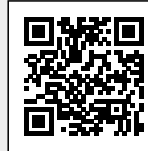


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NOME ALLIEVO:

DATA & ORA:

01. Low intensity obstacle lights on fixed objects shall be:

- a) Flashing red.
- b) Flashing yellow.
- c) Fixed orange.
- d) Fixed red.

02. What is the boundary layer between troposphere and stratosphere called?

- a) Tropopause.
- b) Atmosphere.
- c) Stratosphere.
- d) Ionosphere.

03. Given: Distance from departure to destination 150 NM True track 142W/V 200/15TAS 132 kt What is the distance of the PET from the departure point?

- a) 79 NM
- b) 134 NM
- c) 75 NM
- d) 71 NM

04. Consider the graphic representation of the power required versus true air speed (TAS), for a piston engine aeroplane with a given mass. When drawing the tangent from the origin, the point of contact (A) determines the speed of:

- a) Maximum specific range
- b) Critical angle of attack
- c) Maximum thrust
- d) Maximum endurance

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05. What does the abbreviation 'RVR' mean:

- a) Runway visibility report
- b) Radar vectors requested
- c) Recleared via route...
- d) Runway visual range

06. What does the phrase 'break break' mean?

- a) It indicates the separation between portions of a message transmitted to an aircraft station
- b) It indicates the separation between messages transmitted to different aircraft in a very busy environment
- c) My transmission is ended and I expect a response from you
- d) The exchange of transmissions is ended and no response is expected

07. The pilot of a single engine aircraft has established the climb performance. The carriage of an additional passenger will cause the climb performance to be:

- a) Improved
- b) Unchanged
- c) Degraded
- d) Unchanged, if a short field take-off is adopted

08. An aeroplane's weighing schedule indicates that the empty mass is 57320 kg. The nominal Dry Operating Mass is 60120 kg and the Maximum Zero Fuel Mass is given as 72100 kg. Which of the following is a correct statement in relation to this aeroplane?

- a) Operational items have a mass of 2800 kg and the maximum traffic load for this aeroplane is 11980 kg.
- b) Operational items have a mass of 2800 kg and the maximum useful load is 14780 kg.
- c) Operational items have a mass of 2800 kg and the maximum useful load is 11980 kg.
- d) Operational items have a mass of 2800 kg and the maximum traffic load for this aeroplane is 14780 kg.

09. If an aeroplane is accelerated from subsonic to supersonic speeds, the centre of pressure will move:

- a) To a position near the leading edge.
- b) Forward.
- c) To a position near the trailing edge.
- d) To the mid chord position.

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10. What is the frequency separation between consecutive frequencies in the VHF band:

- a) 25 KHz
- b) 75 KHz
- c) 8.33 KHz
- d) 50 KHz

11. Which of the following statements about the accuracy that can be obtained with the differential technique (D-GPS) of the satellite navigation system NAVSTAR/GPS is correct?

- a) A D-GPS receiver can detect and correct for SA providing a more accurate position fix
- b) The increase in accuracy of position fixes is independent of the receiver position in relation to a D-GPS ground station
- c) Only D-GPS allows position fixes accurate enough for 'Non Precision Approaches'
- d) The nearer a receiver is situated to a D-GPS ground station, the more accurate the position fix

12. Interception An aircraft equipped with SSR transponder which is intercepted by another aircraft shall immediately, unless otherwise instructed by the appropriate air traffic service unit, select Mode A

- a) Code 7600
- b) Code 7500
- c) Code 7000
- d) Code 7700

13. If all attempts to establish radio contact with a ground station fail, the pilot of an aeroplane shall transmit messages preceded by the phrase:

- a) 'Read you one, read you one'
- b) 'How do you read?'
- c) 'Transmitting blind'
- d) PAN PAN, PAN PAN, PAN PAN

14. An aircraft is flying through the polar front jet stream from south to north, beneath the core. How would the OAT change, in the northern hemisphere, during this portion of the flight?

- a) It decreases.
- b) It remains constant.
- c) It first increases, then decreases.
- d) It increases.

