary area, the obstacle clearance for the initial approach segment provides at least:

a) 984 ft
b) 1476 ft
c) 492 ft
d) decreasing from 984 to 492 ft

351. When are ATIS broadcasts updated?

a) Only when weather conditions change enough to require a change in the active runway or instrument approach in use
b) Only when the ceiling and/or visibility changes by a reportable value
c) Upon receipt of any official weather, regardless of content change or reported values
d) Every 30 minutes if weather conditions are below those for VFR ; otherwise hourly

352. At the commencement of final approach, if the controller possesses wind information in the form of components, significant changes in the mean surface wind direction and speed shall be transmitted to aircraft. The mean head-wind component significant change is:

a) 10 KT
b) 5 KT
c) 8 KT
d) 4 KT

353. Whenever ATIS is provided, the broadcast information shall be updated

a) as prescribed by the meteorological office
b) as prescribed by the state
c) immediately a significant change occurs
d) at least every half an hour independently of any significant change

354. Cruising level IFR during cruise within controlled airspace shall be given as flight level (FL)

a) When QNH is higher than the standard pressure 1013 hPa
b) only in airspace class A
c) if the obstacle clearance is more than 2000 feet
d) Above the transition altitude when applicable

355. A strayed aircraft is:

a) an aircraft in a given area but whose identity has not been established
b) An aircraft which has deviated significantly from its intended track or which reports that it is lost
c) only that aircraft which has deviated significantly its intended track
d) only that aircraft which reports that it is lost

356. You are on an IFR flight executing a circling approach. A descend below the MDA should not be made until:
    1. the pilot has the landing threshold in sight
    2. visual reference has been established and can be maintained
    3. the required obstacle clearance can be maintained and a landing can be made

    The combination regrouping all the correct answers is:

    a) 1, 3.
    b) 1, 2, 3.
    c) 1, 2.
    d) 2, 3.

357. ATIS broadcast messages containing departure and arrival information should include cloud cover, when the clouds are :

    a) below 900 m (3.000 ft) or below the highest minimum sector altitude, whichever is the greater
    b) below 2 000 m (600 ft) or below the highest minimum sector altitude, whichever is the greater
    c) cumulonimbus
    d) below 1 500 m (5.000 ft) or below the highest minimum sector altitude, whichever is the greater

358. If in an instrument departure procedure the track to be followed by the aeroplane is published, the pilot is expected:

    a) To request from ATC different heading for wind correction.
    b) To ignore the wind and proceed on an heading equal to the track.
    c) To request clearance from ATC for applying a wind correction.
    d) To correct for known wind to remain within the protected airspace.

359. At the commencement of final approach, if the controller possesses wind information in the form of components, significant changes in the mean surface wind direction and speed shall be transmitted to aircraft. The mean tailwind component significant change is:

    a) 3 KT
    b) 2 KT
    c) 4 KT
    d) 5 KT

360. Who is responsible for an ATC clearance to be safe in respect to terrain clearance?

    a) The ATC.
    b) The air traffic service reporting office when accepting the flight plan.
    c) The pilot in command.
    d) The aircraft operator.

361. The VMC minima for an airspace classified as "B" above 10 000 feet MSL are:

    a) nautical mile horizontally and 1 000 feet vertically from clouds; 8 km visibility
    b) clear of clouds; 8 km visibility
    c) mile horizontally and 1 000 feet vertically from clouds; 5 km visibility
    d) 1000 metres horizontally, 1 000 feet vertically from clouds; 8 km visibility

362. Normally, the maximum descent gradient, applicable in the final approach segment to ensure the

required minimum obstacle clearance, is:

a) 8%.
b) 6,5%.
c) 5%.
d) 7%.

363. Control Area (CTA) is defined as follows:

a) A controlled airspace extending upwards from a height of 1000 feet above the earth.
b) A controlled airspace extending upwards from a specified limit above the earth.
c) A controlled airspace extending upwards from a height of 900 feet above the earth.
d) A controlled airspace extending upwards from the surface of the earth to a specified limit.

364. "Clearway" is defined rectangular area established to:

a) Reduce the risk of damage to aircraft running off a runway.
b) Protect aircraft during take-off or landing operations.
c) Permit the aircraft to stop if it fails the take-off.
d) Permit aircraft to make a portion of its initial climb to a specific height.

365. In an instrument approach procedure, the segment in which alignment and descent for landing are made is called:

a) Initial approach segment.
b) Intermediate approach segment.
c) Arrival segment.
d) Final approach segment.

366. Runway threshold identification lights, when provided, should be:

a) Flashing white.
b) Fixed green.
c) Flashing green.
d) Fixed white.

367. The "PAPI" shall consist of:

a) A wing bar of 2 sharp transition multi-lamp equally spaced.
b) A wing bar of 4 sharp transition multi-lamp or paired units equally spaced.
c) Two wing bars of 4 sharp transition multi-lamp or paired units equally spaced.
d) Two wing bars of 6 sharp transition multi-lamp or paired units equally spaced.

368. In a holding pattern all turns are to be made at a:

a) maximum bank angle of 25°.
b) rate of 3°per second or at a bank angle of 20°, which ever requires the lesser bank.
c) rate of 3°per second or at a bank angle of 25°, which ever requires the lesser bank.
d) rate of 3°per second.

369. How many red lights must a pilot see, whose aircraft, in final approach, is following a normal glide

path defined by a PAPI?

a) 1.
b) 2.
c) 3.
d) None.

370. The speed limitation for VFR flights inside ATS airspace classified as C, when flying below 3.050 m (10.000 ft) AMSL, is:

a) 250 KT TAS
b) Not applicable
c) 240 KT IAS
d) 250 KT IAS

371. Which are the phases of a missed approach procedure?

a) Arrival, intermediate and final.
b) Initial and final.
c) Initial, intermediate and final.
d) Arrival, initial, intermediate and final.

372. An aircraft making a radar approach should be directed to execute a missed approach if no clearance to land has been received from the non-radar controller by the time the aircraft reaches a distance of:

a) 4 NM from the touchdown
b) 5 NM from the touchdown
c) 1.5 NM from the touchdown
d) 2 NM from the touchdown

373. In the "T-VASIS", how many light units are in each wing bar?

a) 4.
b) 5.
c) 3.
d) 2.

374. Runway edge lights excepted in the case of a displaced threshold shall be:

a) Fixed lights showing variable white or yellow.
b) Flashing white.
c) Fixed lights showing variable white.
d) Fixed lights, white or yellow colour.

375. In a straight departure, the initial departure track is of the alignment of the runway centre line within:

a) 45°.
b) 12.5°.
c) 15°.
d) 30°.

376. What is the outbound timing in a holding pattern up to FL 140?

a) 2 minutes
b) 1,5 minutes
c) 30 seconds
d) 1 minute

377. The EAT has to be transmitted to the pilot as soon as possible, in case the expected delay is:

a) 20 minutes
b) 10 minutes or more.
c) 15 minutes or more
d) 5 minutes

378. When an aircraft carries a serviceable transponder, the pilot shall operate the transponder:

a) Only when the aircraft is flying within airspace where SSR is used for ATS purposes.
b) Only when the aircraft is flying within controlled airspace.
c) Only when directed by ATC.
d) At all times during flight, regardless of whether the aircraft is within or outside airspace where SSR is used for ATS purposes.

379. The term used to describe the visual phase of flight after completing an instrument approach, to bring an aircraft into position for landing on runway which is not suitably located for straight-in approach, is:

a) Contact approach.
b) Aerodrome traffic pattern.
c) Visual manoeuvring (circling).
d) Visual approach.

380. The abbreviation PAPI stands for:

a) Precision Approach Power Indicator.
b) Precision Approach Power Index.
c) Precision Approach Path Indicator.
d) Precision Approach Path Index.

381. The ATIS broadcast message should, whenever practicable, not exceed

a) 3 minutes
b) 30 seconds
c) 1 minute
d) 2 minutes

382. A minimum vertical separation shall be provided until aircraft are established inbound on the ILS localizer course and/or MLS final approach track. This minimum is, when independent parallel approaches are being conducted:

a) 100 m (330 ft)
b) 300 m (1000 ft)
c) 200 m (660 ft)
d) 150 m (500 ft)

383. During an instrument approach, followed by a missed approach, the minimum obstacle clearance (MOC) in the intermediate phase of this missed approach is:

a) 120 m (384 ft)
b) 30 m (98 ft)
c) 50 m (164 ft)
d) 90 m (295 ft)

384. Regarding Aerodrome Flight Information Service (AFIS):

a) its only purpose is to relay ATC information to the aircraft in flight or on the ground.
b) it can only supply limited services to the users and under no circumstances may it supply ATC services.
c) its purpose is to supply ATC services but it is not a state organisation.
d) it has the same privileges and prerogatives as an ATC organisation but its activity is neither continuous nor regular.

