PERFORMANCE OF AEROPLANES

34 1hr

1720	32	Which of the following statements with regard to the actual acceleration height at the beginning of the 3rd climb segment is correct?	The minimum val ue according to regulations is 1000 ft.	There is no legal minimum value, because this will be determined from case to case during the calculation of the net flight path.	The minimum val ue according to regulations is 400 ft.	A lower height than 400 ft is allowed in special circumstances e.g. noise abatement.	0	0	1	0
1721	32	What is the influence of the mass on maximum rate of climb (ROC) speed if all other parameters remain constant ?	The ROC is affected by the mass, but not the ROC speed.	The ROC and the ROC speed are independant of the mass.	The ROC speed increases with increasing mass.	The ROC speed decreases with increasing mass.	0	0	1	0
1722	32	Which take-off speed is affected by the presence or absence of stopway and/or clearway ?	VMCA	V1	V2	VMCG	0	1	0	0
1723	32	Uphill slope	increases the allowed take-off mass.	increases the take-off distance more than the accelerate stop distance.	decreases the accelerat e stop distance only.	decreases the take-off distance only.	0	1	0	0
1724	32	Balanced V1 is selected	if it is equal to V2.	if the accelerate stop distance is equal to the one engine out take-off distance.	for a runway length limited take-o ff with a stopway to give the highest mass.	for a runway length limited take-off with a clearway to give the highest mass.	0	1	0	0
1725	32	A 'Balanced Field Length' is said to exist where:	The accelerate stop distance is equal to the take-off distance available.	The clearway does not equal the stopway.	The accelerate stop distance is equal to the all engine take-off distance.	The one engine out take-off distance is equal to the all engine take-off distance.	1	0	0	0
1726	32	V2 has to be equal to or higher than	1.15 VMCG.	1.1 VSO.	1.15 VR.	1.1 VMCA.	0	0	0	1

1727	32	Which one of the following statements concerning drift-down is correct?	The drift-down procedure requires a minimum descent angle after an engine failure at cruising altitude.	The drift-down procedure requires a minimum obstacle clearance of 35 ft.	An engine failure at high cruising altitude will always result in a drift-down, because it is not permitted to fly the same altitude with one engine inoperative as with all engines operating.	When determining the obstacle clearance during drift-down, fuel dumping may be taken into account.	0	0	0	1
1728	32	The take-off safety speed V2min for turbo-propeller powered aeroplanes with more than three engines may not be less than:	1.2 Vs	1.2 Vs1	1.15 Vs	1.3 Vs	0	0	1	0
1729	32	The long range cruise speed is in relation to the speed for maximum range cruise.	Depending on density altitude and mass.	Higher	Lower	Depending on the OAT and net mass.	0	1	0	0
1730	32	According to JAR-OPS 1, which one of the following statements concerning the landing distance for a turbojet aeroplane is correct?	Malfunctioning of an anti-skid system has no effect on the required runway length.	The landing distance is the distance from 35 ft above the surface of the runway to the full stop.	When determining the maximum allowable landing mass at destination, 60% of the available landing runway length should be taken into account.	Reverse thrust is one of the factors always taken into account when determining the landing distance required.	0	0	1	0
1731	32	The take-off mass of an aeroplane is restricted by the climb limit. What would be the effect on this limit of an increase in the headwind component?	The climb limited take-off mass would increase.	The climb limited take-off mass would decrease.	None.	The effect would vary depending upon the height of any obstacle within the net take-off flight path.	0	0	1	0
1732	32	If the field length limited take off mass has been calculated using a Balanced Field Length technique, the use of any additional clearway in take off performance calculations may allow	a greater field length limited take off mass but with a lower V1	a greater field length limited take off mass but with a higher V1	the obstacle clearance limit to be increased with no effect on V1	the obstacle clearance limit to be increased with an higher V1	1	0	0	0
1733	32	The speed V2 is	the lowest safety airspeed at which the aeroplane is under control with aerodynamic surfaces in the case of an engine failure.	the take-off safety speed.	that speed at which the PIC should decide to continue or not the take-off in the case of an engine failure.	the lowest airspeed required to retract flaps without stall problems.	0	1	0	0

1734	32	Which statement regarding the influence of a runway down-slope is correct for a balanced take-off? Down-slope...	increases V1 and increases the take-off distance required (TODR).	reduces V1 and reduces take-off distance required (TODR).	increases V1 and reduces the accelerate stop distance required (ASDR).	reduces V1 and increases the accelerate stop distance required (ASDR).	0	1	0	0
1735	32	Which of the following statements is applicable to the acceleration height at the beginning of the 3rd climb segment ?	The maximum acceleration height depends on the maximum tim e take-off thrust may be applied.	The minimum leg ally allowed acceleration height is at 1500 ft.	There is no requirement for minimum climb performance when flying at the acceleration height.	The minimum one engine out acceleratio n height must be maintained in case of all engines operating.	1	0	0	0
1736	32	Which of the following statements with regard to the optimum cruise altitude (best fuel mileage) is correct?	An aeroplane usually flies above the optimum cruise altitude, as this provides the largest specific range.	An aeroplane sometimes flies above the optimum cruise altitude, because ATC normally does not allow to fly continuously at the optimum cruise altitude.	An aeroplane always flies below the optimum cruise altitude, as otherwise Mach buffet can occur.	An aeroplane always flies on the optimum cruise altitude, because this is most attractive from an economy point of view.	0	1	0	0
1737	32	Which speed provides maximum obstacle clearance during climb?	The speed for which the ratio between rate of climb and forward speed is maximum.	V2 + 10 kt.	The speed for maximum rate of climb.	V2.	1	0	0	0
1738	32	In a given configuration the endurance of a piston engined aeroplane only depends on:	speed, mass and fuel on board.	altitude, speed, mass and fuel on board.	altitude, speed and mass.	speed and mass.	0	1	0	0
1739	32	A multi engine aeroplane is flying at the minimum control speed (VMCA). Which parameter(s) must be maintainable after engine failure?	Straight flight	Straight flight and altitude	Heading, altitude and a positive rate of climb of 100 ft/min	Altitude	1	0	0	0
1740	32	Which statement regarding the relationship between traffic load and range is correct?	The maximum zero fuel mass limits the maximum qu antity of fuel.	The maximum landing mass is basically equal to the maximum zero fuel mass.	The maximum traffic load is not limited by the reserve fuel quantity.	The traffic load can be limited by the desired range.	0	0	0	1
1741	32	The take-off safety speed V2 for two-engined or three-engined turbo propeller powered aeroplanes may not be less than:	1.3 Vs	1.15 Vs	1.15 Vs1	1.2 Vs	0	0	0	1
1742	32	Which of the jet engine ratings below is not a certified rating?	Maximum Cruise Thrust	Maximum Continuous Thrust	Go-Around Thrust	Maximum Take-off Thrust	1	0	0	0