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15. The (1) stick force stability and the (2) manoeuvre stability are positively affected by:

- a) (1) forward G. movement (2) trimming the aeroplane nose up.
- b) (1) aft
- c) G. movement (2) trimming the aeroplane nose up. (1) aft G. movement (2) aft CG. movement.
- d) (1) forward G. movement (2) forward CG. movement.
- e) (1) trimming the aeroplane nose up (2) trimming the aeroplane nose up.

16. When a pilot is facing a problem during flight he should

- a) Always make up his mind quickly to give himself as much spare time as possible
- b) Avoid making up his mind until the very last minute
- c) Take as much time as he needs and is available to make up his mind
- d) Make up his mind before consulting other crew members

17. Which of the following calls is a 'general call'?

- a) ALL STATIONS Stephenville CONTROL
- b) YX-EFG, YX-FGH over
- c) YX-DEF Stephenville CONTROL
- d) YX-ABC, YX-BCD, YX-CDE Stephenville CONTROL

18. What is difference in latitude from 30°39'S 20°20'E to 45°23'N 40°40'E:

- a) 14°44'N
- b) 76°2'N
- c) 76°2'S
- d) 14°44'S

19. What does 'Friction coefficient 45' in a runway report mean:

- a) Braking action good
- b) Braking action not measurable
- c) Braking action poor
- d) Braking action medium

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20. What does the term 'air-ground communication' mean?

- a) One-way communication from aircraft to stations or locations on the surface of the earth
- b) One-way communication from stations or locations on the surface of the earth
- c) Two-way communication between aircraft and stations or locations on the surface of the earth
- d) Any communication from aircraft to ground station requiring handling by the Aeronautical Fixed Telecommunication Network (AFTN)

21. The types of fuel tanks used on most modern transport aircraft are:

- a) Integral tanks.
- b) Combined fuel tanks.
- c) Fixed built-in tanks.
- d) Wet Cell Tanks.

22. In the Airspace where the MNPS is applicable, the vertical separation that can be applied between FL 290 and FL410 inclusive is:

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

23. Which of the figures depicts an Electronic Flight Instrument System (EFIS) display in PLAN mode?

- a) Figure 4
- b) Figure 3
- c) Figure 6
- d) Height based on QFE

24. Which of the following statements is applicable to the acceleration height at the beginning of the 3rd climb segment?

- a) There is no requirement for minimum climb performance when flying at the acceleration height
- b) The minimum legally allowed acceleration height is at 1500'
- c) The minimum one engine out acceleration height must be maintained in case of all engines operating
- d) The maximum acceleration height depends on the maximum time take-off thrust may be applied

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25. In an auto-pilot slaved powered control circuit, the system which ensures synchronisation:

- a) Can itself, when it fails, prevent the automatic pilot from being engaged.
- b) Is inhibited when the automatic pilot is engaged.
- c) Prevents uncommanded surface deflection when the automatic pilot is disengaged.
- d) Intervenes only when the automatic pilot has been engaged.

26. Which of the following statements best characterise a synergetic cockpit?
1. Decisions are taken by the captain, but prepared by the crew
2. There is little delegating of tasks
3. Communications are few in number but precise and geared purely to the flight
4. Fluid, consensual boundaries exist in regard to leadership-style, which fluctuate between authority and laissez-faire

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

27. On a reciprocating engine aeroplane, with increasing altitude at constant gross mass, angle of attack and configuration the power required:

- a) Decreases slightly because of the lower air density
- b) Increases but TAS remains constant
- c) Remains unchanged but the TAS increases
- d) Increases and the TAS increases by the same percentage

28. On the approach, the surface temperature is given as -5°C. The freezing level is at 3000 FT/AGL. At 4000 FT/AGL, there is a solid cloud layer from which rain is falling. According to the weather briefing, the clouds are due to an inversion caused by warm air sliding up and over an inclined front. Would you expect icing?

- a) Yes, but only between 3000 and 4000 FT/AGL.
- b) Yes, between ground level and 3000 FT/AGL.
- c) The freezing level is at 3000 FT/AGL. At 4000 FT/AGL, there is a solid cloud layer from which rain is falling. According to the weather briefing, the clouds are due to an inversion caused by warm air sliding up and over an inclined front. Would you expect icing? Yes, but only between 3000 and 4000 FT/AGL. Yes, between ground level and 3000 FT/AGL. No, absolutely no icing will occur.
- d) No, flights clear of cloud experience no icing.