385. What is meant when departure control instruct you to "resume own navigation" after you have been vectored to an airway?

a) Radar Service is terminated.
b) Advisories will no longer be issued by ATC.
c) You are still in radar contact, but must make position reports.
d) You should maintain that airway by use of your navigation equipment.

386. An air traffic control unit:

a) may require to change the call sign for safety reasons when there is a risk of confusion between two or more similar call signs providing the aircraft is on a repetitive flight plan.
b) must not ask an aircraft to change its call sign.
c) may not ask an aircraft to change its call sign after accepting the flight plan.
d) may ask an aircraft to temporarily change its call sign for safety reasons when there is a risk of confusion between two or more similar call signs.

387. Aerodrome Operating Minima, the Category III A Operation, is a precision instrument approach and landing using ILS or MLS with a decision height lower than 100 feet an RVR (runway visual range) no less than:

a) 230 m
b) 300 m
c) 200 m
d) 250 m

388. Which is the obstacle clearance in the primary area of the initial approach segment in an instrument approach procedure?

a) At least 300m (984 ft).
b) 150m (492 ft).
c) 300m (984 ft).
d) At least 150m (492 ft).

389. A turn executed by the aircraft during the initial approach between the end of the outbound track

and the beginning of the intermediate or final approach track is a:

a) Procedure turn
b) Reversal procedure
c) Race track
d) Base turn

390. Standard airway holding pattern below 14 000 ft?

a) Right hand turns / 1 minute outbound
b) Right hand turns / 1.5 minutes outbound
c) Left hand turns / 1 minute outbound
d) Left hand turns / 1.5 minutes outbound

391. In general, which is the main factor that dictates the design of an instrument departure procedure?

a) Navigation aids.
b) Airspace restrictions.
c) The terrain surrounding the airport.
d) ATC requirements.

392. Runway end lights shall be:

a) Fixed unidirectional lights showing red in the direction of the runway.
b) Fixed unidirectional lights showing white in the direction of the runway.
c) Fixed lights showing variable red.
d) Fixed lights showing variable white.

393. When vectoring an aircraft to intercept the localizer course, the final vector furnished shall be such as to enable the aircraft to intercept the localizer course at an angle not greater than:

a) 20 degrees.
b) 30 degrees.
c) 25 degrees.
d) 15 degrees.

394. In a precision approach (ILS), generally glide path intersection occurs at heights above runway elevation from:

a) 150m (492 ft) to 300m (984 ft).
b) 150m (492 ft) to 900m (2955 ft).
c) 300m (984 ft) to 900m (2955 ft).
d) 300m (984 ft) to 600m (1968 ft).

395. An ATS airspace where IFR and VFR flights are permitted, all participating IFR flights receive an air traffic advisory service and all flights receive flight information service if requested, is classified

a) Airspace G
b) Airspace E
c) Airspace D
d) Airspace F

396. The VMC minima for an airspace classified as "G" above 10 000 feet MSL are:

a) 1500 m horizontally and 1 000 feet vertically from clouds; 5 km visibility
b) nautical mile horizontally and 1 000 feet vertically from clouds; 5 km visibility
c) 1 nautical mile horizontally and 1000 feet vertically from clouds; 8 km visibility
d) 1500 m horizontally and 1 000 feet vertically from clouds; 8 km visibility.

397. Aerodrome traffic is:

a) All traffic on the manoeuvring area.
b) All traffic on the movement area and flying in the vicinity of an aerodrome.
c) All traffic in the aerodrome circuit.
d) All traffic on the manoeuvring area and flying in the vicinity of an aerodrome.

398. If visual reference is lost while circling to land from an instrument approach, it is expected that the pilot will make an initial climbing turn towards the:

a) Landing runway.
b) MAP.
c) FAF.
d) Final missed approach track.

399. Which statement is correct? During a "Visual Approach" in Controlled Airspace (Class C):

a) ATC will apply separation with other arriving traffic
b) ATC will apply separation with other traffic
c) the pilot to apply separation with other traffic;
d) ATC will apply separation only with other IFR-traffic

400. The pilot of a departing aircraft flying under IFR shall change the altimeter setting from QNH to standard setting 1013.25 hPa when passing:

a) Transition level.
b) The level specified by ATC.
c) Transition altitude.
d) Transition layer.

401. An aircraft flying above the sea between 4 500 feet MSL and 9 000 feet MSL outside controlled airspace under VFR, must remain on principle at least:

a) 2 000 feet horizontally, 1000 feet vertically from clouds; 5 km visibility.
b) 500 m horizontally, 1000 feet vertically from clouds; 5 km visibility.
c) 1 500 m horizontally, 1000 feet vertically from clouds; 8 km visibility.
d) Clear of clouds and in sight of the surface; 8 km visibility.

402. Unless otherwise indicated, the missed approach procedures published on the IAC charts are based on a minimum climb gradient of:

a) 5%
b) 3.3%
c) 2.5%
d) 2%

403. During flight through the transition layer the vertical position of the aircraft should be expressed as

a) altitude above mean sea level during climb
b) flight level during descent
c) either altitude above mean sea level or flight level during climb
d) altitude above mean sea level during descent

404. A category I precision approach (CAT I) has:

a) a decision height equal to at least 100 ft.
b) a decision height equal to at least 50 ft.
c) no decision height.
d) a decision height equal to at least 200 ft.

405. According with the "noise abatement take-off and climb procedure B", as established in DOC 8168, aircraft must climb at V2 + 10 to 20 kt, until reaching:

a) 1500 ft
b) 2000 ft
c) 1 000 ft
d) 500 ft

406. The term decision height (DH) is used for:

a) a conventional approach.
b) an indirect approach.
c) a conventional approach followed by a visual manoeuver.
d) a precision approach.

407. A category D aircraft can carry out an indirect approach followed by a visual manoeuver only if the horizontal visibility is higher than or equal to:

a) 2400 m
b) 1600 m
c) 1500 m
d) 3600 m

408. A category C aircraft can carry out an indirect approach followed by a visual manoeuver only if the horizontal visibility is higher than or equal to:

a) 1600 m
b) 1500 m
c) 2400 m
d) 3600 m

409. During a conventional approach, the Minimum Descent Height (MDH) is referred to the runway threshold altitude and not to the aerodrome altitude if the runway threshold is at more than:

a) 2 m (7 ft) below the airdrome altitude
b) 2 m (7 ft) above the airdrome altitude
c) 4 m (14 ft) below the airdrome altitude
d) 4 m (14 ft) above the airdrome altitude

410. Aerodrome Operating Minima, it is established, among other considerations, that an Operator must

take full account of Aeroplane Categories. The criteria taken into consideration for classification of Aeroplanes by Categories is the indicated airspeed at threshold (Vat), which is equal to the stalling speed at the maximum landing mass (Vso) multiplied by 1,3. Corresponding Aeroplane Category when Vat is from 141 kt to 165 kt is:

a) C
b) E
c) D
d) B

411. The pilot of a category A aircraft is flying a non-precision direct IFR approach with the following operational minimums: MDH 250 feet and visibility 750 metres. RVR for threshold, mid and end of the runway are given by the controller...

a) flying a non-precision approach, the pilot may start the final approach only if he has a meteorological visibility higher than 750 metres. RVR are to be taken into account only for precision approaches.
b) the pilot may start the final approach if the threshold RVR is higher than 750 metres.
c) the pilot may start the final approach if the threshold and mid runway RVR are higher than 750 metres.
d) the pilot may start the final approach if the three RVR are higher than 750 metres.