1743	32	Which statement with respect to the step climb is correct ?	Performing a step climb based on economy can be limited by the 1.3-g altitude.	In principle a step climb is performed immediately after the aircraft has exceeded the optimum altitude.	A step climb may not be performed unless it is indicated in the filed flight plan.	A step climb provides better economy than a cruise climb.	1	0	0	0
1744	32	The speed VLO is defined as	long distance operating speed.	lift off speed.	landing gear operating speed.	design low operating speed.	0	0	1	0
1745	32	The speed V2 is defined for jet aeroplane as	take-off climb speed or speed at 35 ft.	lift off speed.	take-off decision speed.	critical engine failure speed.	1	0	0	0
1746	32	The speed VS is defined as	speed for best specific range.	stalling speed or minimum steady flight speed at which the aeroplane is controllable.	safety speed for take-off in case of a contaminated runway.	design stress speed.	0	1	0	0
1747	32	The speed V1 is defined as	take-off decision speed.	take-off climb speed.	speed for best angle of climb.	engine failure speed.	1	0	0	0
1748	32	With all other things remaining unchanged and with T the outside static air temperature expressed in degrees K, the hourly fuel consumption of a turbojet powered aeroplane in a cruise flight with a constant Mach Number and zero headwind,is as follows:	independent from T	proportional to T	proportional to $1/T^2$	proportional to 1/T	0	1	0	0
1749	32	Two identical turbojet aeroplanes (whose specific fuel consumption is assumed to be constant) are in a holding pattern at the same altitude. The mass of the first one is 95 000 kg and its hourly fuel consumption is equal to 3100 kg/h. Since the mass of the second one is 105 000 kg, its hourly fuel consumption is:	3787 kg/h	3426 kg/h	3259 kg/h	3602 kg/h	0	0	1	0
1750	32	A constant headwind component	increases the best rate of climb.	decreases the angle of climb.	increases the maximum endurance.	increases the angle of flight path during climb.	0	0	0	1
1751	32	On a twin engined piston aircraft with variable pitch propellers, for a given mass and altitude, the minimum drag speed is 125 kt and the holding speed (minimum fuel burn per hour) is 95 kt. The best rate of climb speed will be obtained for a speed:	inferior to 95 kts	is between 95 and 125 kt	equal to 125 kt	equal to 95 kt	0	0	0	1
1752	32	Density altitude is the	height above the surface	pressure altitude corrected for 'non standard' temperature	altitude reference to the standard datum plane	altitude read directly from the altimeter	0	1	0	0
1753	32	If other factors are unchanged, the fuel mileage (nautical miles per kg) is	independent from the centre of gravity position.	lower with an aft centre of gravity position.	higher with a forward centre of gravity position.	lower with a forward centre of gravity position.	0	0	0	1
1754	32	V1 has to be	higher than than VR.	equal to or higher than V2.	equal to or higher than VMCG.	equal to or higher than VMCA.	0	0	1	0

1755	32	The take-off distance of an aircraft is 600 m in standard atmosphere, no wind at 0 ft pressure-altitude. Using the following corrections: "± 20 m / 1 000 ft field elevation" "- 5 m / kt headwind" "+ 10 m / kt tail wind" "± 15 m / % runway slope" "+ 5 m / °C deviation from standard temperature"	685 m	755 m	715 m	555 m	0	1	0	0
1756	32	On a reciprocating engined aeroplane, to maintain a given angle of attack, configuration and altitude at higher gross mass	an increase in airspeed is required but power setting does not change.	requires an increase in power and decrease in the airspeed.	an increase in airspeed and power is required.	a higher coefficient of drag is required.	0	0	1	0
1757	32	On a reciprocating engined aeroplane, to maintain a given angle of attack, configuration and altitude at higher gross mass	the lift/drag ratio must be increased.	the airspeed will be increased but the drag does not change.	the airspeed and the drag will be increased.	the airspeed will be decreased and the drag increased.	0	0	1	0
1758	32	The take-off distance required increases	due to downhill slope because of the smaller angle of attack.	due to head wind because of the drag augmentatio n.	due to lower gross mass at take-off.	due to slush on the runway.	0	0	0	1
1759	32	Due to standing water on the runway the field length limited take-off mass will be	higher.	unaffected.	only higher for three and four engine aeroplanes.	lower.	0	0	0	1
1760	32	On a dry runway the accelerate stop distance is increased	by uphill slope.	by headwind.	by low outside air temperature.	by a lower take-off mass because the aeroplane accelerates faster to V1.	1	0	0	0
1761	32	Which statement regarding V1 is correct ?	When determining V1, reverse thrust may only be used on the remaining symmetric engines	The correction for up-slope on the balanced V1 is negative	VR may not be lower than V1	V1 may not be higher than Vmcg	0	0	1	0
1762	32	How does the thrust of fixed propeller vary during take-off run ? The thrust	has no change during take-off and climb.	decreases slightly while the aeroplane sp eed builds up.	increases slightly while the aeroplane sp eed builds up.	varies with mass changes only.	0	1	0	0
1763	32	During climb to the cruising level, a headwind component	increases the amount of fuel for the climb.	increases the climb time.	decreases the climb time.	decreases the ground distance flown during that climb.	0	0	0	1
1764	32	A constant headwind	increases the angle of the descent flight path.	increases the angle of descent.	increases the rate of descent.	increases the descent distance over ground.	1	0	0	0

