Exam simulation

ATPL - Airline Transport Pilot Licence - Performance

Quizvds.it

STUDENT NAME:	DATE AND TIME:

01. A conventional monostatic pulsed primary radar with a shared transmit/receive antenna uses:

a) A directional transmit antenna and an omnidirectional receive antenna.

b) Separate directional transmit and receive antennas.

c) One directional antenna shared for transmitting and receiving.

d) An omnidirectional transmit antenna and a directional receive antenna.

02. General provisions for ATS - obstacle clearance. When does Air Traffic Control Services have the responsibility to prevent collisions with terrain?

a) Always when ATS are provided.

b) When a flight in accordance with IFR is vectored by radar.

c) ATS only provides prevention when an aircraft is flying IFR in IMC.

d) ATS never prevent collisions with terrain.

03. Under CS25.341(a)(5)(i), which combination gives the sea-level reference gust velocity (EAS) and a design speed at which it applies, for the clean configuration?

a) 56 ft/s EAS and VC

b) 55 ft/sec and VB

c) 65 ft/sec at all speeds

d) 66 ft/sec and VD

04. When an aircraft subjected to an unlawful interference has landed it shall notify by the most expeditious means of the State of registry of the aircraft and the State of the operator of the landing and shall similarly transmit all other relevant information to the:

a) Two aforementioned States, each State whose citizens suffered fatalities or injuries, each State whose citizens are known to be on board the aircraft and the ICAO

b) Two aforementioned States and the ICAO

c) Two aforementioned States, each State whose citizens suffered fatalities or injuries, each State whose citizens were detained as hostages, each State whose citizens are known to be on board the aircraft and the ICAO

d) Two aforementioned States, each State whose citizens suffered fatalities or injuries on board the aircraft and the ICAO

05. Relative humidity at a given temperature is the relation between

a) Water vapour weight and dry air weight

b) Water vapour weight and humid air volume

c) Actual water vapour content and saturated water vapour content

d) Dew point and air temperature

06. Which statements describe conventional serviceable nickel-cadmium aircraft batteries under their specified operating and storage conditions? 1 - They have no significant thermal-runaway risk. 2 - High internal resistance is the reason for high starting-current capability. 3 - They offer good high-rate charge and discharge capability. 4 - They can operate over their specified temperature range, although available capacity depends on temperature. 5 - They can be stored under the manufacturer-prescribed storage conditions. 6 - Their metallic aircraft battery case provides mechanical protection. 7 - Electrolyte density does not change appreciably with normal state of charge and therefore cannot be used to determine charge state. Select the option containing all correct statements.

a) 2, 3, 4, 5, 6

b) 1, 2, 5, 6, 7

c) 3, 4, 6, 7

d) 3, 4, 5, 6 and 7

07. Which service broadcasts weather reports for a selection of aerodromes to aircraft in flight?

a) VOLMET

b) SIGMET

c) AFIS

d) ATIS

08. Air traffic control messages (clearances, instructions, etc.) belong to the category of:

a) Flight regularity messages.

b) Class B messages.

c) Service messages.

d) Flight safety messages.

09. Except in special circumstances determined by the public authorities concerned, when a passenger is passing through the territory of a Contracting State and has to stay in that Contracting State until the next flight for lack of facilities or any other circumstances, the Contracting State where the international airport is located shall permit such a passenger to remain within its territory without requiring visas prior to the arrival when:

a) The passenger is to leave that State within two (2) weeks from the day of his (her) arrival.

b) The passenger is to leave that State within two (2) days from the day of his (her) arrival.

c) The passenger is to leave that State within one (1) day from the day of his (her) arrival.

d) The passenger is to leave that State within 72 (seventy two) hours from the time of arrival of that passenger.

10. Under SERA, what defines a controlled aerodrome?

a) Its location within a control zone, irrespective of the service provided to aerodrome traffic

b) Air traffic control service is provided to aerodrome traffic

c) Its location within controlled airspace, even if no aerodrome control service is provided

d) Only an aerodrome flight information service is provided to aerodrome traffic

11. Which controls act together in a V-tail aircraft?

a) The stick in one axis and the rudder-pedals.

b) The rudder-pedals and the mixture.

c) The stick in one axis and the throttle.

d) The stick in both axis (push, pull and turn).

12. The maximum operating altitude for a certain aeroplane with a pressurised cabin

a) Is dependent on aerodynamic ceiling.

b) Is the highest pressure altitude certified for normal operation.

c) Is only certified for four-engine aeroplanes.

d) Is dependent on the OAT.