412. A category III C precision approach (CAT III C) is an approach with:

a) no runway visual range limits
b) a runway visual range of at least 50 m
c) a runway visual range of at least 200 m
d) a runway visual range of at least 350 m

413. A category I precision approach (CAT I) is an approach which may be carried out with a runway visual range of at least:

a) 500 m
b) 550 m
c) 350 m
d) 800 m

414. According to the recommended "noise abatement take-off and climb procedure A" established in ICAO, DOC 8168, thrust reduction to climb power, has to be done as soon as the aircraft reaches:

a) 3 000 ft
b) 2 000 ft
c) 1 000 ft
d) 1 500 ft

415. The information to consider for a standard straight-in approach is:
- the horizontal visibility
- the ceiling
- the minimum descending altitude (MDA)
- the decision altitude (DA)

Which of the following combinations contains all of the correct statements?

a) 1 - 3
b) 1 - 4
c) 1 - 2 - 3

d) 1 - 2 - 4

416. An aircraft flies a VOR/DME direct approach for which the operational minima are: MDH = 360 feet, horizontal visibility = 1 500 metres: Visibility given by ATC and received by the crew is 2 500 metres: The pilot may start the final approach...

a) if the ceiling transmitted by ATC and received by the crew is higher than 240 feet.
b) if the ceiling transmitted by ATC and received by the crew is higher than 240 feet during the day and 360 feet at night.
c) whatever the ceiling given by ATC.
d) if the ceiling transmitted by ATC and received by the crew is higher than 360 feet.

417. A category II precision approach (CAT II) is an approach with:

a) a decision height of at least 100 ft
b) a decision height of at least 200 ft
c) a decision height of at least 50 ft
d) no decision height

418. About procedures for noise attenuation during landing:

a) Such procedures will not involve the prohibition of using reverse thrust.
b) They prohibit the use of reverse thrust.
c) Such procedures do not exist.
d) They are applied in the case of an instrument approach only.

419. Category III B operations, is a precision instrument approach and landing using ILS or MLS with, a decision height lower than 50 ft, or no decision height and a runway visual range lower than 200 m but no less than:

a) 75 m
b) 150 m
c) 100 m
d) 50 m

420. A category B aircraft can carry out an indirect approach followed by a visual manoeuver only if the horizontal visibility is higher than or equal to:

a) 1500 m
b) 3600 m
c) 2400 m
d) 1600 m

421. During an ILS procedure, if the information transmitted by the appropriate services and received by the crew contains parameters below the crew's operational minimums, the point beyond which the approach must not be continued is:

a) the middle marker.
b) the start final descent point (glide slope intersection).
c) the outer marker (OM).
d) the FAF.

422. The determination of the aerodrome minimum operating conditions must take the following into account :
    1. equipment available for navigation
    2. dimensions and characteristics of the runways
    3. composition of the flight crew
    4. obstacles in the vicinity of approach and missed approach areas
    5. facilities for determining and communicating the weather conditions

    The combination regrouping all the correct statements is:

    a) 1,2,3,4,5
    b) 1,2,4,5
    c) 2,4,5
    d) 2,3,5

423. Following take-off, the noise abatement climb procedures specified by the operator is :

    a) different according to airports and airplane types.
    b) for the same airplane type, the same for all airports.
    c) for all airplane types, the same for a specific airport.
    d) different for a same airplane type, according to airports.

424. Regarding all weather operations, if Vat is from 141 kt to165 kt, the aeroplane is in:

    a) Category B.
    b) Category D.
    c) Category E.
    d) Category C.

425. The movement area of an airfield, the adjacent lands and buildings or the parts of them with controlled access is called:

    a) Security program.
    b) Manoeuvring area.
    c) Terminal.
    d) Aeronautical part

426. When establishing an instrument approach procedure, 5 aircraft categories according to their speed at the threshold (Vat) are established. This speed is equal to the stalling speed in the landing configuration at the maximum certified landing weight multiplied by a factor of:

    a) 1.3
    b) 1.45
    c) 1.5
    d) 1.15

427. One shall not initiate any flight made in accordance with instrument flight rules unless the available information indicates that the conditions at the aerodrome of predicted destination or, at an aerodrome of alternative destination, are:

    a) At the predicted time of arrival equal to or better than the minimum conditions required for aerodrome use.
    b) At the predicted time of take-off equal to or better than the minimum conditions required for aerodrome use.
    c) At the predicted time of arrival, and for a reasonable period before and after such a predicted time, equal to or better than the minimum conditions required for aerodrome use.

d) At the predicted time of arrival better than the minimum conditions required for aerodrome use.

428. Aerodrome Operating Minima, an operator must ensure that system minima for "non-precision approach procedures", which are based upon the use of ILS without glidepath (LLZ only), VOR NDB, SRA, and VDF are no lower than MDH following value with:

a) VOR/DME facility, lowest MDH=300 ft
b) NDB facility, lowest MDH=300 ft
c) ILS facility without glidepath (localizer) lowest MDH=200 ft
d) VOR facility, lowest MDH=250 ft

429. A category III A precision approach (CAT III A) is an approach which may be carried out with a runway visual range of at least:

a) 200 m
b) 100 m
c) 250 m
d) 50 m

430. An operator must ensure that the MDH for a VOR/DME approach is not lower than:

a) 300 ft
b) 250 ft
c) 200 ft
d) 350 ft

431. A category A aircraft can carry out an indirect approach followed by a visual manoeuvre only if the horizontal visibility is higher than or equal to:

a) 1500 m
b) 2400 m
c) 1600 m
d) 3600 m

432. Aerodrome Operating Minima, the lowest minima to be used by an operator in a category B aeroplane for circling are :

a) MDH=600 ft and visibility=2400 m
b) MDH=700 ft and visibility=2600 m
c) MDH=500 ft and visibility=1600 m
d) MDH=400 ft and visibility=1500 m

433. In accordance with (ICAO) DOC 8168, noise preferential routes are established to ensure that departing and arriving aeroplanes avoid overflying noise-sensitive areas in the vicinity of the aerodrome as far as practicable. In establishing noise preferential routes:

a) no turns should be required coincident with a reduction of power associated with a noise abatement procedure.
b) turns during take-off and climb should not be required unless the aeroplane has reached and can maintain throughout the turn a height of no less than 100 m above terrain and the highest obstacle.
c) turns during take-off and climb should not be required unless the bank angle for turns is

limited to 20° (climbing at V2 + 10 to 20 Kt)

d) turns during take-off and climb should not be required unless the bank angle for turns is limited to 28° (climbing at V2 + 10 to 20 Kt)

434. Which one of the following factors should prevent a runway being chosen as the preferential landing runway for noise abatement purposes in visual meteorological condition (VMC) ?

a) It has a tail wind component of any value
b) It has a tail wind component of 3 kts and a cross wind, including gusts, of 12 kt
c) It has no ILS or visual approach slope guidance
d) Cross-wind component, including gusts, is 10 kt

435. For turbo-propeller aircraft, in the flight preparation stage, the landing distance on at alternate aerodrome shall be less than the available landing distance multiplied by a factor of:

a) 0.8
b) 0.7
c) 0.6
d) 0.5

436. If the crew on an arriving aircraft approaching a controlled aerodrome will report 'field in sight', a clearance for 'visual approach' may be given under certain conditions

a) The meteorological visibility must not be less than 8 km
b) The air traffic controller will provide separation to other controlled traffic
c) Continued approach will be according to VFR
d) The approach must be passing the FAF

437. The lowest minima to be used by an operator for circling with a category A aeroplane is a meteorological visibility of:

a) 2400 m
b) 1500 m
c) 1600 m
d) 3600 m

438. Where no outer marker or equivalent position exists, if the reported RVR / Visibility is less than the applicable minima, the approach shall not be continued beyond:

a) the FAF.
b) the middle marker.
c) the glide slope intersection.
d) 1000 ft above the aerodrome / heliport.

439. The term decision height (DH) is used for:

a) an indirect approach.
b) a precision approach.
c) a non-precision approach.
d) a circling approach only.

440. Regarding all weather operations, if Vat is from 91 kt to120 kt, the aeroplane is in:

a) Category D.
b) Category E.
c) Category C.
d) Category B.

441. The aerodrome operating minima for a VOR/DME approach are: MDH = 360 ft Required RVR = 1500 metres. Reported RVR is 1800 metres. The pilot may continue the final approach:

a) if the ceiling reported is higher than 360 ft.
b) if the ceiling reported is higher than 240 ft.
c) regardless of the ceiling reported.
d) if the ceiling reported is higher than 240 ft during the day and 360 ft at night.

442. Who has the responsibility for establishing operating procedures for noise abatement purposes during instrument flight, the:

a) operator
b) state of the operator
c) commander
d) state in which the aeroplane is operating

443. Which statement is correct about noise abatement procedures during landing?

a) These procedures are applied in case of instrument approach only.
b) These procedures prohibit the use of reverse thrust.
c) These procedures shall not prohibit the use of reverse thrust.
d) There are no noise abatement procedures for landing.