1765	32	VR cannot be lower than:	105% of V1 and VMCA.	1.2 Vs for twin and three engine jet aeroplane.	1.15 Vs for turbo-prop with three or more engines.	V1 and 105% of VMCA.	0	0	0	1
1766	32	By what factor must the landing distance available (dry runway) for a turbojet powered aeroplane be multiplied to find the landing distance required? (planning phase for destination).	60/115	0.60	115/100	1.67	0	1	0	0
1767	32	(For this question use annex 032-6570A or Performance Manual SEP 1 Figure 2.4) With regard to the landing chart for the single engine aeroplane determine the landing distance from a height of 50 ft . Given : O.A.T : ISA +15°C Pressure Altitude: 0 ft	approximately : 1300 feet	approximately : 950 feet	approximately : 1400 feet	approximately : 750 feet	1	0	0	0
1768	32	(For this question use annex 032-6571A or Performance Manual SEP 1 Figure 2.4) With regard to the landing chart for the single engine aeroplane determine the landing distance from a height of 50 ft . Given : O.A.T : ISA Pressure Altitude: 1000 ft	approximately : 1700 feet	approximately :1150 feet	approximately : 1500 feet	approximately : 920 feet	1	0	0	0
1769	32	(For this question use annex 032-6572A or Performance Manual SEP 1 Figure 2.4) With regard to the landing chart for the single engine aeroplane determine the landing distance from a height of 50 ft . Given : O.A.T : 0°C Pressure Altitude: 1000 ft	approximately : 1480 feet	approximately : 940 feet	approximately : 1650 feet	approximately : 1150 feet	0	0	1	0
1770	32	(For this question use annex 032-6573A or Performance Manual SEP 1 Figure 2.4) With regard to the landing chart for the single engine aeroplane determine the landing distance from a height of 50 ft . Given : O.A.T : ISA +15°C Pressure Altitude: 0 ft Aeroplane Mass: 2940 lbs	approximately : 1450 feet	approximately :1794 feet	approximately : 1300 feet	approximately : 2000 feet	0	1	0	0

1771	32	(For this question use annex 032-6574A or Performance Manual SEP 1 Figure 2.1) With regard to the take off performance chart for the single engine aeroplane determine the take off distance to a height of 50 ft . Given : O.A.T : 30°C Pressure Altitude: 1000 ft	approximately : 2800 feet	approximately : 2200 feet	approximately : 2470 feet	approximately : 1440 feet	0	0	1	0
1772	32	(For this question use annex 032-6575A or Performance Manual SEP 1 Figure 2.1) With regard to the take off performance chart for the single engine aeroplane determine the maximum allowable take off mass . Given : O.A.T : ISA Pressure Altitude: 4000 ft Headwind component: 5 kt	2900 lbs	> 3650 lbs	3240 lbs	3000 lbs	0	0	1	0
1773	32	(For this question use annex 032-6576A or Performance Manual SEP 1 Figure 2.2) With regard to the take off performance chart for the single engine aeroplane determine the take off distance to a height of 50 ft. Given : O.A.T : -7°C Pressure Altitude: 7000 ft	approximately : 2050 ft	approximately : 1150 ft	approximately : 2450 ft	approximately : 1260 ft	1	0	0	0
1774	32	On a segment of the take-off flight path an obstacle requires a minimum gradient of climb of 2.6% in order to provide an adequate margin of safe clearance. At a mass of 110000 kg the gradient of climb is 2.8%. For the same power and assuming that the sine of the angle of climb varies inversely with mass, at what maximum mass will the aeroplane be able to achieve the minimum gradient?	106425 kg	118455 kg	102150 kg	121310 kg	0	1	0	0
1775	32	(For this question use annex 032-6569A or Performance Manual SEP 1 Figure 2.4) With regard to the landing chart for the single engine aeroplane determine the landing distance from a height of 50 ft . Given : O.A.T : 27 °C Pressure Altitude: 3000 ft	approximately : 1120 feet	approximately : 1700 feet	approximately : 1370 feet	approximately : 1850 feet	0	0	0	1
1776	32	Given that the characteristics of a three engine turbojet aeroplane are as follows: Thrust = 50 000 Newton / Engine g = 10 m/s² Drag = 72 569 N Minimum gross gradient (2nd segment) = 2.7%	286 781 kg	74 064 kg	209 064 kg	101 596 kg	0	0	0	1

1777	32	What affect has a tailwind on the maximum endurance speed?	No affect	Tailwind only effects holding speed.	The IAS will be increased.	The IAS will be decreased.	1	0	0	0
1778	32	When the outside air temperature increases, then	the field length limited take-off mass and the climb limited take-off mass decreases.	the field length limited take-off mass and the climb limited take-off mass increases.	the field length limited take-off mass decreases but the climb limited take-off mass increases.	the field length limited take-off mass increases but the climb limited take-off mass decreases.	1	0	0	0
1779	32	With regard to a take-off from a wet runway, which of the following statements is correct?	The screen height can be lowered to reduce the mass penalties.	When the runway is wet, the V1 reduction is sufficient to maintain the same margins on the runway length.	In case of a reverser inoperative the wet runway performance information can still be used.	Screen height cannot be reduced.	1	0	0	0
1780	32	The one engine out take-off run is the distance between the brake release point and:	the middle of the segment between VLOF point and 35 ft point.	the lift-off point.	the point where V2 is reached.	the point half way between V1 and V2.	1	0	0	0
1781	32	The decision speed at take-off (V1) is the calibrated airspeed:	below which the take-off must be continued.	at which the failure of the critical engine is expected to occur.	below which take-off must be rejected if an engine failure is recognized, above which take-off must be continued.	at which the take-off must be rejected.	0	0	1	0
1782	32	With regard to a unaccelerated horizontal flight, which of the following statement is correct?	The minimum drag is is a function of the density altitude.	The minimum drag is independant of the aircraft mass.	The minimum drag is proportional to the aircraft mass.	The minimum drag is a function of the pressure altitude.	0	0	1	0
1783	32	Which of the following statements is correct?	Induced drag is independant of the speed.	Induced drag decreases with increasing angle of attack.	Induced drag decreases with increasing speed.	Induced drag increases with increasing speed.	0	0	1	0
1784	32	Which of the following statements is correct? If the aircraft mass, in a horizontal unaccelerated flight, decreases	the minimum drag decreases and the IAS for minimum drag decreases.	the minimum drag increases and the IAS for minimum drag decreases.	the minimum drag increases and the IAS for minimum drag increases.	the minimum drag decreases and the IAS for minimum drag increases.	1	0	0	0
1785	32	Consider the graphic representation of the power required versus true air speed (TAS), for a jet aeroplane with a given mass. When drawing the tangent out of the origin, the point of contact determines the speed of:	maximum endurance.	minimum power.	maximum specific range.	critical angle of attack.	1	0	0	0