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29. A temperature sensor has a recovery factor of 0,95. The temperature measured is equal to:

- a) Ram air temperature (RAT) + 95 % of the ram rise.
- b) Static air temperature (SAT) + 95% of the ram rise.
- c) 95 % of the ram air temperature (RAT).
- d) 95 % of the static air temperature (SAT).

30. A water fire extinguisher can be used without restriction for:1. a paper fire2. a hydrocarbon fire3. a fabric fire4. an electrical fire5. a wood fireThe combination regrouping all the correct statements is:

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

31. In order to indicate an emergency situation, the aircraft Secondary Surveillance Radar (SSR) transponder should be set to:

- a) 7600
- b) 7700
- c) 7000
- d) FLAG/OFF, the aircraft is within the cone of silence.

32. What does the abbreviation 'IMC' mean?

- a) In most cases
- b) International meteorological channel
- c) Instrument meteorological conditions
- d) In meteorological conditions

33. How can aviation routine weather reports (METAR) of specific airports be obtained by aircraft in flight:

- a) VOLMET
- b) SIGMET
- c) AFIS
- d) ATIS

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34. Which phrase shall be used if you want to say: 'Pass me the following information...':

- a) Request
- b) Say again
- c) Report
- d) Check

35. What does the word 'Monitor' mean:

- a) Wait and I will call you
- b) Establish radio contact with...
- c) Listen out on (frequency).
- d) Examine a system or procedure

36. What conditions are most likely to lead to the formation of hill fog?

- a) High relative humidity and an unstable air mass.
- b) Clear skies, calm or light winds, with relatively low humidity.
- c) Humid stable air mass, wind blowing towards the hills.
- d) Precipitation which is lifted by the action of moderate winds striking the range.

37. What winds and air mass characteristics are mainly associated with the winter monsoon in the monsoon regions of the Indian sub-continent?

- a) North-Easterly winds bringing dry and hazy air.
- b) South-Easterly winds carrying warm and humid air.
- c) North-Westerly winds bringing dry and hazy air.
- d) South-Westerly winds carrying warm and humid air.

38. Which of the following statements concerning jet streams is correct?

- a) In the northern hemisphere only westerly jet streams occur
- b) In the northern hemisphere both westerly and easterly jet streams occur
- c) In the southern hemisphere only easterly jet streams occur
- d) In the southern hemisphere no jet streams occur

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39. A departing aircraft experiencing radio communication failure on an IFR flight under radar vectors has to:

- a) Squawk 7600 and thereafter return to the route indicated in the current flight plan in the most direct manner
- b) Squawk 7600 and thereafter, regardless of any limitation instructed by ATC, return to the route indicated in the current flight plan on the shortest way
- c) Squawk 7600, maintain present heading for 1 minute and thereafter return to the route indicated in the current flight plan on the shortest way
- d) Squawk 7600 and maintain the heading last assigned by ATC for a period of 3 minutes and then return to the flight path in accordance with the current flight plan

40. As regards the detection of bird strike hazard, pilots may obtain information on bird strike hazards by means of: 1 - ATIS 2 - NOTAMS 3 - BIRDTAMS 4 - Weather radar 5 - The report by another crew. The combination regrouping all the correct statements is:

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

41. Ergonomics are associated with:

- a) Cognition
- b) Communications
- c) The human/workplace interface
- d) Information processing

42. During a special VFR flight, the minimum visibility required by EASA OPS is:

- a) 2.500 meters
- b) 3.000 meters
- c) 5.000 meters
- d) 1.500 meters or more

43. An aircraft encountering radio communication failure on an IFR flight in IMC has to land, if possible, within:

- a) 30 minutes after noticing the radio failure
- b) 30 minutes after ETA or the last EAT, whichever is later
- c) 15 minutes after vacating the transition layer
- d) 30 minutes after waiting for the EAT

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44. An RMI slaved to a remote indicating compass has gone unserviceable and is locked on to a reading of 090°. The tail of the VOR pointer shows 135°. The available information from the VOR is:

- a) Radial 135°, relative bearing unknown
- b) Radial 315°, relative bearing unknown
- c) Radial unknown, relative bearing 045°
- d) Local thunderstorm activity

45. A chip detector in the oil system of an engine/gearbox is to indicate that

- a) To Indicate That Seals Are Worn
- b) The piston rings are worn
- c) The oil temperature is too high
- d) There are metal particles in the oil

46. Altimeter setting procedures - Transition Layer When flying through the transition layer the vertical position of the aircraft should be expressed as:

- a) Altitude during climb
- b) Altitude during descent
- c) Either altitude or flight level during climb
- d) Flight level during descent

47. What lowest cloud conditions (oktas/ft) are forecast for JOHANNESBURG/JAN SMUTS at 0300 UTC?

- a) 5 to 7 at 400
- b) 3 to 4 at 400
- c) 5 to 7 at 800
- d) 3 to 4 at 800[see Annex]

48. A read back is not needed for the following message:

- a) Clearance to backtrack on RWY in use
- b) Wind velocity
- c) Altimeter setting
- d) Clearance to take off

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49. Among the factors that increase tolerance to long-duration g forces are:

- a) Anti-g suits and correct use of pilot's harness
- b) Correct use of pilot's harness and tensing of the abdominal muscles
- c) Tensing the leg muscles and correct use of pilot's harness
- d) Bending forward or supine body position and tensing of the abdominal muscles

50. On the QDR of 075° (in the vicinity of the station) with a magnetic heading of 295°, the relative bearing on the ADF indicator is:

- a) 320°
- b) 220°
- c) 040°
- d) Range within "line of sight", and maximum of 200 NM

51. Longitudinal CG location can be expressed:

- a) As a percentage of the MAC from its trailing edge.
- b) As a percentage of the MAC from its leading edge.
- c) With respect to the centre of pressure.
- d) With respect to the neutral point.

52. What does the word 'cancel' mean?

- a) A change has been made to your last clearance
- b) Wait and I will call you
- c) Annul the previously transmitted clearance
- d) Consider that transmission as not sent

53. About a twin spool compressor:

- a) The Low Pressure Spool Runs At A Very High Rpm, Thus Preventing The Onset Of Compressor Stall.
- b) Both spools run at the same RPM.
- c) The low pressure spool runs at a lower RPM than the high pressure spool.
- d) When Operating At Very High Rpm's, The Later Stages Within The High Pressure Spool Will Have A Large Negative Angle Of Attack.

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54. Which of the following is most likely to affect the range of centre of gravity positions on an aeroplane?

- a) Location of the undercarriage.
- b) The need to maintain a low value of stalling speed.
- c) Elevator and tailplane (horizontal stabiliser) effectiveness in all flight conditions.
- d) The need to minimise drag forces and so improve efficiency.

55. What is the most important aspect of the 'backside of the power curve'?

- a) The altitude cannot be maintained.
- b) The aeroplane will not stall.
- c) The elevator must be pulled to lower the nose.
- d) The speed is unstable.

56. Which is the maximum distance at which you might expect solid VHF contact over flat terrain at flight level 50:

- a) About 8 NM
- b) About 15 NM
- c) About 85 NM
- d) About 150 NM

57. Which of the following lists contain aeroplane design features that all increase static lateral stability?

- a) High wing, sweep back, large and high vertical fin.
- b) Sweep back, under wing mounted engines, winglets.
- c) Fuselage mounted engines, dihedral, T-tail.
- d) Low wing, dihedral, elliptical wing planform.

58. What is the minimum field length required for the worst wind situation, landing a twin jet aeroplane with the anti-skid inoperative?
Elevation: 2000 ft QNH: 1013 hPa
Landing mass: 50 000 kg
Flaps: as required for minimum landing distance
Runway condition: dry
Wind: Maximum allowable tailwind: 15 kt
Maximum allowable headwind: 50 kt

- a) 2600 m.
- b) 3100 m.
- c) 2900 m.
- d) 2700 m.[see Annex]

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59. The Earth has been charted using:

- a) WGS84
- b) GPS84
- c) GD84
- d) WGP84

60. The climb gradient of an aircraft after take-off is 6% in standard atmosphere, no wind, at 0' pressure altitude. Using the following corrections: $\pm 0.2\%$ / 1000' field elevation $\pm 0.1\%$ / °C from standard temperature $\pm 1\%$ with wing anti-ice $\pm 0.5\%$ with engine anti-ice. The climb gradient after take-off from an airport situated at 1000', 17°C

- a) QNH 1013.25 hPa, with wing and engine anti-ice operating for a functional check is:
- b) 4.7 %
- c) 4.3 %
- d) 4.9 %

61. Given that the characteristics of a three engine turbojet aeroplane are as follows: Thrust = 50000 Newton / Engine $g = 10 \text{ m/s}^2$ Drag = 72569 N Minimum steady gradient of climb (2nd segment) = $2.7\% \sin(\text{Angle of climb}) = (\text{Thrust} - \text{Drag}) / \text{Weight}$ The maximum take-off mass under 2nd segment conditions with 1 engine out is:

- a) 101596 kg
- b) 209064 kg
- c) 74064 kg
- d) 286781 kg

62. A class A fire is a fire of:

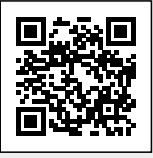
- a) Liquid or liquefiable solid
- b) Electrical origin
- c) Solid material, generally of organic nature
- d) Metal or gas or chemical (special fires)

63. A 3-D RNAV system has capability in:

- a) A horizontal plane and cruise management system
- b) A horizontal plane and speed management system
- c) A horizontal plane and vertical plane and timing function
- d) True altitude is obtained from mode S

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64. What is the Q-code for 'true bearing from the station'?

- a) QDM
- b) QDR
- c) QFE
- d) QTE

65. What is the effect of a head wind component, compared to still air, on the maximum range speed (IAS) and the speed for maximum climb angle respectively?

- a) Maximum range speed decreases and maximum climb angle speed increases
- b) Maximum range speed decreases and maximum climb angle speed decreases
- c) Maximum range speed increases and maximum climb angle speed stays constant
- d) Maximum range speed increases and maximum climb angle speed increases

66. In the ATC flight plan Item 15, for a flight along a designated route, where the departure aerodrome is not on or connected to that route:

- a) The letters 'DCT' should be entered, followed by the point of joining the ATS route
- b) It is not necessary to indicate the point of joining that route as it will be obvious to the ATS unit.
- c) The words 'as cleared' should be entered
- d) It is necessary only to give the first reporting point on that route

67. Flickering light when reflected from spinning rotor blades

- a) Can cause spatial disorientation and/or nausea
- b) Should be avoided, because it may destroy the optic nerve
- c) Can be avoided when the strobe-lights are switched on
- d) Has no effect

68. A Lambert conformal conic projection, with two standard parallels:

- a) Shows all great circles as straight lines
- b) The scale is only correct along the standard parallels
- c) Shows lines of longitude as parallel straight lines
- d) The scale is only correct at parallel of origin

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69. Your aircraft is heading 075°M. The OBI is set to 025°. The VOR indications are 'TO' with the needle showing right deflection. Relative to the stations, you are situated in a quadrant defined by the radials:

- a) 025° and 115°
- b) 295° and 025°
- c) 115° and 205°
- d) 2.5°

70. The time is 9:20

- a) M. What is the correct way of transmitting this time if there is no possibility of confusion about the hour? Twenty.
- b) Two zero this hour.
- c) Two zero.
- d) Nine twenty M.

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Schema Risposte

Confronta le risposte fornite con il seguente schema e segna il tuo punteggio!

01: D	02: A	03: A	04: A
05: D	06: B	07: C	08: A
09: D	10: C	11: D	12: D
13: C	14: A	15: C	16: C
17: A	18: B	19: A	20: C
21: A	22: A	23: D	24: D
25: A	26: C	27: D	28: B
29: B	30: D	31: B	32: C
33: A	34: C	35: C	36: C
37: A	38: B	39: A	40: C
41: C	42: D	43: B	44: C
45: D	46: B	47: A	48: B
49: D	50: A	51: B	52: C
53: C	54: C	55: D	56: C
57: A	58: B	59: A	60: D
61: A	62: C	63: D	64: D
65: C	66: A	67: A	68: B
69: D	70: C		