444. Regarding all weather operations, if VAT is from 121 ktto140 kt, the aeroplane is in:

a) Category E.
b) Category D.
c) Category C.
d) Category B.

445. During an ILS procedure, if the reported RVR/visibility is less than the applicable minima, the approach shall not be continued beyond:

a) the FAF, or 1500 ft above the aerodrome / heliport if there is no FAF.
b) the outer marker or equivalent, or 1000 ft above the aerodrome / heliport if there is no outer marker or equivalent.
c) the middle marker, or 500 ft above the aerodrome / heliport if there is no middle marker.
d) the glide slope intersection.

446. In general, which is the main factor that dictates the design of an instrument departure procedure?

a) The terrain surrounding the airport.
b) ATC requirements.
c) Navigation aids.
d) Airspace restrictions.

447. During a VOR procedure, if the reported RVR/visibility is less than the applicable minima, the approach shall not be continued beyond:

a) 1000 ft above the aerodrome / heliport on the final approach segment.
b) the middle marker, or 500 ft above the aerodrome / heliport if there is no middle marker.
c) the FAF, or 1500 ft above the aerodrome / heliport if there is no FAF.
d) the final path intersection.

448. Which are the phases of a missed approach procedure?

a) Initial, intermediate and final.
b) Arrival, initial, intermediate and final.
c) Arrival, intermediate and final.
d) Initial and final.

449. If in an instrument departure procedure the track to be followed by the aeroplane is published, the pilot is expected:

a) To request from ATC different heading for wind correction.
b) To ignore the wind and proceed on an heading equal to the track.
c) To request clearance from ATC for applying a wind correction.
d) To correct for known wind to remain within the protected airspace.

450. Normally missed approach procedures are based on a nominal missed approach climb gradient of:

a) 2.5%.
b) 0.8%.
c) 3.3%.
d) 5%.

451. If a step down fix is established on the final approach track, a descend shall be made so as to:

a) follow approximately 50 feet above the nominal glide path.
b) pass the fix at the rate of descent of 500 feet/min, which is obligatory.
c) leave the intermediate approach altitude, step by step until reaching the MAPt.
d) pass the fix not below the specified crossing altitude.

452. We can distinguish two types of departure routes. During a straight departure the initial departure track is within :

a) 5° of the alignment of the runway centre-line
b) 10° of the alignment of the runway centre-line
c) 25° of the alignment of the runway centre-line
d) 15° of the alignment of the runway centre-line

453. The primary area of an instrument approach segment is:

a) the most critical part of the segment where the minimum altitude should be kept very carefully;
b) the first part of the segment ;
c) the outside part of the segment where the obstacle clearance increases from 0 ft to the appropriate minimum
d) A defined are symmetrically disposed about the nominal flight track in which full obstacle clearance is provided.

454. During circling-to-land (with or without prescribed flight tracks), the maximum allowed airspeed for a Cat B aeroplane, in order to remain within the protection envelope, is:

a) 135 kt
b) 120 kt
c) 125 kt
d) 150 kt

455. It is permissible to eliminate from consideration a particular sector where a prominent obstacle exists in the visual manoeuvring (circling) area outside the final approach and missed approach area. When this option is exercised, the published procedure:

a) Permits circling only in VMC.
b) Recommends not to perform circling within the total sector in which the obstacle exists.
c) Prohibits the circling approach to the affected runway.
d) Prohibits circling within the total sector in which the obstacle exists.

456. Under which conditions may an aircraft on a straight-in-VOR approach continue its descend below the OCA?

a) When the aircraft is in visual contact with the ground and with the runway lights in sight
b) When the aircraft has the control tower in sight
c) When the aircraft is in contact with the ground but not with the runway in sight yet
d) When seems possible to land

457. A turn executed by the aircraft during the initial approach between the end of the outbound track and the beginning of the intermediate or final approach track is a:

a) Base turn
b) Procedure turn
c) Reversal procedure
d) Race track

458. The term used to describe the visual phase of flight after completing an instrument approach, to bring an aircraft into position for landing on runway which is not suitably located for straight-in approach, is:

a) Visual approach.
b) Visual manoeuvring (circling).
c) Contact approach.
d) Aerodrome traffic pattern.

459. In an instrument approach procedure, the segment in which alignment and descent for landing are made is called:

a) Initial approach segment.
b) Intermediate approach segment.
c) Arrival segment.
d) Final approach segment.

460. Where an operational advantage can be obtained, an ILS procedure may include a dead reckoning segment from a fix to the localizer. The DR track will:

a) Intersect the localizer at 30° and will not be more 5 NM in length.
b) Intersect the localizer at 45° and will not be more 5 NM in length.
c) Intersect the localizer at 45° and will not be more 10 NM in length.
d) Intersect the localizer at 30° and will not be more 10 NM in length.

461. A " precision approach" is a direct instrument approach...

a) using at least one source of bearing information and one source of elevation or distance information.
b) using bearing, elevation and distance information, providing the pilot uses a flight director or an autopilot certified to a height below 200 ft.
c) using bearing, elevation and distance information.
d) carried out by a crew of at least two pilots trained with a specific working method.

462. Closed runways and taxiways are indicated by:

a) Displaying crosses in the centre of the unserviceable part as well as at each end of the unserviceable part.
b) Crosses of a single contrasting colour, yellow or white, displayed horizontally on runways and taxiways or parts thereof indicate an area unfit for movement of aircraft.
c) Double crosses at each end of the unserviceable part as well as in the centre of the unserviceable part.
d) Nil

463. In a precision approach (ILS), obstacle clearance surfaces assume that the pilot does not normally deviate from the centreline, after being established on track, more than:

a) A quarter of scale deflection.
b) Half a scale deflection.
c) One scale deflection.
d) One and a half of scale deflection.

464. During an instrument approach, followed by a missed approach, the minimum obstacle clearance (MOC) in the intermediate phase of this missed approach is :

a) 30 m (98 ft)
b) 50 m (164 ft)
c) 90 m (295 ft)
d) 120 m (384 ft)

465. The width of the corridor around a specified arrival route is:

a) ± 2.5 NM
b) ± 5 NM
c) ± 10 NM
d) ± 12.5 NM

466. In general, during a straight-in approach, the MDH cannot be below:

a) the OCH

b) 200 ft
c) 350 ft
d) 400 ft

467. What will be your action if you cannot comply with a standard holding pattern?

a) inform the ATC immediately and request a revised clearance.
b) a non-standard holding pattern is permitted.
c) it is permitted to deviate from the prescribed holding pattern at pilots discretion.
d) Follow the radio communication failure procedure.

468. When the visual manoeuvring (circling) area has been established the obstacle clearance Altitude / height (OCA/H) is determined:

a) Only for categories A and B aircraft.
b) Only for categories C, D and E aircraft.
c) For all categories of aircraft, and it is the same for all of them.
d) For each category of aircraft, and it may be different for each one of them.

469. If visual reference is lost while circling to land from an instrument approach, it is expected that the pilot will make an initial climbing turn towards the:

a) MAP.
b) FAF.
c) Landing runway.
d) Final missed approach track.

470. During an instrument approach, followed by a missed approach, the minimum obstacle clearance (MOC) in the intermediate phase of this missed approach is :

a) 120 m (384 ft)
b) 90 m (295 ft)
c) 50 m (164 ft)
d) 30 m (98 ft)

471. How far beyond the boundary of the holding area extends the buffer area?

a) 3 NM.
b) 5 NM.
c) 5 km.
d) 3 km.

472. In a holding pattern all turns are to be made at a:

a) rate of 3°per second.
b) rate of 3°per second or at a bank angle of 20°, which ever requires the lesser bank.
c) rate of 3°per second or at a bank angle of 25°, which ever requires the lesser bank.
d) maximum bank angle of 25°.

473. In relation to the three entry sectors, the entry into the holding pattern shall be according to:

a) Heading.

b) Course.
c) Bearing.
d) Track.

474. Unless otherwise indicated, the missed approach procedures published on the IAC charts are based on a minimum climb gradient of:

a) 2%
b) 2.5%
c) 3.3%
d) 5%

475. Related to the three entry sectors in a holding pattern, there is a zone of flexibility on either side of the sectors boundaries of:

a) 5°.
b) 10°.
c) 15°.
d) 20°

476. The vertical position of an aircraft at or below the transition altitude will be reported:

a) according pilot's choice.
b) as altitude.
c) as height.
d) as flight level.