1786	32	A jet aeroplane is performing a maximum range flight. The speed corresponds to:	the point of contact of the tangent from the origin to the Drag versus TAS curve.	the minimum drag.	the minimum required power.	the point of contact of the tangent from the origin to the power required (Pr) versus TAS curve.	1	0	0	0
1787	32	If the value of the balanced V1 is found to be lower than VMCG, which of the following is correct ?	The ASDR will become greater than the one engine out take-off distance.	The take-off is not permitted.	The one engine out take-off distance will become greater than the ASDR.	The VMCG will be lowered to V1.	0	1	0	0
1788	32	(For this question use annex 032-6581A or Performance Manual SEP 1 Figure 2.3) Using the climb performance chart, for the single engine aeroplane, determine the ground distance to reach a height of 2000 ft above the reference zero inthe following conditions: Given : O.A.T. at take-off: 25° C Airport pressure altitude: 1000 ft	18 832 ft	18 347 ft	21 505 ft	24 637 ft	0	1	0	0
1789	32	The speed VR	is the speed at which rotation to the lift-off angle of attack is initiated.	must be higher than V2.	must be higher than VLOF.	must be equal to or lower than V1.	1	0	0	0
1790	32	The stalling speed or the minimum steady flight speed at which the aeroplane is controllable in landing configuration is abbreviated as	VS.	VMC.	VSO.	VS1.	0	0	1	0
1791	32	(For this question use annex 032-6590A or Performance Manual SEP 1 Figure 2.4) Using the Landing Diagramm, for single engine aeroplane, determine the landing distance (from a screen height of 50 ft) required, in the following conditions: Given : Pressure altitude: 4000 ft O.A.T.: 5°C Aeroplane mass: 3530 lbs Headwind component: 15 kt	880 ft	1550 ft	1020 ft	1400 ft	0	0	0	1
1792	32	If the airworthiness documents do not specify a correction for landing on a wet runway; the landing distance must be increased by:	20 %	15 %	5 %	10 %	0	1	0	0
1793	32	(For this question use annex 032-6588A or Flight planning Manual SEP 1 Figure 2.4) Using the Range Profile Diagramm, for the single engine aeroplane, determine the range, with 45 minutes reserve, in the following conditions: Given : O.A.T.: ISA -15°C	908 NM	902 NM	875 NM	860 NM	0	1	0	0

1794	32	(For this question use annex 032-6587A or Flight planning Manual SEP 1 Figure 2.4) Using the Range Profile Diagramm, for the single engine aeroplane, determine the range, with 45 minutes reserve, in the following conditions: Given : O.A.T.: ISA +16°C	851 NM	911 NM	865 NM	739 NM	0	0	1	0
1795	32	(For this question use annex 032-6586A or Flight planning Manual SEP 1 Figure 2.3 Table 2.3.1) Using the Power Setting Table, for the single engine aeroplane, determine the cruise TAS and fuel flow (lbs/hr) with full throttle and cruise lean mixture in the following conditions: Given : OAT: 3°C	136 kt and 56,9 lbs/hr	131 kt and 56,9 lbs/hr	125 kt and 55,7 lbs/hr	134 kt and 55,7 lbs/hr	0	0	0	1
1796	32	(For this question use annex 032-6585A or Flight planning Manual SEP 1 Figure 2.2 Table 2.2.3) Using the Power Setting Table, for the single engine aeroplane, determine the cruise TAS and fuel flow (lbs/hr) with full throttle and cruise lean mixture in the following conditions: Given: OAT: 13°C	160 kt and 69,3 lbs/hr	158 kt and 74,4 lbs/hr	160 kt and 71,1 lbs/hr	159 kt and 71,7 lbs/hr	1	0	0	0
1797	32	(For this question use annex 032-6584A or Flight Planning Manual SEP 1 Figure 2.2 Table 2.2.3) Using the Power Setting Table, for the single engine aeroplane, determine the manifold pressure and fuel flow (lbs/hr) with full throttle and cruise lean mixture in the following conditions: Given: OAT: 13°C	22,4 in.Hg and 69,3 lbs/hr	23,0 in.Hg and 69,0 lbs/hr	22,4 in.Hg and 71,1 lbs/hr	22,4 in.Hg and 73,8 lbs/hr	1	0	0	0
1798	32	If the take-off mass of an aeroplane is brake energy limited a higher uphill slope would	have no effect on the maximum mass for take-off.	decrease the required take-off distance.	increase the maximum mass for take-off.	decrease the maximum mass for take-off.	0	0	1	0
1799	32	(For this question use annex 032-6582A or Performance Manual SEP 1 Figure 2.3) Using the climb performance chart, for the single engine aeroplane, determine the ground distance to reach a height of 1500 ft above the reference zero inthe following conditions: Given : O.A.T at Take-off: ISA Airport pressure altitude: 5000 ft	16 665 ft	18 909 ft	18 073 ft	20 109 ft	1	0	0	0
1800	32	In the drag versus TAS curve for a jet aeroplane, the speed for maximum range corresponds with:	the point of intersection of the parasite drag curve and the induced drag curve.	the point of contact of the tangent from the origin to the parasite drag curve.	the point of contact of the tangent from the origin to the induced drag curve.	the point of contact of the tangent from the origin to the drag curve.	0	0	0	1