13. Which approach best supports effective performance of the pilot–automation system?

a) Allocate tasks appropriately, keep the pilot informed and engaged, monitor the automation and maintain the ability to intervene or fly manually.

b) Transfer every decision to the automation and discontinue monitoring once it is engaged.

c) Optimise only the amount of automation, without considering pilot workload, mode awareness or manual skills.

d) Assume that reducing physical control inputs always improves awareness and removes the need for cross-checks.

14. A minimum sector altitude (MSA) is defined in relation to a radio navigation facility. Unless a different distance is specified, this altitude is valid within:

a) 20 NM

b) 25 NM

c) 10 NM

d) 15 NM

15. In still air, how is the aerodynamic climb gradient, relative to the air mass, expressed as a percentage?

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 divided by horizontal distance over the ground in any wind, without allowing for wind

16. The fields affecting a magnetic compass originate from: 1. magnetic masses 2. ferrous metal masses 3. non ferrous metal masses 4. electrical currents. The combination regrouping all the correct statements is:

a) 1, 2, 3, 4

b) 1, 2, 3

c) 1, 3, 4

d) 1, 2, 4

17. A conventional direct-reading compass is used at a moderate northerly magnetic latitude during a shallow-bank, coordinated right turn within the compass operating limits from 330° to 040°. Assume compass-liquid swirl drags the magnetic assembly in the same direction as the turn. How do northerly turning error and this swirl affect the indicated turn?

a) Under-indicate the turn and liquid swirl will increase the effect
b) Over-indicate the turn and liquid swirl will increase the effect
c) Under-indicate the turn and liquid swirl will decrease the effect
d) Over-indicate the turn and liquid swirl will decrease the effect

18. The angle of attack of a wing profile is defined as the angle between:

a) The local airflow and the mean camberline
b) The undisturbed airflow and the chordline
c) The undisturbed airflow and the mean camberline
d) The local airflow and the chordline

19. The 'cocktail party effect' is:

a) The tendency to believe information that reinforces our mental model of the world
b) The ability to drink too much at social gathering
c) The tendency not to perceive relevant information
d) The ability to pick up relevant information unintentionally

20. The Flight Management Computer (FMC) position is:

a) The actual position of the aircraft at any point in time
b) The same as that given on the No. 1 IRS
c) The computed position based on a number of sources (IRS, Radio, ILS, GPS etc)
d) Another source of aircraft position; it is independent of other navigation sources (IRS, Radio, ILS, etc)

21. The time is 16:15 UTC. How should it be transmitted when there is a possibility of confusion about the hour?

a) Sixteen fifteen
b) Four fifteen PM
c) Four fifteen in the afternoon
d) One six one five

22. An engine pressure ratio (EPR) gauge reading normally shows the ratio of:

a) Jet pipe pressure to compressor inlet pressure.

b) Compressor outlet pressure to compressor inlet pressure.

c) Combustion chamber pressure to compressor inlet pressure.

d) Jet pipe pressure to combustion chamber pressure.

23. A warning device alerts the crew in case of an excessive cabin altitude. This warning must be triggered on reaching the following altitude:

a) 14000 ft (approx. 4200 m)

b) 10000 ft (approx. 3000 m)

c) 12000 ft (approx. 3600 m)

d) 8000 ft (approx. 2400 m)

24. Which statements describe a typical sodium-chlorate chemical oxygen generator used for passenger emergency oxygen? 1 - It produces oxygen after ignition. 2 - It requires a continuous supply of engine bleed air to generate oxygen. 3 - It is relatively light compared with stored gaseous oxygen for an equivalent supply. 4 - It does not require refilling a pressurised oxygen cylinder, although inspection, expiry and replacement requirements still apply. 5 - The pilot can continuously adjust its oxygen-generation rate. 6 - It is inherently unsuitable for an approved passenger oxygen installation. Which combination is correct?

a) 2, 3 and 6

b) 1, 3 and 4

c) 2, 4 and 5

d) 1, 4 and 6

25. An aircraft departs Brioude (elevation 1483 ft, QFE 963 hPa, temperature 32°C). Passing an indicated height of 5000 ft on an altimeter set to QFE, what will a second altimeter set to 1013 hPa indicate approximately? For this exercise use 28 ft per hPa; calculate indicated pressure altitude, without a true-height temperature correction.

a) 6400'

b) 4000'

c) 6000'

d) 6800'