477. The transition level:

a) for the aerodrome is published in the AGA section of the AIP
b) is calculated and decided by the commander
c) shall be the lowest available flight level above the transition altitude that has been established
d) shall be the highest available flight level below the transition altitude that has been established

478. At what moment during the approach should the reported airfield altimeter setting be set?

a) Within the transition layer
b) When passing the transition level
c) When passing the transition altitude
d) When passing 3000 FT AMSL or 1000 FT AGL

479. Transition from altitude to flight level, and vice-versa is done:

a) at transition level during climb and transition altitude during descent.
b) only at transition altitude.
c) only at transition level.
d) at transition altitude during climb and transition level during descent.

480. Pilots shall not operate the SSR special position indicator (IDENT) feature unless:

a) They operate within controlled airspace.

b) They operate a transponder with Mode C.
c) They operate within non controlled airspace.
d) Requested by ATC.

481. When an aircraft carries a serviceable transponder, the pilot shall operate the transponder:

a) At all times during flight, regardless of whether the aircraft is within or outside airspace where SSR is used for ATS purposes.
b) Only when the aircraft is flying within airspace where SSR is used for ATS purposes.
c) Only when the aircraft is flying within controlled airspace.
d) Only when directed by ATC.

482. When the aircraft carries serviceable Mode C equipment, the pilot:

a) Shall continuously operate this mode only when directed by ATC.
b) Shall continuously operate this mode unless otherwise directed by ATC.
c) Shall continuously operate this mode regardless of ATC instructions.
d) Shall continuously operate this mode only when the aircraft is within controlled airspace.

483. An ATS airspace where IFR and VFR flights are permitted, all participating IFR flights receive an air traffic advisory service and all flights receive flight information service if requested, is classified

a) Airspace D
b) Airspace E
c) Airspace F
d) Airspace G

484. The transfer of an aircraft from one ATC unit to another is done:

a) automatically at the control zone boundary.
b) with the pilot's consent.
c) through a central control unit.
d) by agreement with the receiving unit.

485. During an instrument approach, followed by a missed approach, the minimum obstacle clearance (MOC) in the final phase of this missed approach is :

a) 30 m (98 ft)
b) 50 m (164 ft)
c) 90 m (295 ft)
d) 120 m (384 ft)

486. The pilot in command of an aircraft:
1 - must comply immediately to all instructions received from ATC.
2 - is responsible only if he is the " pilot flying" .
3 - may deviate from air regulations for safety reasons.
4 - may be exempt from air regulations in order to comply to an ATC instruction.
5 - may ask for the modification of an unsatisfactory clearance.
Which of the following combinations contains all of the correct statements?

a) 3 - 4 - 5
b) 1 - 4
c) 1 - 3 - 5

d) 1 - 5

487. Definition of Transition altitude:

a) The Transition Altitude specified at major airports, and is where the pilot is expected to set the QNH in the subscale of the altimeter
b) The Transition altitude is always at 18000 feet and at this point in the climb the pilot will set 1013 in the subscale
c) The Transition altitude is designated at major airports and is given to the pilot on the ATIS; this is where he or she is expected to contact ATC after departure
d) The Transition Altitude is designated at major airports and is where the pilot will set 1013 on the climb out to a flight level.

488. Area Control Centres issue clearances for the purpose of:

a) Achieving separation between IFR flights
b) Achieving separation between controlled flights
c) Providing flight Information Service
d) Providing advisory service

489. The vertical position of an aircraft at or above the transition level will be reported :

a) as flight level.
b) as height.
c) as altitude.
d) According to pilot's choice.

490. How many red lights must a pilot see, whose aircraft, in final approach, is following a normal glide path defined by a PAPI?

a) None.
b) 1.
c) 2.
d) 3.

491. The "PAPI" shall consist of:

a) Two wing bars of 4 sharp transition multi-lamp or paired units equally spaced.
b) Two wing bars of 6 sharp transition multi-lamp or paired units equally spaced.
c) A wing bar of 4 sharp transition multi-lamp or paired units equally spaced.
d) A wing bar of 2 sharp transition multi-lamp equally spaced.

492. In the case of parallel runways, each runway designation number shall be supplemented:

a) "By a letter - for example 2 parallel runways " L" and " R" - for 3 " L" , " C" and " R" ."
b) "By a number like " 0" and " 01" for 2 parallel runways."
c) By a letter for 2 parallel runways.
d) "By a letter - for example 3 parallel runways " L" and " R" and the central has no letter."

493. "3-BAR AVASIS" , " PAPI" and " T-VASIS" shall be provided for aircraft having eye-to-wheel heights, when in the flare attitude, not exceeding:

a) Approximately 16 m.
b) Approximately 14 m.
c) Approximately 15 m.
d) Approximately 18 m.

494. Taxiway edge lights shall be:

a) Fixed showing green.
b) Fixed showing yellow.
c) Flashing showing blue.
d) Fixed showing blue.

495. Runway end lights shall be:

a) Fixed unidirectional lights showing white in the direction of the runway.
b) Fixed lights showing variable red.
c) Fixed lights showing variable white.
d) Fixed unidirectional lights showing red in the direction of the runway.

496. Yellow lights towards the end of the runway during landing. What do they mean?

a) Caution to pilot that he is nearing the end of the runway during landing
b) They ran out of white lights during the construction of the lighting system of the runway
c) Yellow lights, like yellow lines, mean that a taxiway is close by
d) These are called caution lights, and are on the edges of the stopway.

497. In the " PAPI" system the pilot during an approach will see the two units nearest the runway as red and the two units farthest from the runway as white when:

a) Above the approach slope.
b) On or close to the approach slope.
c) Below the approach slope.
d) Only on the approach slope.

498. Reversal procedure timing of the leg after the 45 degree turn for CAT C and D aircraft:

a) 45 seconds
b) minute
c) 1 minute 15 seconds
d) minute 30 seconds.

499. In the " VASIS" , how many light units are in each wing bar?

a) 3.
b) 2.
c) 4.
d) 5.

500. Runway threshold and wing bar lights shall be fixed unidirectional lights showing:

a) White

b) Green in the direction of approach to the runway
c) Alternate red and white.
d) Nil

501. You are on final approach to a runway with a PAPI lighting system. You observe the left bank of lights indicating three white lights and one red, and the right hand bank of lights indicating three red and one white. Your actions would be:

a) Obey the left hand set of lights, since it is better to be too high.
b) Obey the right hand set of lights, since you are only slightly low.
c) Ignore the PAPI system altogether
d) Nil

502. Aerodrome elevation is defined as the elevation of the:

a) ARP
b) Highest point of the landing area.
c) Highest point of the aerodrome.
d) Nil

503. The MEA (Minimum En Route Altitude) assures acceptable navigational signal coverage and:

a) Intersection identification.
b) DME response.
c) Meets obstacle clearance requirements.
d) Nil

504. An ATS airspace where IFR and VFR are permitted and receive flight information service if requested, is classified as

a) Airspace C
b) Airspace E
c) Airspace F
d) Airspace G

505. The letters "SALS" appear under aerodrome lighting in the AIP. This is the abbreviation for:

a) Short approach light system
b) Simple approach light system.
c) Sectional approach light system.
d) Nil

506. For a visual approach, the minimum RVR may not be less than:

a) 1000 m
b) 1500 m
c) 2000 m
d) Nil

507. On a return to the IAF from a missed approach, the correct action is to:

a) Enter the holding pattern.

b) Commence a further letdown
c) The pilot will decide whether to do another approach or to divert.
d) Ask ATC for further instructions.

508. The aerodrome reference point is:

a) Used to determine the aerodrome elevation
b) The geographical location of the aerodrome
c) The position of the primary navigation aid associated with the aerodrome.
d) Nil

509. "Time Approach Procedure" is used as necessary to expedite the approach of a number of arriving aircraft. This will be obtained requesting aircraft:

a) To pass the specified point inbound at the previously notified time.
b) To pass a specified point.
c) To apply a step down descent between aircraft in the approach sequence.
d) To maintain a specified speed during the approach procedure.