1801	32	(For this question use annex 032-6580A or Performance Manual SEP 1 Figure 2.2) With regard to the take off performance chart for the single engine aeroplane determine the take off distance over a 50 ft obstacle height. Given : O.A.T : 30°C Pressure Altitude: 1000 ft Aeroplane Mass: 2950 lbs Tailwind component: 5 kt	2375 ft	1900 ft	1600 ft	2000 ft	1	0	0	0
1802	32	(For this question use annex 032-6579A or Performance Manual SEP 1 Figure 2.3) With regard to the climb performance chart for the single engine aeroplane determine the climb speed (ft/min). Given : O.A.T : ISA + 15°C Pressure Altitude: 0 ft	1290 ft/min	1370 ft/min	1210 ft/min	1150 ft/min	1	0	0	0
1803	32	(For this question use annex 032-6578A or Performance Manual SEP 1 Figure 2.2) With regard to the take off performance chart for the single engine aeroplane determine the take off distance to a height of 50 ft. Given : O.A.T : 38°C Pressure Altitude: 4000 ft Aeroplane Mass: 3400 lbs	approximately : 4200 ft	approximately : 5040 ft	approximately : 3960 ft	approximately : 3680 ft	0	0	1	0
1804	32	(For this question use annex 032-6577A or Performance Manual SEP 1 Figure 2.1) With regard to the take off performance chart for the single engine aeroplane determine the take off speed for (1) rotation and (2) at a height of 50 ft. Given : O.A.T : ISA+10°C Pressure Altitude: 5000 ft Aeroplane mass: 3400 lbs	65 and 75 KIAS	71 and 82 KIAS	73 and 84 KIAS	68 and 78 KIAS	0	1	0	0
1805	32	At a given mass, the stalling speed of a twin engine aircraft is 100 kt in the landing configuration. The minimum speed a pilot must maintain in short final is:	120 kt	130 kt	115 kt	125 kt	0	1	0	0
1806	32	(For this question use annex 032-11661A or Performance Manual SEP 1 Figure 2.1) An extract of the flight manual of a single engine propeller aircraft is reproduced in annex. Airport characteristics: hard, dry and zero slope runway Actual conditions are: pressure altitude: 1 500 ft outside tempereature: +18°C	440 m	615 m	525 m	415 m	0	0	1	0

1807	32	Is there any difference between the vertical speed versus forward speed curves for two identical aeroplanes having different masses ? (assume zero thrust and wind)	Yes, the difference is that for a given angle of attack both the vertical and forward speeds of the heavier aeroplane will be larger.	No difference.	Yes, the difference is that the heavier aeroplane will always glide a greater distance.	Yes, the difference is that the lighter aeroplane will always glide a greater distance.	1	0	0	0
1808	32	The maximum rate of climb that can be maintained at the absolute ceiling is:	500 ft/min	100 ft/min	0 ft/min	125 ft/min	0	0	1	0
1809	32	During climb with all engines, the altitude where the rate of climb reduces to 100 ft/min is called:	Maximum transfer ceiling	Service ceiling	Absolute ceiling	Thrust ceiling	0	1	0	0
1810	32	(For this question use annex 032-6583A or Performance Manual SEP 1 Figure 2.3) Using the climb performance chart, for the single engine aeroplane, determine the rate of climb and the gradient of climb in the following conditions: Given : O.A.T at Take-off: ISA	1030 ft/min and 8,4%	1170 ft/min and 9,9%	1310 ft/min and 11,3%	1120 ft/min and 9,3%	0	0	0	1
1811	32	Which of the equations below defines specific range (SR)?	SR = Groundspeed/Total Fuel Flow	SR = True Airspeed/Total Fuel Flow	SR = Indicated Airspeed/Total Fuel Flow	SR = Mach Number/Total Fuel Flow	0	1	0	0
1812	32	At a constant Mach number the thrust and the fuel flow of a jet engine	increase with increasing altitude.	are independent of outside air temperature (OAT).	increase in proportion to the ambient pressure at constant temperature.	decrease in proportion to the ambient pressure at constant temperature.	0	0	0	1
1813	32	The thrust of a jet engine at constant RPM	is inversely proportional to the airspeed.	increases in proportion to the airspeed.	does not change with changing altitude.	is independent of the airspeed.	0	1	0	0
1814	32	The intersections of the thrust available and the drag curve are the operating points of the aeroplane	in descent with constant IAS.	in accelerated level flight.	in unaccelerated climb.	in unaccelerated level flight.	0	0	0	1
1815	32	At speeds below minimum drag	the aeroplane can be controlled only in level flight.	a lower speed requires a higher thrust.	a higher speed requires a higher thrust.	the aeroplane can not be controlled manually.	0	1	0	0
1816	32	A lower airspeed at constant mass and altitude requires	a higher coefficient of lift.	less thrust and a lower coefficient of lift.	more thrust and a lower coefficient of lift.	more thrust and a lower coefficient of drag.	1	0	0	0
1817	32	A higher altitude at constant mass and Mach number requires	a higher angle of attack.	a lower coefficient of lift.	a lower coefficient of drag.	a lower angle of attack.	1	0	0	0
1818	32	The coefficient of lift can be increased either by flap extension or by	increasing the angle of attack.	increasing the TAS.	decreasing the 'nose-up' elevator trim setting.	increasing the CAS.	1	0	0	0

1819	32	When flying the "Backside of Thrustcurve" means	a lower airspeed requires less thrust because drag is decreased.	a lower airspeed requires more thrust.	the thrust required is independent of the airspeed.	a thrust reduction results in an acceleration of the aeroplane.	0	1	0	0
1820	32	"Maximum endurance"	is the same as maximum specific range with wind correction.	can be flown in a steady climb only.	can be reached with the 'best rate of climb' speed in level flight.	is achieved in unaccelerated level flight with minimum fuel consumption.	0	0	0	1
1821	32	What is the advantage of balancing V1, even in the event of a climb limited take-off?	The safety margin with respect to the runway length is greatest.	The take-off distance required with one engine out at V1 is the shortest.	The accelerate stop distance required is the shortest.	The climb limited take-off mass is the highest.	1	0	0	0
1822	32	Which of the following statements is correct?	The accelerate stop distance required is independant of the runway condition.	The take-off distance with one engine out is independant of the wind component.	The climb limited take-off mass is independant of the wind component.	The performance limited take-off mass is independant of the wind component.	0	0	1	0
1823	32	The drift down requirements are based on:	the landing mass limit at the alternate.	the obstacle clearance during a descent to the new cruising altitude if an engine has failed.	the actual engine thrust output at the altitude of engine failure.	the maximum flight path gradient during the descent.	0	1	0	0
1824	32	The load factor in a turn in level flight with constant TAS depends on	the radius of the turn and the weight of the aeroplane.	the bank angle only.	the radius of the turn and the bank angle.	the true airspeed and the bank angle.	0	1	0	0
1825	32	Long range cruise is selected as	the speed for best economy.	the climbing cruise with one or two engines inoperative.	specific range with tailwind.	the higher speed to achieve 99% of maximum specific range in zero wind.	0	0	0	1
1826	32	The optimum altitude	is the altitude at which the specific range reaches its minimum.	is the altitude up to which cabin pressure of 8 000 ft can be maintained.	increases as mass decreases and is the altitude at which the specific range reaches its maximum.	decreases as mass decreases.	0	0	1	0
1827	32	To achieve the maximum range over ground with headwind the airspeed should be	reduced to the gust penetration speed.	higher compared to the speed for maximum range cruise with no wind.	equal to the speed for maximum range cruise with no wind.	lower compared to the speed for maximum range cruise with no wind.	0	1	0	0