26. On a given path, it is possible to choose between four flight levels (FL), each associated with a mandatory flight Mach Number (M). The flight conditions, static air temperature (SAT) and headwind component (HWC) are given below: FL 370 - M = 0.80 Ts = -60°C HWC = 15 kt. FL 330 - M = 0.78 Ts = -60°C HWC = 5 kt. FL 290 - M = 0.80 Ts = -55°C HWC = 15 kt. FL 270 - M = 0.76 Ts = -43°C HWC = 0. The flight level allowing the highest ground speed is:

a) FL290

b) FL270

c) FL370

d) FL330

27. An urgency message shall be preceded by the radiotelephony urgency signal:

a) URGENCY, spoken three times

b) PAN PAN, spoken three times

c) ALERFA, spoken three times

d) MAYDAY, spoken three times

28. The geometric shape of the reference system for the satellite navigation system NAVSTAR/GPS, defined as WGS 84, is:

a) A mathematical model that describes the exact shape of the earth

b) A sphere

c) An ellipsoid

d) A geoid

29. Which of the following factors leads to the maximum flight time of a glide?

a) High mass

b) Low mass

c) Tailwind

d) Headwind

30. In a mountain-valley wind circulation, the mountain wind blows

a) At night up from the valley

b) During the day down from the mountains

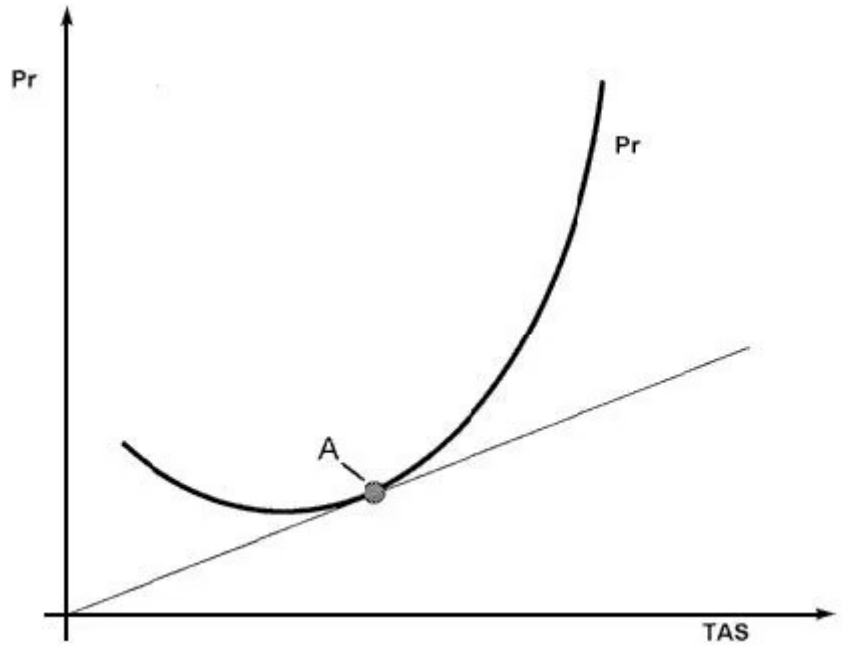
c) At night down from the mountains

d) During the day up from the valley

31. Given: Pressure Altitude 29000 FT, OAT -55°C. Calculate the Density Altitude?

a) 33500 FT
b) 31000 FT
c) 26000 FT
d) 27500 FT

32. 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

33. According to ICAO Annex 8, a certificate of airworthiness shall be renewed or shall remain valid subject to the:

a) Laws of the State in which is operated
b) Laws of the State of registry
c) Requirements laid down by ICAO
d) Laws of the State of registry and operation

34. Given: True course from A to B = 090°, TAS = 460 KT, W/V = 360/100 KT, Average variation = 10°E, Deviation = -2°. Calculate the compass heading and GS?

a) 068° - 460 KT

b) 070° - 450 KT

c) 073° - 453 KT

d) 078° - 450 KT

35. The function of the stick pusher is:

a) To activate and push the stick forward prior to stick shaker

b) To activate and push the stick forward at or beyond a certain value of angle of attack

c) To pull the stick, to avoid a high speed stall

d) To vibrate the controls

36. If outside air temperature increases while ambient pressure and indicated EPR remain constant, is unchanged thrust guaranteed for every engine using EPR as a thrust-setting reference?

a) Yes; unchanged EPR always guarantees unchanged thrust, independently of ambient temperature

b) Yes; EPR measures thrust directly in force units, so no engine-specific correction is needed

c) Yes; ambient temperature has no effect on the applicable EPR thrust-setting data

d) No; the applicable engine characteristics and ambient-temperature corrections must be considered

37. An aircraft making a radar approach should be advised to consider executing a missed approach, if the position or identification of the aircraft is in doubt during any portion of the final approach or if the aircraft is not visible on the radar display for significant interval during the last:

a) 2 NM.

b) 4 NM.

c) 1 NM.

d) 3 NM.

