

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

NOME ALLIEVO:

DATA & ORA:

01. A twin engine aeroplane in cruise flight with one engine inoperative has to fly over high ground. In order to maintain the highest possible altitude the pilot should choose:

- a) The long range speed
- b) The speed corresponding to the minimum value of $(\text{lift} / \text{drag})^{3/2}$
- c) The speed corresponding to the maximum value of the lift / drag ratio
- d) The speed at the maximum lift

02. In determining the Dry Operating Mass of an aeroplane it is common practice to use 'standard mass' values for crew. These values are

- a) Flight crew 85 kg., cabin crew 75 kg. each. These do not include a hand baggage allowance.
- b) Flight crew 85 kg., cabin crew 75 kg. each. These are inclusive of a hand baggage allowance.
- c) Flight crew (male) 88 kg. (female) 75 kg., cabin crew 75 kg. each. These do not include an allowance for hand baggage.
- d) Flight crew (male) 88 kg. (female) 75 kg., cabin crew 75 kg. each. These include an allowance for hand baggage.

03. When Fowler type trailing edge flaps are extended at a constant angle of attack, the following changes will occur:

- a) CL increases and the centre of pressure moves forward
- b) CL and CD increase
- c) CD decreases and the centre of pressure moves aft
- d) CL increases and CD remains constant

04. The 'departure' between positions 60°N 160°E and 60°N 'x' is 900 NM. What is the longitude of 'x'?

- a) 170°W
- b) 175°E
- c) 145°E
- d) 140°W

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

05. The distance on a Lambert's chart, between two parallels of latitude the same number of degrees apart:

- a) Is constant all over the chart.
- b) Reduces between the standard parallels, but expands outside them.
- c) Is constant between the standard parallels, and expands outside them.
- d) Expands between the standard parallels, but reduces outside them.

06. In very cold weather, the pilot notices during startup, a slightly higher than normal oil pressure. This higher pressure:

- a) Is normal, if it decreases after startup.
- b) Requires an oil change.
- c) Is abnormal but does not require the engine to be shut down.
- d) Is Abnormal And Requires The Engine To Be Shut Down.

07. Which of the following statements concerning an isothermal layer in the atmosphere is correct?

- a) Air parcels that are forced to rise through an isothermal layer keep the same temperature.
- b) An isothermal layer is formed when the air in the layer is well mixed by turbulence.
- c) An isothermal layer is absolutely stable.
- d) The vertical temperature gradient lies between the dry and saturated adiabatic lapse rates.

08. What does the signal "N" mean?

- a) All personnel found.
- b) "No" or "Negative".
- c) Nothing found, continuing search.
- d) Unable to continue - returning to base.

09. 'Night Effect' which causes loss of signal and fading, resulting in bearing errors from NDB transmissions, is due to:

- a) Static activity increasing at night particularly in the lower frequency band
- b) Interference from other transmissions and is maximum at dusk when east of the NDB
- c) The effect of the Aurora Borealis
- d) 1.25° above or below the correct glide path.

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

10. A slat will:

- a) Prolongs the stall to a higher angle of attack
- b) Provide a boundary layer suction on the upper surface of the wing
- c) Increase the lift by increasing the wing area and the camber of the aft portion of the wing
- d) Increase the camber of the aerofoil and divert the flow around the sharp leading edge

11. A parcel of rising air stays unsaturated. Which of the following statements is correct?

- a) Relative humidity increases, temperature decreases
- b) Mixing ratio increases, temperature decreases
- c) Relative humidity and mixing ratio remain unchanged
- d) Relative humidity decreases, mixing ratio remains unchanged

12. An aeroplane should be equipped with a Mach trimmer, if:

- a) Stick force stability is independent of the airspeed and -altitude.
- b) At transonic Mach numbers the aeroplane demonstrates unconventional elevator stick force characteristics.
- c) At high airspeed and low altitude the aeroplane demonstrates unconventional elevator stick force characteristics.
- d) Stick force per g strongly decreases at low Mach numbers.