1828	32	The take-off run is	the distance of the point of brake release to a point equidistant between the point at which VLOF is reached and the point at which the aeroplane attains a height of 50 ft above the runway assuming a failure of the critical engine at V1.	the horizontal distance along the take-off path from the start of the take-off to a point equidistant between the point at which VLOF is reached and the point at which the aeroplane is 35 ft above the take-off surface.	1.5 times the distance from the point of brake release to a point equidistant between the point at which VLOF is reached and the point at which the aeroplane attains a height of 35 ft above the runway with all engines operative.	1.15 times the distance from the point of brake release to the point at which VLOF is reached assuming a failure of the critical engine at V1.	0	1	0	0
1829	32	During the flight preparation a pilot makes a mistake by selecting a V1 greater than that required. Which problem will occur when the engine fails at a speed immediatly above the correct value of V1?	The one engine out take-off distance required may exceed the take-off distance available.	V2 may be too high so that climb performance decreases.	It may lead to over-rotation.	The stop distance required will exceed the stop distance available.	0	0	0	1
1830	32	Which combination of circumstances or conditions would most likely lead to a tyre speed limited take-off?	A high runway elevation and tail wind.	A low runway elevation and a cross wind.	A high runway elevation and a head wind.	A low runway elevation and a head wind.	1	0	0	0
1831	32	During the flight preparation the climb limited take-off mass (TOM) is found to be much greater than the field length limited TOM using 5° flap. In what way can the performance limited TOM be increased? There are no limiting obstacles.	By selecting a higher flap setting.	By selecting a higher V2.	By selecting a lower V2.	By selecting a lower flap setting.	1	0	0	0
1832	32	VX is	the speed for best angle of flight path.	the speed for best angle of climb.	the speed for best rate of climb.	the speed for best specific range.	0	1	0	0
1833	32	The speed for maximum endurance	is the lower speed to achieve 99% of maximum specific range.	can either be higher or lower than the speed for maximum specific range.	is always higher than the speed for maximum specific range.	is always lower than the speed for maximum specific range.	0	0	0	1
1834	32	A runway is contaminated by a 0,5 cm layer of wet snow. The take-off is nevertheless authorized by a light-twin's flight manual. The take-off distance in relation to a dry runway will be:	increased	unchanged	decreased	very significantly decreased	1	0	0	0

1835	32	The minimum climb gradient required on the 2nd flight path segment after the take-off of a jet aeroplane is defined by the following parameters: 1 Gear up 2 Gear down 3 Wing flaps retracted 4 Wing flaps in take-off position 5 N engines at the take-off thrust 6 (N-1) engines at the take-off thrust 7 Speed over the path equal to V2 + 10 kt	1, 5, 8, 10	1, 4, 6, 9	2, 3, 6, 9	1, 4, 5, 10	0	1	0	0
1836	32	Minimum control speed on ground, VMCG, is based on directional control being maintained by:	nosewheel steering only.	primary aerodynamic control only.	primary aerodynamic control and nosewheel.	primary aerodynamic control, nosewheel steering and differential braking.	0	1	0	0
1837	32	The drift down procedure specifies requirements concerning the:	engine power at the altitude at which engine failure occurs	climb gradient duri ng the descent to the net level-off altitude	weight during landing at the alternate	obstacle clearance during descent to the net level-off altitude	0	0	0	1
1838	32	The take-off performance requirements for transport category aeroplanes are based upon:	all engines operating.	only one engine operating.	failure of critical engine.	failure of critical engine or all engines operating which ever gives the largest take off distance.	0	0	0	1
1839	32	Which of the following distances will increase if you increase V1?	Take-off run	Accelerate Stop Distance	Take-off distance	All Engine Take-off distance	0	1	0	0
1840	32	Which of the following answers is true?	V1 <= VR	V1 > Vlof	V1 > VR	V1 < VMCG	1	0	0	0
1841	32	The approach climb requirement has been established to ensure:	minimum climb gradient in case of a go-around with one engine inoperative.	obstacle clearance in the approach are a.	manoeuvrabili ty in case of landing with one engine inoperative.	manoeuvrability during approach with full flaps and gear down, all engines operating.	1	0	0	0
1842	32	Which statement related to a take-off from a wet runway is correct?	A reduction of screen height is allowed in order to reduce weight penalties	The use of a reduced Vr is sufficient to maitain the same safety margins as for a dry runway	In case of a reverser inoperative the wet runway performance information can still be used	Screenheight reduction can not be applied because of reduction in obstacle clearance.	1	0	0	0
1843	32	The length of a clearway may be included in:	the distance to reach V1.	the take-off distance available.	the accelerate-st op distance available.	the take-off run available.	0	1	0	0
1844	32	At constant thrust and constant altitude the fuel flow of a jet engine	increases with decreasing OAT.	increases slightly with increasing airspeed.	is independent of the airspeed.	decreases slightly with increasing airspeed.	0	1	0	0
1845	32	A climb gradient required is 3,3%. For an aircraft maintaining 100 kt true airspeed , no wind, this climb gradient corresponds to a rate of climb of approximately:	33,0 m/s	330 ft/min	3 300 ft/min	3,30 m/s	0	1	0	0