38. 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

39. Traffic Load is the:

a) Dry Operating Mass minus the disposable load.

b) Zero Fuel Mass minus Dry Operating Mass.

c) Take-off Mass minus Zero Fuel Mass.

d) Dry Operating Mass minus the Variable Load.

40. Once established on the NAT contingency parallel track offset by 5 NM, if the aircraft remains in the NAT level band, the vertical offset should normally be:

a) 300 ft from the normally used flight levels.

b) 1 000 ft at all levels.

c) 500 ft from the normally used flight levels, or 1 000 ft if above FL 410.

d) No vertical offset if the aircraft can maintain its assigned level.

41. An aircraft is 2500 ft above runway threshold elevation. For a straight 3° ILS glide path with a threshold crossing height of 50 ft, at what distance before the threshold does this height intersect the path, rounded to the nearest tenth of a nautical mile?

a) 13.1 NM

b) 7.0 NM

c) 14.5 NM

d) 7.7 NM

42. What are the tabulated circling MDH and visibility floors for a Category B aeroplane under EASA criteria, before applying any higher published OCH, IAP minimum or visibility requirement?

a) MDH=600 ft and visibility=2400 m

b) MDH=400 ft and visibility=1500 m

c) MDH=700 ft and visibility=2600 m

d) MDH=500 ft and visibility=1600 m

43. Given the following: D = flight distance X = distance to Point of Equal Time GSo = groundspeed out GSr = groundspeed return. The correct formula to find distance to Point of Equal Time is:

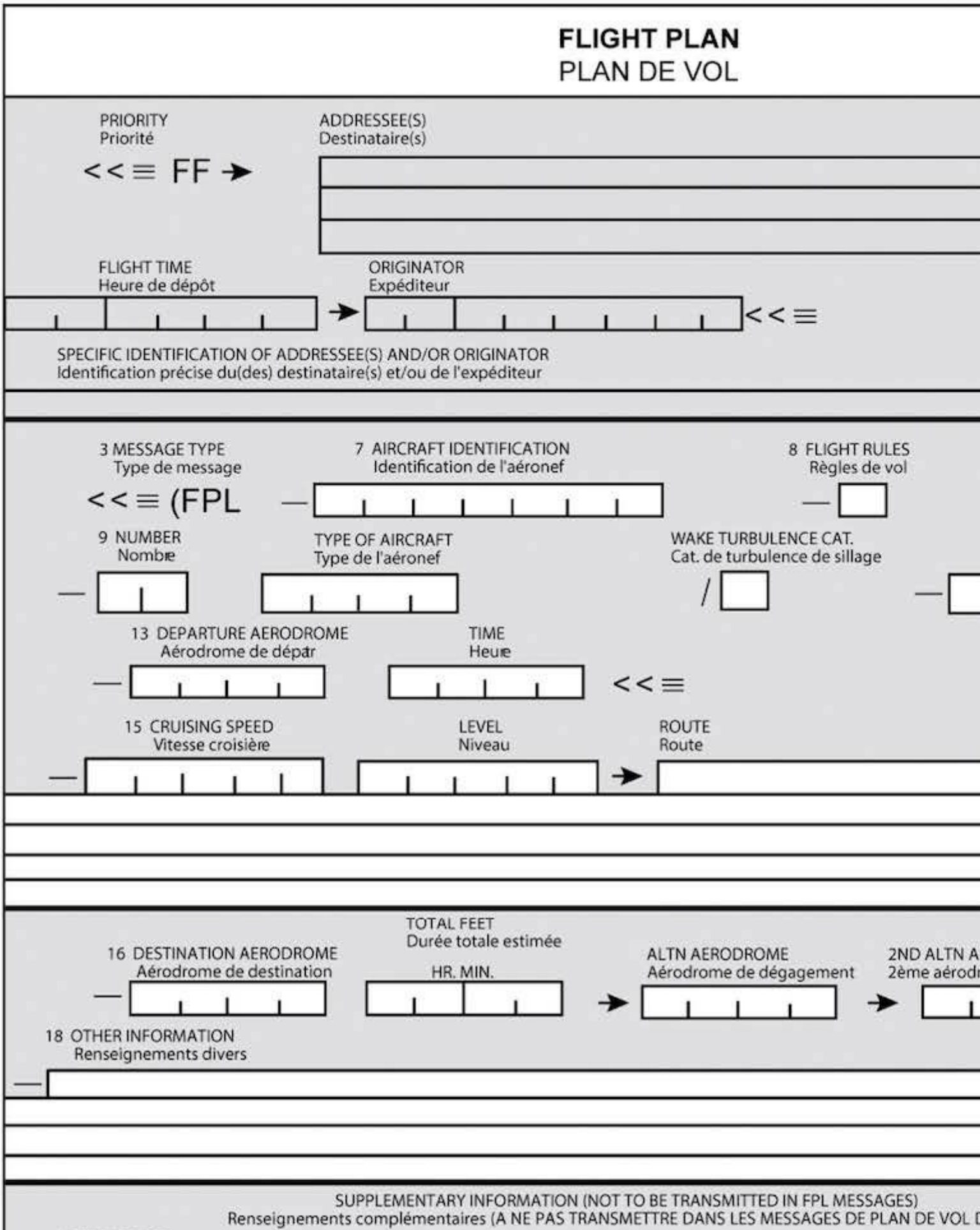
a) X = (D/2) x GSo / (GSo + GSr)