13. What is the Q-code for 'magnetic heading to the station (no wind)?

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

14. Given: True Heading = 090° TAS = 180 kt GS = 180 kt Drift 5° right Calculate the W/V?

- a) 190° / 15 kt
- b) 005° / 15 kt
- c) 185° / 15 kt
- d) 355° / 15 kt

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

15. Which phrase shall be used if you want to say: 'Yes':

- a) Yes
- b) Affirm
- c) Affirmative
- d) Roger

16. How many feet are there in a km?

- a) 3.280 ft
- b) 1.000 ft
- c) 6.080 ft
- d) 5.280 ft

17. Which of the following represents the minimum for V1?

- a) VMU
- b) VLOF
- c) VR
- d) VMCG

18. A small supercooled cloud droplet that collides with an airfoil will most likely

- a) Freeze immediately and create clear ice.
- b) Freeze immediately and create rime ice.
- c) Travel back over the wing, creating clear ice.
- d) Travel back over the wing, creating rime ice.

19. Given: True course (TC) 017°, W/V 340°/30 kt, True air speed (TAS) 420 kt Find: Wind correction angle (WCA) and ground speed (GS)

- a) WCA -2°, GS 396 kt
- b) WCA +2°, GS 416 kt
- c) WCA -2°, GS 426 kt
- d) WCA +2°, GS 396 kt

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

20. Given: M 0.80, OAT -50°C, FL 330, GS 490 kt, VAR 20°W, Magnetic heading 140°, Drift is 11° Right. Calculate the true W/V?

- a) 025°/47 kt
- b) 200°/95 kt
- c) 020°/95 kt
- d) 025°/45 kt

21. Given: Distance from departure to destination 338 NM True track 045W/V 225/35TAS 120 kt What is the distance and time of the PET from the departure point? What is the distance and time of the PET from the departure point?

- a) Distance: 218 NM Time: 85 min
- b) Distance: 169 NM Time: 85 min
- c) Distance: 120 NM Time: 46 min
- d) Distance: 185 NM Time: 72 min

22. During a flight to Europe, planned in MNPS (Minimum Navigation Performance Specification) airspace, you expect to cross the 30°W meridian at 11H00 UTC

- a) You will then normally be:
- b) Within the organised daytime flight track system.
- c) Outside of the validity period of the organised track system.
- d) Within the polar track system.

23. The longitudinal separation minima between aircraft departed from the same aerodrome and following the same track, and the preceding aircraft is maintaining a true airspeed of 40 kt or more faster than the succeeding aircraft, is:

- a) 3 minutes.
- b) 8 minutes.
- c) 10 minutes.
- d) 5 minutes.

24. A ring laser gyro can measure:

- a) Rotation in all directions.
- b) Accelerations about its sensitive axis.
- c) Accelerations in all direction.
- d) Rotation about its sensitive axis.

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

25. Flight planning chart for an aircraft states, that the time to reach the cruising level at a given gross mass is 36 min and the distance travelled is 157 NM (zero-wind). What will be the distance travelled with an average tailwind component of 60 KT?

- a) 128 NM
- b) 193 NM
- c) 228 NM
- d) 157 NM

26. The fuel burn of an aircraft turbine engine is 220 l/h with a fuel density of 0,80. If the density is 0,75, the fuel burn will be:

- a) 235 l/h
- b) 176 l/h
- c) 220 l/h
- d) 206 l/h

27. According to the 'Aerodrome Reference Code', the 'Code Letter E' shall identify an aircraft wing span of:

- a) 52 m up to but not including 65 m.
- b) 15 m up to but not including 24 m.
- c) 24 m up to but not including 36 m.
- d) 36 m up to but not including 52 m.