1846	32	Take-off performance data, for the ambient conditions, show the following limitations with flap 10° selected: - runway limit: 5 270 kg - obstacle limit: 4 630 kg Estimated take-off mass is 5 000kg.	5°, the obstacle limit is increased but the runway limit decreases	5°, both limitations are increased	20°, the obstacle limit is increased but the runway limit decreases	20°, both limitations are increased	1	0	0	0
1847	32	Following a take-off, limited by the 50 ft screen height, a light twin climbs on a gradient of 5%. It will clear a 160 m obstacle in relation to the runway (horizontally), situated at 5 000 m from the 50 ft point with an obstacle clearance margin of:	it will not clear the obstacle	105 m	90 m	75 m	0	1	0	0
1848	32	Why are 'step climbs' used on long distance flights ?	Step climbs do not have any special purpose for jet aeroplanes; they are used for piston engine aerop lanes only.	To respect ATC flight level constraints.	To fly as close as possible to the optimum altitude as aeroplane mass reduces.	Step climbs are only justified if at the higher altitude less headwind or more tailwind can be expected.	0	0	1	0
1849	32	Which force compensates the weight in unaccelerated straight and level flight ?	the lift	the thrust	the drag	the resultant from lift and drag	1	0	0	0
1850	32	An aeroplane operating under the 180 minutes ETOPS rule may be up to :	90 minutes flying time from the first enroute airport and another 90 minutes from the second enroute airport in still air with one engine inoperative.	180 minutes flying time to a suitable airport in still air with one engine inoperative.	180 minutes flying time to a suitable airport under the prevailing weather condition with one engine inoperative.	180 minutes flying time from suitable airport in still air at a normal cruising speed	0	1	0	0
1851	32	ETOPS flight is a twin engine jet aeroplane flight conducted over a route, where no suitable airport is within an area of	75 minutes flying time at the approved one engine out cruise speed.	60 minutes flying time in still air at the approved one engine out cruise speed.	60 minutes flying time in still air at the normal cruising speed.	30 minutes flying time at the normal cruising speed.	0	1	0	0
1852	32	(For this question use annex 032-3589A or Performance Manual MRJT 1 Figure 4.24) With regard to the drift down performance of the twin jet aeroplane, why does the curve representing 35 000 kg gross mass in the chart for drift down net profiles start at approximately 3 minutes at FL370?	All the curves start at the same point, which is situated outside the chart.	Because at this mass it takes about 3 minutes to decelerate to the optimum speed for drift down at the original cruising level.	Because at this mass the engines slow down at a slower rate after failure, there is still some thrust left during four minutes.	Due to higher TAS at this mass it takes more time to develop the optimal rate of descent, because of the inertia involved.	0	1	0	0

1853	32	(For this question use annex 032-3590A or Performance Manual MRJT 1 Figure 4.5) With regard to the take-off performance of a twin jet aeroplane, why does the take-off performance climb limit graph show a kink at 30°C, pressure altitude 0?	At higher temperatures the flat rated engines determines the climb limit mass.	At higher temperatures the VMBE determines the climb limit mass.	At lower temperatures one has to take the danger of icing into account.	The engines are pressure limited at lower temperature, at higher temperatures they are temperature limited.	1	0	0	0
1854	32	(For this question use annex 032-3591A or Performance Manual MRJT 1 Figure 4.5) Consider the take-off performance for the twin jet aeroplane climb limit chart. Why has the wind been omitted from the chart?	There is a built-in safety measure.	The climb limit performances are taken relative to the air.	The effect of the wind must be taken from another chart.	There is no effect of the wind on the climb angle relative to the ground.	0	1	0	0
1855	32	In which of the flight conditions listed below is the thrust required (Tr) equal to the drag (D)?	In level flight with constant IAS	In accelerated level flight	In a climb with constant IAS	In a descent with constant TAS	1	0	0	0
1856	32	How is V2 affected if T/O flaps 20° is chosen instead of T/O flaps 10°?	V2 has the same value in both cases.	V2 increases in proportion to the angle at which the flaps are set.	V2 has no connection with T/O flap setting, as it is a function of runway length only.	V2 decreases if not restricted by VMCA.	0	0	0	1
1857	32	Following a take-off determined by the 50ft (15m) screen height, a light twin climbs on a 10% over-the-ground climb gradient. It will clear a 900 m high obstacle in relation to the runway (horizontally), situated at 10 000 m from the 50 ft clearing point with an obstacle clearance of:	115 m	100 m	85 m	It will not clear the obstacle	1	0	0	0
1858	32	The take-off distance of an aircraft is 800m in standard atmosphere, no wind at 0 ft pressure-altitude. Using the following corrections : "± 20 m / 1 000 ft field elevation " "- 5 m / kt headwind " "+ 10 m / kt tail wind " "± 15 m / % runway slope " "± 5 m / °C deviation from standard temperature "	810 m	970 m	890 m	870 m	0	1	0	0
1859	32	The take-off decision speed V1 is:	not less than V2min, the minimum take-off safety speed.	a chosen limit. If an engine failure is recognized after reaching V1 the take-off must be aborted.	sometimes greater than the rotation speed VR.	a chosen limit. If an engine failure is recognized before reaching V1 the take-off must be aborted.	0	0	0	1
1860	32	The flight manual of a light twin engine recommends two cruise power settings, 65 and 75 %. The 75% power setting in relation to the 65 % results in:	same speed and fuel-burn/distance, but an increase in the fuel-burn per hour.	an increase in speed, fuel consumption and fuel-burn/distance.	same speed and an increase of the fuel-burn per hour and fuel-burn/distance.	an increase in speed and fuel-burn/distance, but an unchanged fuel-burn per hour.	0	1	0	0
1861	32	With an true airspeed of 194 kt and a vertical speed of 1 000 ft/min, the climb gradient is about :	3°	3%	5°	8%	1	0	0	0