b) X = D x GSo / (GSo + GSr)

c) X = (D/2) + GSr / (GSo + GSr)

d) X = D x GSr / (GSo + GSr)

44. Item 9 of the ATC flight plan includes 'NUMBER AND TYPE OF AIRCRAFT'. In this case 'NUMBER' means:


FLIGHT PLAN
PLAN DE VOL
PRIORITY
Priorité
<< ≡ FF →
ADDRESSEE(S)
Destinataire(s)
FLIGHT TIME
Heure de dépôt
ORIGINATOR
Expéditeur
<< ≡
SPECIFIC IDENTIFICATION OF ADDRESSEE(S) AND/OR ORIGINATOR
Identification précise du(des) destinataire(s) et/ou de l'expéditeur
3 MESSAGE TYPE
Type de message
<< ≡ (FPL
7 AIRCRAFT IDENTIFICATION
Identification de l'aéronef
8 FLIGHT RULES
Règles de vol
9 NUMBER
Nombre
TYPE OF AIRCRAFT
Type de l'aéronef
WAKE TURBULENCE CAT.
Cat. de turbulence de sillage
13 DEPARTURE AERODROME
Aérodrome de départ
TIME
Heure
<< ≡
15 CRUISING SPEED
Vitesse croisière
LEVEL
Niveau
ROUTE
Route
TOTAL FEET
Durée totale estimée
16 DESTINATION AERODROME
Aérodrome de destination
HR. MIN.
ALTN AERODROME
Aérodrome de dégagement
2ND ALTN A
2ème aérodr
18 OTHER INFORMATION
Renseignements divers
SUPPLEMENTARY INFORMATION (NOT TO BE TRANSMITTED IN FPL MESSAGES)
Renseignements complémentaires (A NE PAS TRANSMETTRE DANS LES MESSAGES DE PLAN DE VOL

a) The registration number of the aircraft
b) The number of aircraft which will separately be using a repetitive flight plan (RPL)
c) The number of aircraft flying in a group
d) The ICAO type designator number as set out in ICAO Doc 8643

45. Which of these statements best describes the meaning of the phrase 'Standby'?

a) Continue on present heading and listen out
b) Select STANDBY on the SSR transponder
c) Wait and I will call you
d) Permission granted for action proposed

46. During a flight to Europe, planned in NAT HLA (North Atlantic High Level Airspace), you expect to cross the 30°W meridian at 11H00 UTC; you will then normally be:

a) Within the organised daytime flight track system.
b) Outside of the validity period of the organised track system.
c) Within the polar track system.
d) Within the organised night-time flight track system.

47. Under normal resting conditions, how does the partial pressure of carbon dioxide in alveolar air compare with that in the mixed venous blood arriving at the pulmonary capillaries before gas exchange?

a) It is higher than in the incoming mixed venous blood.
b) It is equal to that in dry atmospheric air.
c) It is lower than that in dry atmospheric air.
d) It is lower than in the incoming mixed venous blood, allowing carbon dioxide to diffuse into the alveoli.

48. The radio altimeter is required to indicate zero height AGL as the main wheels touch down on the runway. For this reason, it is necessary to:

a) Have a specific radio altimeter dedicated to automatic landing.

b) Adjust the gross height according to the aircraft instantaneous pitch.

c) Compensate for residual height and cable length.

d) Change the display scale in short final, in order to have a precise readout.

49. A double white cross displayed horizontally in the signal area indicates that:

a) An area unit for the movement of aircraft.

b) Need special precautions while approaching for landing.

c) Special precautions must be observed due to bad state of the taxiways.

d) The aerodrome is being used by gliders and that glider flights are being performed.