28. Which of the following statement(s) is/are correct?- 1: The retina has rods on its peripheral zone and cones on its central zone- 2: The retina has cones and the crystalline lens has rods- 3: The rods allow for night-vision- 4: The cones are located on the peripheral zone of the retina

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

29. What is the correct way to transmit and read back frequency 120.375 MHz (VHF channel separated by 25 KHz):

- a) One two zero decimal three seven five
- b) One twenty decimal three seven
- c) One two zero three seven
- d) One two zero decimal three seven

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

30. Which statement regarding V1 is correct?

- a) V1 must not exceed VMCG
- b) V1 must not exceed VR
- c) The V1 correction for up-slope is negative
- d) When determining the V1, reverse thrust is only allowed to be taken into account on the remaining symmetric engines

31. Given: Total mass 2900 kg Centre of gravity (cg) location station: 115 Aft cg limit station: 116 The maximum mass that can be added at station 130 is:

- a) 140 kg.
- b) 317 kg.
- c) 14 kg.
- d) 207 kg.

32. The great circle distance between position A (59°34.1'N 008°08.4'E) and B (30°25.9'N 171°51.6'W) is:

- a) 10 800 km
- b) 2 700 NM
- c) 5 400 NM
- d) 10 800 NM

33. The maximum wind velocity (°/kt) shown in the vicinity of MUNICH (48°N 012°E) is:

- a) 300/100
- b) 300/140
- c) 290/110
- d) 300/160

34. What is the correct call sign of Fastair 345 in the initial call to the aerodrome control tower and the approach control unit, if the aircraft has a maximum take-off weight of more than 136 tonnes:

- a) Fastair 345 heavy
- b) Fastair 345 widebody
- c) Fastair 345
- d) Heavy Fastair 345

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

35. When an aircraft has turned 90 degrees with a constant attitude and bank, the pilot observes the following on a classic artificial horizon:

- a) Too much nose-up and bank correct
- b) Attitude and bank correct
- c) Too much nose-up and bank too high
- d) Too much nose-up and bank too low

36. The maximum rate of climb that can be maintained at the absolute ceiling is:

- a) 0 fpm
- b) 100 fpm
- c) 500 fpm
- d) 125 fpm

37. . The moment for an item is

- a) The mass of the item divided by it's distance from the datum
- b) The mass of the item multiplied by it's distance from the datum
- c) The square of the distance the item is from the datum divided by it's mass
- d) The distance the item is from the datum divided by it's mass

38. Position "Elephant Point" is situated at (58°00'N, 135°30'W). Standard time for this location is listed in the Air Almanac as UTC -8. If sunset occurs at 00:57 UTC on 21st January, what is the time of sunset in LMT?

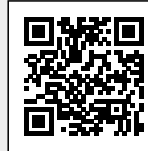
- a) 15:55 on January 20th.
- b) 09:59 on January 21st.
- c) 16:57 on January 20th.
- d) 08:57 on January 21st.

39. In which of these cloud types can icing be virtually ruled out?

- a) SC
- b) CU
- c) NS
- d) CI

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

40. A chart has the scale 1: 1 000 000. From A to B on the chart measures 1.5 inches (one inch equals 2.54 cm), the distance from A to B in NM is:

- a) 38.1
- b) 20.6
- c) 54.2
- d) 44.5

41. The 'climb gradient' is defined as the ratio of:

- a) The increase of altitude to horizontal air distance expressed as a percentage
- b) Rate of climb to true airspeed
- c) True airspeed to rate of climb
- d) The increase of altitude to distance over ground expressed as a percentage

42. Upon extension of a spoiler on a wing:

- a) Only CL is decreased (CD remains unaffected)
- b) CD is increased and CL is decreased
- c) CD is increased, while CL remains unaffected
- d) Both CL and CD are increased

43. The two main design functions of Secondary Surveillance Radar (SSR) Mode S are:

- a) Collision avoidance using TCAS II and improved long range (HF) communication capability.
- b) Air to ground and ground to air data link communications and improved ATC aircraft surveillance capability
- c) The elimination of ground to air communications and the introduction of automatic separation between aircraft using TCAS II
- d) Aeroplane is circling around the station

44. The Maximum Zero Fuel Mass is a structural limiting mass. It is made up of the aeroplane Dry Operational mass plus

- a) Traffic load, non-revenue load and crew standard mass.
- b) Unuseable fuel and crew standard mass.
- c) Traffic load
- d) Traffic load and potable water.