510. During an approach the PAPI displays four white lights on either side of the runway. That means that:

a) The approach slope is not yet intercepted. Level flight should be maintained.
b) The correct approach slope has been intercepted and should be maintained
c) The aircraft is too close to the runway in relation to its height.
d) Nil

511. An airport has no approach lighting, but has runway lighting. The MDA is 5 085 ft and the threshold elevation is 4 500 ft, the required RVR for a category A aircraft is:

a) 500 m.
b) 1 000 m
c) 2 400 m.
d) 2000 m

512. During an instrument approach, followed by a missed approach, the minimum obstacle clearance (MOC) in the intermediate phase of this missed approach is :

a) 120 m (384 ft)
b) 90 m (295 ft)
c) 50 m (164 ft)
d) 30 m (98 ft)

513. Aerodrome Operating Minima, it is established, among other considerations, that an Operator must take full account of Aeroplane Categories. The criteria taken into consideration for classification of Aeroplanes by Categories is the indicated airspeed at threshold (Vat), which is equal to the stalling speed at the maximum landing mass (Vso) multiplied by 1,3.
Corresponding Aeroplane Category when Vat is from 141 kt to 165 kt is:

a) D
b) B
c) C
d) E

514. You are on an IFR flight plan in IMC conditions when you experience a communications failure. However, an ATC clearance was received restricting you to a level below the flight level specified in the current flight plan. Your actions should be:

a) Maintain the last assigned flight level for 7 minutes and then climb at a normal rate of climb to the flight plan level.
b) Climb immediately to the flight plan level.
c) If terrain permits, descend until VMC.
d) Nil

515. Normally the maximum gradient applicable in the final approach segment to ensure the required minimum obstacle clearance is:

a) 7%
b) 5%
c) 6.5%
d) 8%

516. The transition level:

a) Is calculated by ATS
b) Is published on the approach and landing chart for each aerodrome
c) Is calculated by the commander
d) Will be distributed via NOTAM

517. "Clearway" is defined rectangular area established to:

a) Reduce the risk of damage to aircraft running off a runway.
b) Protect aircraft during take-off or landing operations.
c) Permit aircraft to make a portion of its initial climb to a specific height.
d) Permit the aircraft to stop if it fails the take-off.

518. The Final Approach Segment (instrument) is defined as:

a) Part of an Instrument Approach Procedure in which alignment and descent for landing are accomplished
b) The section of an Instrument Approach between the Final Approach Fix and the Decision Altitude
c) The segment of an Instrument Approach Procedure between the middle marker and the MAP
d) The segment of the Instrument Approach Procedure from the Initial Fix to the Intermediate Fix

519. In an Instrument Approach the segment in which alignment and descent for landing are made is:

a) Initial approach
b) Final approach
c) Intermediate approach
d) Arrival

520. During an ILS approach the pilot should, on reaching the DH and still being IMC:

a) Carry out the MAP

b) Maintain DH until the missed approach point
c) Obtain ATC approval before going around
d) Ask for a CAT II Approach

521. The descent on the inbound track may only be started when:

a) Inbound turn has been completed
b) Within full scale deflection for the ILS/VOR
c) Within 5° of the required bearing for the NDB
d) Once overhead the OM

522. What is the correct way for the pilot to acknowledge that ATIS Information Golf has been received:

a) Information Golf
b) Weather Golf received
c) We have the Information
d) We have the ATIS Golf

523. During an ILS procedure, if the information transmitted by the appropriate services and received by the crew contains parameters below the crew ś operational minimums, the point beyond which the approach must not be continued is:

a) the outer marker (OM).
b) the FAF.
c) the middle marker.
d) the start final descent point (glide slope intersection).

524. What does the term "way point" mean:

a) A specified geographical position used to define an area navigation route or the flight path of an aircraft employing area navigation
b) A defined position on an aerodrome used for the calibration of the inertial navigation system
c) A signal indicating the direction of the runway-in-use
d) A general term meaning the taxiway- and the runway-system of an international airport

525. Which phrase should a pilot use to inform ATC that he is initiating a missed approach procedure:

a) Missed approach
b) Pulling up
c) Overshooting
d) Going around

526. A category III C precision approach (CAT III C) is an approach with:

a) no runway visual range limits
b) a runway visual range of at least 50 m
c) a runway visual range of at least 200 m
d) a runway visual range of at least 350 m

527. An aircraft flies a VOR/DME direct approach for which the operational minima are: MDH = 360 feet, horizontal visibility = 1 500 metres: Visibility given by ATC and received by the crew is 2 500 metres: The pilot may start the final approach...

a) whatever the ceiling given by ATC.
b) if the ceiling transmitted by ATC and received by the crew is higher than 360 feet.
c) if the ceiling transmitted by ATC and received by the crew is higher than 240 feet.
d) if the ceiling transmitted by ATC and received by the crew is higher than 240 feet during the day and 360 feet at night.

528. What does the term "clearance limit" mean:

a) The time of expiry of an air traffic control clearance
b) The time at which an aircraft is given an air traffic control clearance
c) The point to which an aircraft is granted an air traffic control clearance
d) The time after which an air traffic control clearance will be automatically cancelled if the flight has not been commenced

529. If a step down fix is established on the final approach track, a descend shall be made so as to:

a) follow approximately 50 feet above the nominal glide path.
b) pass the fix at the rate of descent of 500 feet/min, which is obligatory.
c) leave the intermediate approach altitude, step by step until reaching the MAPt.
d) pass the fix not below the specified crossing altitude.

530. An "Automatic Terminal Information Service" provides:

a) Information concerning en-route weather phenomena which may affect the safety of aircraft operation.
b) Current meteorological and operational information essential for the safety of the air navigation within a FIR.
c) Routine information to arriving and departing aircraft by means of continuous and repetitive broadcast .
d) Weather reports relating a specific number of aerodromes located within a flight information region (FIR).

531. Under which conditions may an aircraft on a straight-in-VOR approach continue its descend below the OCA?

a) When the aircraft is in visual contact with the ground and with the runway lights in sight
b) When the aircraft has the control tower in sight
c) When the aircraft is in contact with the ground but not with the runway in sight yet
d) When seems possible to land

532. The DA for a CAT I ILS approach is reference to:

a) The threshold – if this is specified on the chart
b) Threshold elevation if this is more than 7 ft lower than airfield elevation
c) The airfield elevation unless the threshold is moe than 7 ft lower than this
d) Threshold elevation

533. The minima for a VOR approach is called a:

a) Minimum Decision altitude

b) Minimum Descent altitude
c) Decision altitude
d) Descent altitude

534. During circling-to-land (with or without prescribed flight tracks), the maximum allowed airspeed for a Cat B aeroplane, in order to remain within the protection envelope, is:

a) 135 kt
b) 120 kt
c) 125 kt
d) 150 kt

535. QNH is the Q-code to indicate:

a) The atmospheric pressure at aerodrome elevation (or at runway threshold).
b) The atmospheric pressure measured at the aerodrome reference point (ARP).
c) The altimeter sub-scale setting to obtain elevation when on the ground.
d) The atmospheric pressure referred to the highest obstacle located on the surface of an aerodrome.

536. If a turn of more than 15° is required to avoid obstacles on an IFR departure then:

a) Max speed for Cat B aircraft is 165 kts
b) Max speed for Cat A aircraft is 165 kts
c) Max speed not specified. Only the area in which rhe aircraft is to reamin is specified in terms of DME or GPS distance
d) Wind effect must be compensated for whilst under radar control to ensure the required track is made good.

537. When ‘Holding Area’ is referred to on an enroute chart, this refers to:

a) Area covered by Holding patter as well as the surrounding area which allows a clearance of ± 1000 ft above all objects
b) Area outside Holding Pattern which also gives a clearance above all objects, starting at 1000 ft and going to 0 at the edge of the buffer area.
c) Area where aircraft wait before entering RWY demarcated by double yellow lines, one of which is dashed (nearest runway surface)
d) Area on runway surface where aircraft usually do the line up on centre line before take-off – this distance is included in the TORR.

538. A turn executed by the aircraft during the initial approach between the end of the outbound track and the beginning of the intermediate or final approach track is a:

a) Base turn
b) Procedure turn
c) Reversal procedure
d) Race track

539. Which is the obstacle clearance in the primary area of the initial approach segment in an

instrument approach procedure?

a) 150m (492 ft).
b) 300m (984 ft).
c) At least 150m (492 ft).
d) At least 300m (984 ft).

540. Where does the initial approach segment in an instrument approach procedure commence?

a) At the IAF.
b) At the IF.
c) At the FAF.
d) At the final en-route fix.