50. Given that the characteristics of a three engine turbojet aeroplane are as follows: Thrust = 50000 Newton / Engine. g = 10 m/s². Drag = 72569 N. Minimum steady gradient of climb (2nd segment) = 2.7%. SIN (Angle of climb) = (Thrust - Drag) / Weight. The maximum take-off mass under 2nd segment conditions with 1 engine out is:

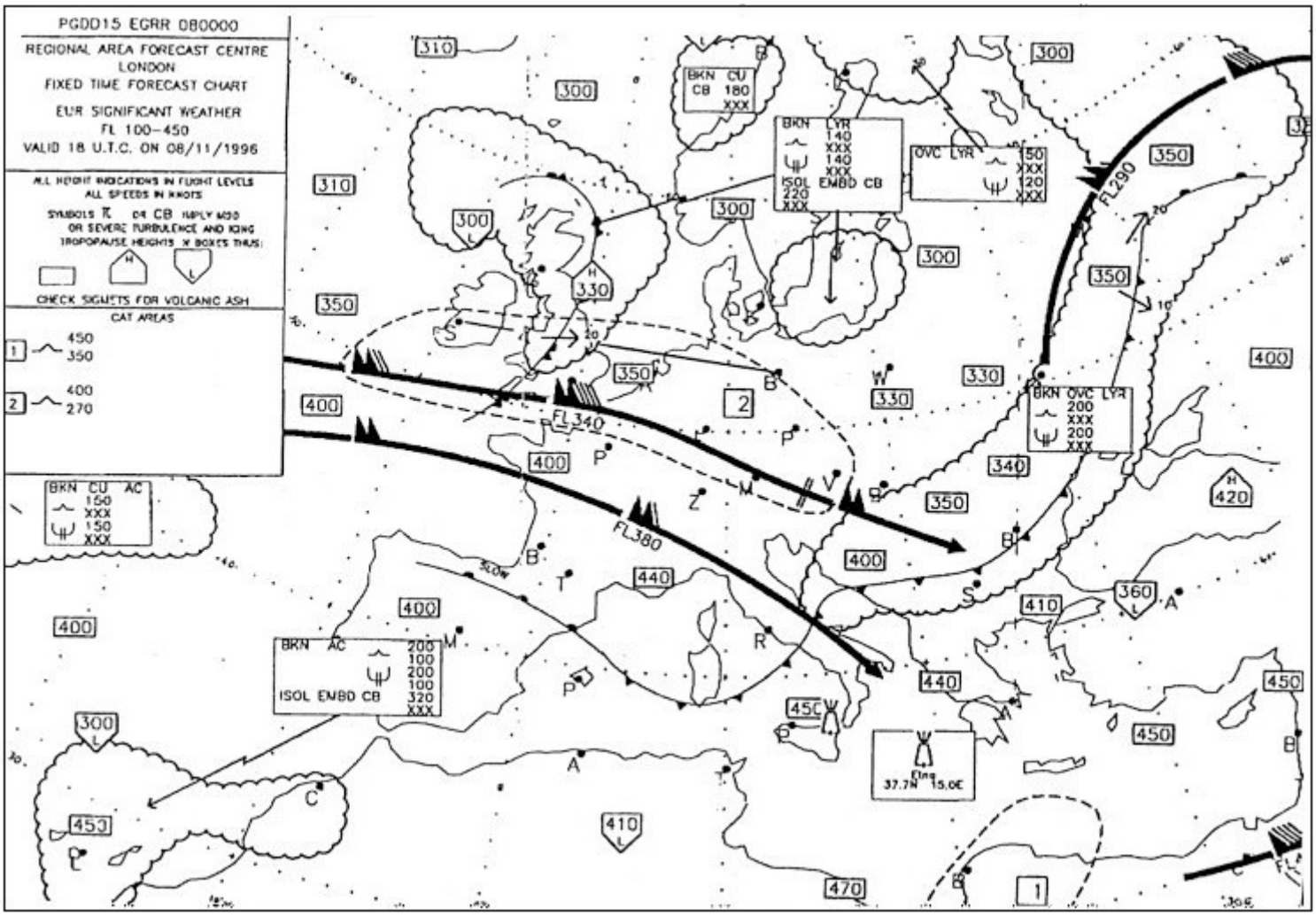
a) 101596 kg

b) 209064 kg

c) 74064 kg

d) 286781 kg

51. In the attached historical SIGWX training chart, what is the most serious listed potential hazard associated with the volcanic feature near 38 degrees N, 015 degrees E?



a) Reduced visibility

b) Severe attenuation in the HF R/T band

c) There is no hazard

d) Engine flame out and windscreen damage

52. What is the correct suffix to be used when establishing radio contact in an area control centre?

a) Control

b) Centre

c) Control centre

d) Radio

53. If the continuity equation is applicable, what will happen to the air density (rho) if the cross sectional area of a tube changes? (low speed, subsonic and incompressible flow)

a) Rho1 < rho2

b) Rho1 > rho2

c) Rho1 = rho2

d) The density depends on the change of the tube area

54. The wind direction in a METAR is measured relative to:

a) The 0-meridian.

b) True North.

c) Grid North.

d) Magnetic North.