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

45. If there is a tail wind, the climb limited TOM will:

- a) Not be affected
- b) Increase in the flaps extended case
- c) Decrease
- d) Increase

46. Which statement about stick force per g is correct?

- a) The stick force per g increases, when centre of gravity is moved aft.
- b) The stick force per g must have both an upper and lower limit in order to ensure acceptable control characteristics.
- c) If the slope of the Fe-n line becomes negative, generally speaking this is not a problem for control of an aeroplane.
- d) The stick force per g can only be corrected by means of electronic devices (stability augmentation) in case of an unacceptable value.

47. The rate-of-turn is the:

- a) Yaw rate in a turn
- b) Aircraft speed in a turn
- c) Change-of-heading rate of the aircraft
- d) Pitch rate in a turn

48. An aeroplane is to depart from an airfield at a take-off mass of 302550 kg. Fuel on board at take-off (including contingency and alternate of 19450 kg) is 121450 kg. The Dry Operating Mass is 161450 kg. The useful load will be

- a) 19650 kg
- b) 141100 kg
- c) 39105 kg
- d) 121450 kg

49. The minimum navigation equipment required for an aircraft flying without restriction in MNPS airspace can be at the very least:

- a) Two inertial navigation systems
- b) One inertial navigation system
- c) Three inertial navigation systems
- d) One Global Navigation Satellite System

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

50. The QFF at an airfield located 400 metres above sea level is 1016 hPa. The air temperature is 10°C higher than a standard atmosphere. What is the QNH?

- a) 1016 hPa
- b) Less than 1016 hPa
- c) More than 1016 hPa
- d) It is not possible to give a definitive answer

51. To which frequency bands do the frequencies 118.000 - 136.975 MHz of the Aeronautical Mobile Service belong?

- a) Very high frequency
- b) Medium frequency
- c) Low frequency
- d) Very low frequency

52. The correct drag formula is:

- a) $D = C_D \frac{1}{2} \rho V S$
- b) $D = C_D 2 \rho V^2 S$
- c) $D = C_D \frac{1}{2} \frac{1}{\rho} V^2 S$
- d) $D = C_D \frac{1}{2} \rho V^2 S$

53. The trailing edge flaps when extended:

- a) Degrade the best angle of glide
- b) Significantly lower the drag
- c) Significantly increase the angle of attack for maximum lift
- d) Increase the zero lift angle of attack

54. In the cruise at FL 155 at 260 kt TAS, the pilot plans for a 500 feet/min descent in order to fly overhead MAN VOR at 2000 feet (QNH 1030). TAS will remain constant during descent, wind is negligible, temperature is standard. The pilot must start the descent at a distance from MAN of:

- a) 110 NM
- b) 140 NM
- c) 130 NM
- d) 120 NM

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

55. RADAR instructs aircraft X-BC:'X-BC squawk ident'. What does this mean:

- a) Radar identification has been achieved by correlating an observed radar blip with aircraft XY-ABC
- b) X-BC should perform an identification turn of at least 020 degrees
- c) X-BC shall operate the IDENT button
- d) X-BC shall reselect his assigned mode and code

56. What does QDR mean?

- a) Magnetic heading to the station (no wind)
- b) Magnetic bearing from the station
- c) True heading to the station
- d) True bearing from the station

57. For an aircraft flying a true track of 360° between the 5°S and 5°N parallels, the precession error of the directional gyro due to apparent drift is equal to:

- a) -5°/hour
- b) +5°/hour
- c) 15°/hour
- d) Approximately 0°/hour

58. What does the abbreviation 'SAR' mean?

- a) Surveillance airport radar.
- b) Standard arrival route.
- c) Search and rescue.
- d) Secondary altimeter responder.

59. What does the word " WILCO" mean?

- a) I read you fine.
- b) I understand your message and will comply with it.
- c) I have received all of your last transmission.
- d) As communication is difficult, I will call you later.