541. What is meant by Aircraft Approach Category:

a) Based on the mass of the aircraft and is reference to on all approach charts
b) Based on the speed of the aircraft – the stall speed in the landing configuration (V_{SO}) at max landing weight and referred to on all charts
c) Category based on performance of the aircraft
d) Depends on whether the approach is a Precision / Non-Precision Approach and is listed on the approach chart

542. Racetrack / Reversal Procedure:

a) Reversal procedure for a racetrack pattern for Cat B aircraft is 140 kts
b) Reversal procedure, otherwise known as a Procedure Turn is applicable for joining the holding pattern and speeds are the same as for holding pattern speeds and depend on altitude / flight level of the aircraft
c) Reversal procedure is used to join the holding pattern from sector I / II.
d) Speed limitations for Racetrack pattern laid down by ICAO – for Cat B aircraft as 135 KIAS

543. Which is the obstacle clearance in the primary area of the intermediate approach segment in an instrument approach procedure?

a) 150m (492 ft).
b) 300m (984 ft).
c) 450m (1476 ft).
d) 600m (1968 ft).

544. Terminal Arrival Altitude (TAA) is:

a) Final altitude expected at destination IFR flight above aerodrome where let down is about to be performed
b) Altitude within 25 nm of IF of a RNAV / GNSS approach
c) Minimum altitude as depicted on chart that gives clearance of ± 1000 ft above all obstacles within sectors flown based on IAF (or IF) in RNAV / GNSS approach
d) Minimum altitude associated with an approach which replaces MSA used in other approaches

545. In an instrument approach procedure, the segment in which alignment and descent for landing are made is called:

a) Initial approach segment.
b) Intermediate approach segment.
c) Arrival segment.
d) Final approach segment.

546. In a precision approach (ILS), generally glide path intersection occurs at heights above runway elevation from:

a) 300m (984 ft) to 600m (1968 ft).
b) 150m (492 ft) to 300m (984 ft).
c) 150m (492 ft) to 900m (2955 ft).
d) 300m (984 ft) to 900m (2955 ft).

547. The aerodrome operating minima for a VOR/DME approach are: MDH = 360 ft Required RVR = 1500 metres. Reported RVR is 1800 metres. The pilot may continue the final approach:

a) if the ceiling reported is higher than 360 ft.
b) if the ceiling reported is higher than 240 ft.
c) regardless of the ceiling reported.
d) if the ceiling reported is higher than 240 ft during the day and 360 ft at night.

548. The characteristics of Intermediate Approach Segment are:

a) The segment in which the landing configuration is set in preparation for landing
b) The segment during which the aircraft speed and configuration should be adjusted to prepare aircraft for final approach. Descent gradient kept as shallow as possible.
c) The segment where the major portion of descent required is done in preparation for final approach
d) The segment where the aircraft is slowed down to the approach speed + 10 to 20 kts, to prepare for landing.

549. When the visual manoeuvring (circling) area has been established the obstacle clearance Altitude / height (OCA/H) is determined:

a) Only for categories A and B aircraft.
b) Only for categories C, D and E aircraft.
c) For all categories of aircraft, and it is the same for all of them.
d) For each category of aircraft, and it may be different for each one of them.

550. The term used to describe the visual phase of flight after completing an instrument approach, to bring an aircraft into position for landing on runway which is not suitably located for straight-in approach, is:

a) Visual approach.
b) Visual manoeuvring (circling).
c) Contact approach.
d) Aerodrome traffic pattern.

551. Entering a holding pattern at FL 110 with a jet aircraft, which will be the maximum speed?

a) 230 kt IAS.
b) 230 kt TAS.
c) 240 kt IAS.
d) 240 kt TAS.

552. If contact is lost with the runway on the down-wind leg of a circling manoeuvre, what actions should be taken?

a) Turn 90 degrees towards the runway and wait for visual conctact
b) If you have other visual cues, continue with ground contact
c) Turn towards the inner marker for the runway in use, maintaining circling altitude
d) Initiate a missed approach

553. A " precision approach" is a direct instrument approach...

a) using at least one source of bearing information and one source of elevation or distance information.
b) using bearing, elevation and distance information, providing the pilot uses a flight director or an autopilot certified to a height below 200 ft.
c) using bearing, elevation and distance information.
d) carried out by a crew of at least two pilots trained with a specific working method.

554. Definition of "Missed Approach Point".

a) For precision approach and APV it is the point of intersection of the electronic glide slope with the DA/H
b) For non-precision approaches it is the latest point at which the MAP can be commenced
c) The point at which the aircraft reaches the MDA/H and where the pilot is expected to initiate the MAP
d) The earliest point at which the pilot on an instrument approach is allowed to initiate the MAP.

555. According to the recommended "noise abatement take-off and climb procedure A" established in ICAO, DOC 8168 Volume I part V, Chapter 3, thrust reduction to climb power, has to be done as soon as the aircraft reaches:

a) 1 500 ft
b) 2 000 ft
c) 3 000 ft
d) 1 000 ft

556. The criteria taken into consideration for classification of Aeroplanes by Categories is the indicated airspeed at threshold (Vat), which is equal to the stalling speed at the maximum landing mass (Vso) multiplied by 1,3. Corresponding Aeroplane Category when Vat is from 141 kt to 165 kt is:

a) C
b) E
c) D
d) B

557. Which are the phases of a missed approach procedure?

a) Initial, intermediate and final.
b) Arrival, initial, intermediate and final.
c) Arrival, intermediate and final.
d) Initial and final.

558. The MSA in RSA is:

a) Clearance of 1500 ft within a radius of 25 km
b) Clearance of 1000 ft within a radius of 25 km
c) Clearance of 1500 ft within a radius of 25 nm
d) Clearance of 1000 ft within a radius of 25 nm

559. When does a pilot on an IFR flight start timing the outbound leg of a holding pattern?

a) Abeam the fix
b) Timing started over the fix and 1 min after starting the turn the outbound leg starts
c) As soon as the outbound leg is intercepted
d) After the EAT

560. The maximum speed in the holding pattern up to and including 14 000 ft for Cat B aircraft is:

a) 175 KIAS
b) 180 KIAS
c) 170 KIAS
d) 160 KIAs

561. About procedures for noise attenuation during landing:

a) Such procedures will not involve the prohibition of using reverse thrust.
b) They prohibit the use of reverse thrust.
c) Such procedures do not exist.
d) They are applied in the case of an instrument approach only.

562. The Initial Approach segment of an Instrument Approach Procedure:

a) Commences at the Initial approach fix and terminates at the Intermediate fix
b) Commences at the Intermediate approach fix and terminates at the Initial fix
c) Commences at the Initial approach fix and terminates at the Final approach fix
d) Commences at the Intermediate approach fix and terminates at the Final approach fix

563. What timing procedure should be used when performing a VOR holding pattern at 8000 ft?

a) Time for 1.5 mins on outbound leg, which begins abeam fix or wings level, whichever comes later
b) Time for 1 min when overhead the VOR
c) Time when leaving the VOR and arrange to be back overhead VOR after 4 mins
d) Time for 1 min on outbound leg, which begins abeam fix or wings level whichever comes later

564. During an instrument approach, followed by a missed approach, the minimum obstacle clearance (MOC) in the intermediate phase of this missed approach is :

a) 30 m (98 ft)
b) 50 m (164 ft)
c) 90 m (295 ft)
d) 120 m (384 ft)

565. When setting up a minimum noise climb, the minimum height at which a power reduction shall be allowed is:

a) 300 m (1000 ft)
b) 450 m (1500 ft)
c) 150 m (500 ft)
d) 600 m (2000 ft)

566. Which one of the following factors should prevent a runway being chosen as the preferential landing runway for noise abatement purposes in visual meteorological condition (VMC)?

a) It has no ILS or visual approach slope guidance
b) Cross-wind component, including gusts, is 10 kt
c) It has a tail wind component of any value
d) It has a tail wind component of 3 kts and a cross wind, including gusts, of 12 kt

567. Which statement regarding approach control service is correct?

a) Approach control have to advise the aircraft operators about substantial delays in departure in any event when they are expected to exceed 45 minutes ;
b) If it is anticipated that an aircraft has to hold for 30 minutes or more, an Expected Approach Time will be transmitted by the most expeditious means to the aircraft
c) An approach sequence shall be established according to the sequence of initial radio contact between aircraft and approach control ;
d) During a visual approach an aircraft is maintaining its own separation;

568. An aircraft approaches a NDB facility on the reciprocal of the final approach track and may thus:

a) In the event of no delay, carry out a Procedure Turn on condition that ATC is informed on completion of the Procedure Turn
b) In the event of no delay and with ATC approval, carry out a Procedure Turn
c) Without delay for the approach and without informing ATC, carry out a Procedure Turn
d) Do a straight in approach into the hold

569. During an ILS procedure, if the reported RVR/visibility is less than the applicable minima, the approach shall not be continued beyond:

a) the FAF, or 1500 ft above the aerodrome / heliport if there is no FAF.
b) the outer marker or equivalent, or 1000 ft above the aerodrome / heliport if there is no outer marker or equivalent.
c) the middle marker, or 500 ft above the aerodrome / heliport if there is no middle marker.
d) the glide slope intersection.