55. Which statement about cortisol in the physiological stress response is correct?

a) It helps mobilise energy resources, including increasing the availability of glucose from body reserves.

b) It is produced only by parasympathetic nerves and has no connection with the adrenal glands.

c) It immediately stops all cellular energy use whenever a threat is perceived.

d) Its release makes the body incapable of responding to any further demand.

56. An aircraft indicates 16 000 ft with the correct current QNH set, referenced to a sea-level datum. The outside air temperature is -30°C. Assume ISA temperature decreases by 2°C per 1000 ft, the ISA temperature deviation is constant throughout the layer, and instrument and position errors are negligible. Using the approximate 4%-per-10°C temperature-correction rule, what is the true altitude?

a) 16 200 ft

b) 18 600 ft

c) 15 200 ft

d) 13 500 ft

57. The terms 'q' and 'S' in the lift formula are:

a) Dynamic pressure and the area of the wing

b) Static pressure and dynamic pressure

c) Static pressure and wing surface area

d) Square root of surface and wing loading

58. Which of the following messages shall a station in control of distress use to impose silence?

a) Stop transmitting, MAYDAY
b) Stop transmitting, EMERGENCY
c) Stop transmitting, DISTRESS
d) All stations in this frequency, MAYDAY traffic

59. A category D aeroplane can carry out a circling approach only if the meteorological visibility is higher than or equal to:

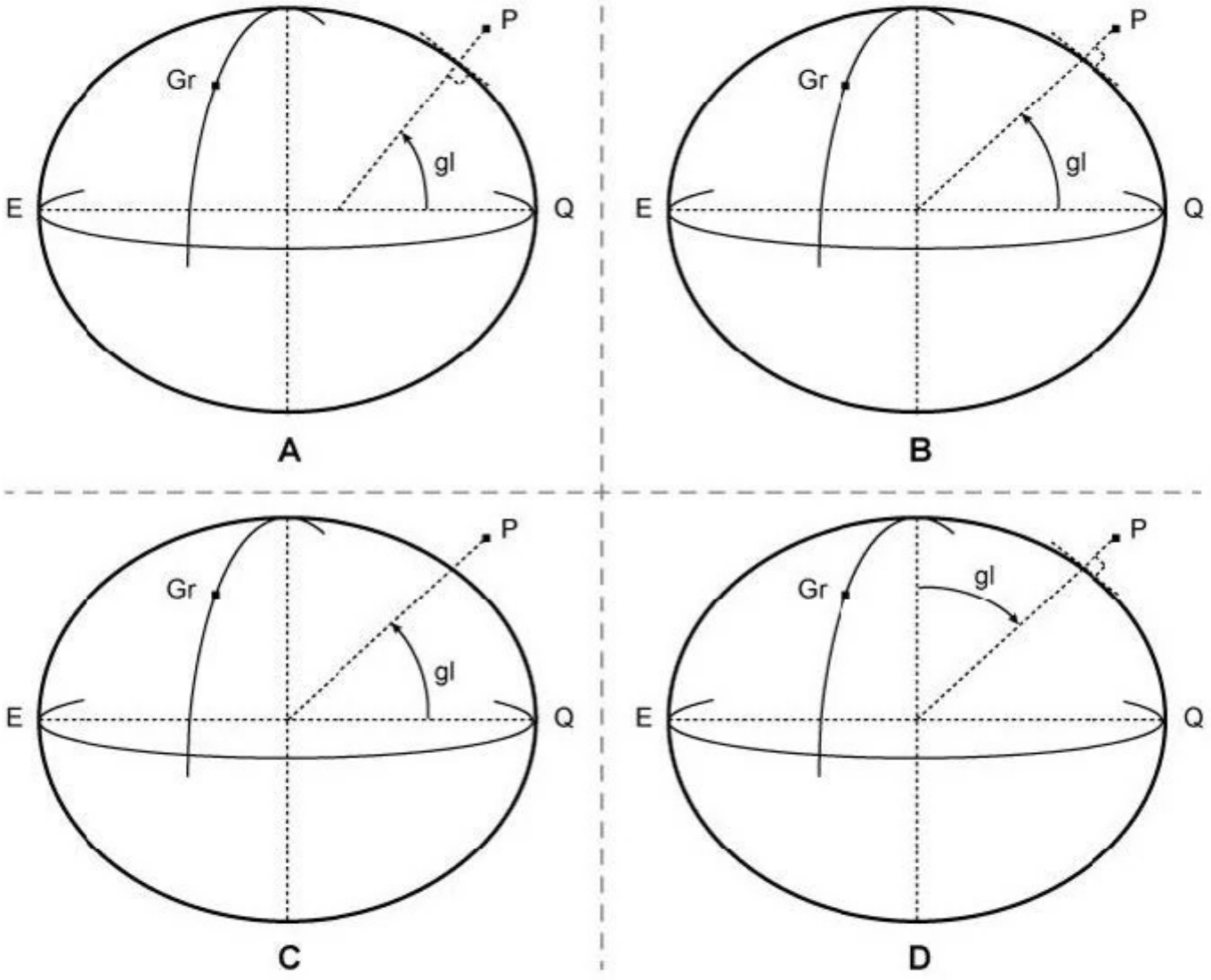
a) 2400 m
b) 1600 m
c) 3600 m
d) 1500 m

60. The two types of fatigue are:

a) Acute (short-term) fatigue and chronic (long-term) fatigue.
b) Heavy and light
c) Oppressive and negative
d) Short-term and oppressive

61. Among the four candidate drawings, which figure actually shows the geocentric latitude of P, rather than the geodetic latitude proposed in the caption?

gl = geodetic latitude



a) Figure A
b) Figure C
c) Figure D
d) Figure B

62. When planned fuel jettison is necessary, which listed operating approach is appropriate, subject to the aircraft's approved procedure and the urgency of the situation?

a) Perform jettison below FL50 regardless of terrain, weather or ATC coordination.

b) Coordinate the route, altitude and weather conditions with ATC and apply the approved procedure while maintaining terrain clearance and separation from other traffic.

c) Always wait until final approach, even if doing so delays the necessary response to an emergency.

d) Enter a holding stack and jettison fuel behind another aeroplane without coordinating with ATC.

63. The operating mass of an aeroplane is:

a) The empty mass plus crew, crew baggage and catering.

b) The empty mass plus the take-off fuel mass.

c) The empty mass plus the trip fuel mass.

d) The dry operating mass plus the take-off fuel mass.

64. Precipitation in the form of showers occurs from

a) Stratified clouds

b) Convective clouds

c) Clouds containing only ice crystals

d) Cirro-type clouds

65. Under CAT.OP.MPA.250, the commander may commence take-off after ground icing conditions only when:

a) The aircraft is clear of deposits that might adversely affect performance or controllability, except as permitted by the operator's ground procedures in accordance with the AFM.

b) Ice accretions do not lead to an exceeding of mass and balance limits.

c) External surfaces are still covered with anti-icing fluid and the aircraft is not to be operated in forecasted icing conditions greater than moderate icing.

d) External surfaces are free from any ice accretion greater than 5 mm.

66. The Mach-trim function is intended to reduce adverse pitch-stability effects associated with:

a) Uncontrolled changes in stabilizer setting

b) Increased drag due to shock wave formation

c) Compressibility effects on the stabilizer

d) Mach-dependent nose-down pitching tendencies, such as Mach tuck associated with rearward centre-of-pressure movement.

67. Pneumatic mechanical devices that provide ice protection:

a) Are usually used as de-icing devices.

b) Are usually used on aeroplanes equipped with turbo-fan engines.

c) Require large quantities of bleed air.

d) Can only be used as anti-icing devices.

68. From which of the following would you expect to find facilitation information regarding customs and health formalities?

a) NAV/RAD charts

b) ATCC

c) AIP

d) NOTAM

69. The mass displacement caused by landing gear extension:

a) Does not create a longitudinal moment

b) Creates a pitch-up longitudinal moment

c) Creates a pitch-down longitudinal moment

d) Creates a longitudinal moment in the direction (pitch-up or pitch-down) determined by the type of landing gear

70. 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) 10800 km

b) 2700 NM

c) 5400 NM

d) 10800 NM

Exam simulation

ATPL - Airline Transport Pilot Licence - Performance

Quizvds.it

Response Scheme

Compare your answers with the following diagram and mark your score!

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

Visit quizvds.it and download the Apps for iPhone, iPad and Android! Quizvds.it

Exam simulation

ATPL - Airline Transport Pilot Licence - Performance

Quizvds.it

Response form

Use this form to mark your answers

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

Visit quizvds.it and download the Apps for iPhone, iPad and Android!

Quizvds.it