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

60. Which of the statements about computer architecture are correct or incorrect? 1) The software part includes the programs that make up the operating system (OS). 2) The hardware part includes the physical components of the computer.

- a) 1) is correct, 2) is correct
- b) 1) is incorrect, 2) is correct
- c) 1) is incorrect, 2) is incorrect
- d) 1) is correct, 2) is incorrect

61. What is the maximum theoretical range that an aircraft at FL150 can receive signals from a VOR situated 609' above MSL?

- a) 220 NM
- b) 147 NM
- c) 184 NM
- d) 156 NM

62. A jet transport has the following structural limits:-Maximum Ramp Mass: 63 060 kg-Maximum Take Off Mass: 62 800 kg-Maximum Landing Mass: 54 900 kg-Maximum Zero Fuel Mass: 51 300 kgThe aeroplane's fuel is loaded accordance with the following requirements:-Taxi fuel: 400 kg-Trip fuel: 8400 kg-Contingency & final reserve fuel: 1800 kg-Alternate fuel: 1100 kgIf the Dry Operating Mass is 34930 kg, determine the maximum traffic load that can be carried on the flight if departure and landing airfields are not performance limited.

- a) 16 430 kg
- b) 17 070 kg
- c) 16 370 kg
- d) 16 570 kg

63. The alignment sequence of an IRS consists of: 1 - searching for the local vertical2 - searching for the true north3 - searching for the latitude4 - searching for the longitude5 - comparison between the computed longitude and the one entered by the pilot6 - comparison between the computed latitude and the one entered by the pilot The combination that regroups all of the correct statements is:

- a) 1, 2, 4, 5.
- b) 1, 2, 3, 6.
- c) 3, 4.
- d) 1, 2, 3, 4, 5, 6.

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

64. Regarding the obstacle limited take-off mass, which of the following statements is correct?

- a) Wind speed plays no role when calculating this particular mass
- b) A take-off in the direction of an obstacle is also permitted in tail wind condition
- c) The maximum bank angle which can be used is 10°
- d) The obstacle limited mass can never be lower than the climb limited take-off mass

65. A checklist of AIP supplements currently in force shall be issued at intervals of:

- a) Not more than one month
- b) Not more than 2 months
- c) Not more than 28 days
- d) Not more than three months

66. The purpose of the TAS input, from the air data computer, to the Inertial Navigation System is for:

- a) 345 - 100 kt
- b) 005 - 102 kt
- c) 002 - 98 kt
- d) 348 - 102 kt

67. The Decision Height (DH) warning light comes on when an aircraft:

- a) Passes over the outer marker.
- b) Descends below a pre-set barometric altitude.
- c) Descends below a pre-set radio altitude.
- d) Passes over the ILS inner marker.

68. An aircraft, following a 215° true track at variation 3°W, must fly over a 10 600 ft obstacle with a minimum obstacle clearance of 1 500 ft. Knowing the QNH received from an airport close by, which is almost at sea-level, is 1035 and the temperature is ISA -15°C, the minimum flight level will be:

- a) 140
- b) 150
- c) 130
- d) 120

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

69. The planned departure time from the parking area is 1815 UTC The estimated take-off time is 1825 UTC The flight plan must be filed with ATC at the latest at:

- a) 1725 UTC
- b) 1745 UTC
- c) 1715 UTC
- d) 1755 UTC

70. Which of the following statements, concerning the obstacle limited take-off mass for performance class A aeroplane, is correct?

- a) It should be calculated in such a way that there is a margin of 50 ft with respect to the 'net take off flight path'
- b) It should not be corrected for 30° bank turns in the take-off path
- c) It cannot be lower than the corresponding climb limited take-off mass
- d) It should be determined on the basis of a 35 ft obstacle clearance with the respect to the 'net take- off flight path'

Simulazione di Esame

Air Law - ATPL - Airline Transport Pilot license, 70 domande in 70 minuti!



QuizVds.it

Schema Risposte

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

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