570. Noise abatement procedures apply to:

a) Aircraft on SID
b) All aircraft departing and arriving, according to specified procedures
c) Aircraft with turbo-engines only
d) All departing aircraft

571. If an aircraft is being vectored to intercept a localiser for an ILS approach and experiences RCF what should the pilot ś next actions be:

a) Continue to intercept the localiser and complete the ILS approach and landing
b) Initiate the MAP and return to IAF
c) Established on the localiser and expect light signals to indicate the clearance to land
d) Initiate the MAP and divert to nearest alternate.

572. During an instrument approach, followed by a missed approach, the minimum obstacle clearance (MOC) in the final phase of this missed approach is :

a) 30 m (98 ft)
b) 50 m (164 ft)
c) 90 m (295 ft)
d) 120 m (384 ft)

573. According to ICAO Doc 8168, turns may be specified at:

1. an altitude
2. height,
3. at a fix
4. at a facility.

Which of the following combinations contains all of the correct statements?

a) 1, 2 & 3
b) 2, 3 & 4
c) 1, 2 & 4
d) 1, 2, 3 & 4

574. For an IFR flight to an airport equipped with nav aids, the estimated time of arrival is the estimated time at which the aircraft:

a) will land.
b) will arrive overhead the initial approach fix.
c) will stop on the parking area.
d) will leave the initial approach fix to start the final approach.

575. According to ICAO Doc 8168, the design of an instrument departure procedure is dictated by

a) the terrain surrounding the aerodrome,
b) ATC requirements in the case of SID routes
c) Airspace restrictions
d) All of the above

576. A CTA always has an upper limit:

a) only when located at an airfield

b) sometimes
c) never

577. According to ICAO Doc 8168, when a departure route requires a turn of more than ⋯⋯: to avoid an obstacle, a turning departure is constructed.

a) 5 °
b) 10 °
c) 15 °
d) 20 °

578. In accordance with PAN-OPS, when will pilots not compensate for wind effects?

a) When flying a straight departure with tracks to be made good
b) When flying an omnidirectional departure with tracks to be made good
c) When flying a turning departure with tracks to be made good
d) When being radar vectored

579. In accordance with PAN-OPS, unless otherwise promulgated, a Procedure Design Gradient (PDG) of ⋯:. is assumed:

a) 3.3%
b) 2.5%
c) 0.8%
d) 3%

580. According to ICAO Doc 8168, Pilots should not accept radar vectors during departure unless:

a) It is a straight departure with tracks to be made good
b) The departure route is non-critical with respect to obstacle clearance.
c) They are below the minimum altitude(s)/height(s) required to maintain obstacle clearance
d) When flying an omnidirectional departure with tracks to be made good

581. In accordance with PAN-OPS, there are two basic types of SIDs:

a) Straight & omnidirectional departures
b) Omnidirectional & turning departures
c) Straight & turning departures
d) Straight, omnidirectional & turning departures

582. In accordance with PAN-OPS, during a turning departure, straight flight is assumed until reaching an altitude / height of at least ⋯⋯: above the elevation of the DER.

a) 120m (394 ft)
b) 90m (295 ft)
c) 100m (328 ft)
d) 150m (492 ft)

583. According to ICAO Doc 8168, turn speeds employed are the final missed approach speeds listed increased by:

a) 5%
b) 7%
c) 10 %
d) 20%

584. In accordance with PAN-OPS, during a omnidirectional departure procedure, the basic procedure ensures……: Obstacle clearance:

a) 295 ft
b) 394 ft
c) 492 ft
d) 984 ft

585. According to ICAO Doc 8168, departure routes are labeled as RNAV only when:

a) Any form of navigational system may be used
b) That is the primary means of navigation utilized.
c) At an International aerodrome

586. According to ICAO Doc 8168, for omnidirectional departures, any restrictions will be expressed as:

a) Navigation systems to be used
b) Only RNAV departures
c) Sectors to be avoided
d) Fixes to be avoided

587. In accordance with PAN-OPS, there are two(2) types of approaches:

a) straight-in approach & a circling approach
b) straight-in approach & an omnidirectional approach
c) a circling approach & an omnidirectional approach

588. In accordance with PAN-OPS, the minimum descent gradient, applicable in the final approach segment to ensure the required minimum obstacle clearance, is:

a) 4.3%.
b) 5.2%
c) 6,5%.
d) 7%.

589. According to ICAO Doc 8168, since the point of lift-off will vary, the omnidirectional departure procedure assumes that a turn at 394 ft above the elevation of the aerodrome will not be initiated sooner than …… from the beginning of the runway.

a) 100 m
b) 200m
c) 300 m
d) 600m

590. According to ICAO Doc 8168, for procedures with VOR or NDB on an aerodrome and no FAF, the minimum and maximum rates of descent in the final approach phase for Category A & B are:

a) 120 ft/min - 200 ft/min
b) 394 ft/min - 655 ft/min
c) 180 ft/min - 305 ft/min
d) 590 ft/min - 1000 ft/min

591. In accordance with PAN-OPS, when entering the racetrack procedure in the "offset entry from sector 2", which procedure is applicable:

a) The time is limited on the 30° offset track to 1 minute 30 seconds, after which the pilot is expected to turn to a heading parallel to the outbound track for the remainder of the outbound time.
b) The aircraft shall not return directly to the facility without first intercepting the inbound track when proceeding to the final segment of the approach procedure
c) It starts at a facility or fix and consists of a straight leg with track guidance limited by a radial or DME distance
d) In this case, a particular pattern, normally a base turn or procedure turn is prescribed,

592. In accordance with PAN-OPS, when are "Racetrack procedures" normally used:

a) used as an alternative where the track guidance to the IF is not provided.
b) used as an alternative to flying a STAR
c) to accommodate pilot's with more experience
d) where sufficient distance is not available in a straight segment to accommodate the required loss of altitude and when entry into a reversal procedure is not practical.

593. According to ICAO Doc 8168, the outbound timing in a racetrack procedure, when the procedure is based on a facility, outbound timing starts

a) from abeam the facility
b) on attaining the outbound heading,
c) from abeam the facility or on attaining the outbound heading
d) from abeam the facility or on attaining the outbound heading, whichever comes later.

594. According to ICAO Doc 8168, where no final approach fix is specified, the final approach segment begins at:

a) when you have the aerodrome in sight
b) the inbound track
c) the turn inbound
d) when you reach the Decision Height

595. According to ICAO Doc 8168, in a non-precision instrument approach with a Final Approach Fix, the optimum distance for locating the FAF relative to the threshold is:

a) 2 nm
b) 3 nm
c) 5 nm
d) 10 nm

596. According to ICAO Doc 8168, in a non-precision with no Final Approach Fix, the final approach track:

a) Cannot normally be aligned on the runway center line.
b) Is always aligned with the runway centre line
c) Is determined by the pilot
d) Is given by ATC

597. According to ICAO Doc 8168, in a Precision Approach — ILS / MLS, the final approach begins at:

a) The FAF
b) The FAP
c) Turn inbound
d) When established on the inbound track

598. In accordance with PAN-OPS, in a precision approach, the final approach area contains a fix or facility that permits verification of the glide path / MLS elevation angle / altimeter relationship. What facilities are normally used for this purpose?

a) The VOR/DME fix
b) The NDB/DME fix
c) The outer marker or equivalent DME fix

599. In accordance with PAN-OPS, the altimeter error on a Pressure Altimeter may be significant under conditions of:

a) Extremely cold temperatures.
b) Cold temperatures
c) Extremely warm temperatures.
d) Warmer temperatures

600. In accordance with PAN-OPS, in the calculation of the OCA/H for a procedure, obstacles in which areas are taken into consideration.

a) In the arrival and descent area
b) in the approach and in the missed approach areas
c) in the approach area only
d) in the missed approach area only