1862	32	At a given altitude, when a turbojet aeroplane mass is increased by 5% - assuming the engines specific consumption remains unchanged -, its hourly consumption is approximately increased by:	7.5%	10%	2.5%	5%	0	0	0	1
1863	32	For a turboprop powered aeroplane, a 2200 m long runway at the destination aerodrome is expected to be "wet". The "dry runway" landing distance, should not exceed:	1339 m.	1771 m.	1540 m.	1147 m.	1	0	0	0
1864	32	During the certification flight testing of a twin engine turbojet aeroplane, the real take-off distances are equal to: - 1547 m with all engines running - 1720 m with failure of critical engine at V1, with all other things remaining unchanged. The take-off distance adopted for the certification file is:	1547 m.	1720 m.	1779 m.	1978 m.	0	0	1	0
1865	32	In relation to the net take-off flight path, the required 35 ft vertical distance to clear all obstacles is	based on pressure altitudes.	the height by which acceleration and flap retraction should be completed.	the height at which power is reduced to maximum climb thrust.	the minimum vertical distance between the lowest part of the aeroplane and all obstacles within the obstacle corridor.	0	0	0	1
1866	32	(For this question use annex 032-915A) What is the maximum vertical speed of a three engine turbojet aeroplane with one engine inoperative (N-1) and a mass of 75 000 kg? Using the following: g = 10 m/s² 1 kt = 100 ft/min	-1267 ft / min.	0 ft / min.	+3293 ft / min.	+1267 ft / min.	0	0	0	1
1867	32	A runway is contaminated with 0.5 cm of wet snow. The flight manual of a light twin nevertheless authorises a landing in these conditions. The landing distance will be, in relation to that for a dry runway:	increased	unchanged	reduced	substantially decreased	1	0	0	0
1868	32	The danger associated with low speed and/or high speed buffet	can be reduced by increasing the load factor.	exists only above MMO.	has to be considered at take-off and landing.	limits the maneuvering load factor at high altitudes.	0	0	0	1
1869	32	An aircraft has two certified landing flaps positions, 25° and 35°. If a pilot chooses 25° instead of 35°, the aircraft will have:	an increased landing distance and degraded go-around performance	a reduced landing distance and degraded go-around performance	an increased landing distance and better go-around performance	a reduced landing distance and better go-around performance	0	0	1	0
1870	32	What will be the influence on the aeroplane performance if aerodrome pressure altitude is increased?	It will increase the accelerate stop distance avai lable.	It will increase the take-off distance.	It will decrease the take-off distance.	It will increase the take-off distance available.	0	1	0	0
1871	32	Which statement is correct?	VR must not be less than 1.1 VMCA and not less than V1.	VR must not be less than 1.05 VMCA and not less than 1.1 V1.	VR must not be less than 1.05 VMCA and not less than V1.	VR must not be less than VMCA and not less than 1.05 V1.	0	0	1	0

1872	32	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:	Improved	Unchanged	Unchanged, if a short field take-off is adopted	Degraded	0	0	0	1
1873	32	How is wind considered in the take-off performance data of the Aeroplane Operations Manuals ?	Since take-offs with tailwind are not permitted, only headwinds are considered.	Not more than 50% of a headwind and not less than 150% of the tailwind.	Unfactored headwind and tailwind components are used.	Not more than 80% headwind and not less than 125% tailwind.	0	1	0	0
1874	32	A higher pressure altitude at ISA temperature	decreases the field length limited take-off mass.	decreases the take-off distance.	increases the climb limited take-off mass.	has no influence on the allowed take-off mass.	1	0	0	0
1875	32	An aircraft has two certified landing flaps positions, 25° and 35°. If a pilot chooses 35° instead of 25°, the aircraft will have:	an increased landing distance and better go-around performance	a reduced landing distance and degraded go-around performance	a reduced landing distance and better go-around performance	an increased landing distance and degraded go-around performance	0	1	0	0
1876	32	The critical engine inoperative	does not affect the aeroplane performance since it is independent of the power plant.	decreases the power required because of the lower drag caused by the windmilling engine.	increases the power required and decreases the total drag due to the windmilling engine.	increases the power required because of the greater drag caused by the windmilling engine and the compensation for the yaw effect.	0	0	0	1
1877	32	The induced drag of an aeroplane at constant gross weight and altitude is highest at	VS1 (stalling speed in clean configuration)	VMO (maximum operating limit speed)	VA (design manoeuvring speed)	VSO (stalling speed in landing configuration)	0	0	0	1
1878	32	A higher outside air temperature (OAT)	increases the field length limited take-off mass.	increases the climb limited take-off mass.	decreases the take-off distance.	decreases the brake energy limited take-off mass.	0	0	0	1
1879	32	The effect of a higher take-off flap setting up to the optimum is:	a decrease of both the field length limited take-off mass and the climb limited take-off mass.	an increase of both the field length limited take-off mass and the climb limited take-off mass.	an increase of the field length limited take-off mass but a decrease of the climb limited take-off mass.	a decrease of the field length limited take-off mass but an increase of the climb limited take-off mass.	0	0	1	0
1880	32	The climb gradient of an aircraft after take-off is 6% in standard atmosphere, no wind, at 0 ft pressure altitude. Using the following corrections: "± 0,2 % / 1 000 ft field elevation" "± 0,1 % / °C from standard temperature" " - 1 % with wing anti-ice" " - 0,5% with engine anti-ice" The climb gradient after take-off from an airport situated at 1	4,9 %	3,9 %	4,3 %	4,7 %	0	1	0	0

1881	32	(For this question use annex 032-4732A or Performance Manual MRJT 1 Figure 4.24) With regard to the drift down performance of the twin jet aeroplane, what is meant by "equivalent gross weight at engine failure" ?	This gross weight accounts for the lower Mach number at higher temperatures .	The increment accounts for the higher fuel flow at higher temperatures .	The equivalent gross weight at engine failure is the actual gross weight corrected for OAT higher than ISA +10° C.	The increment represents fuel used before engine failure.	0	0	1	0
1882	32	The approach climb requirement has been established so that the aeroplane will achieve:	minimum climb gradient in the event of a go-around with one engine inoperative.	obstacle clearance in the approach are a.	manoeuverab ility in the event of landing with one engine inoperative.	manoeuverabilit y during approach with full flaps and gear down, all engines operating.	1	0	0	0
1883	32	On a reciprocating engined aeroplane, with increasing altitude at constant gross mass, angle of attack and configuraton the drag	remains unchanged but the the CAS increases.	increases at constant TAS.	decreases and the CAS decreases too because of the lower air density.	remains unchanged but the TAS increases.	0	0	0	1
1884	32	Which of the following factors favours the selection of a low flap setting for the take-off?	High field elevation, distant obstacles in the climb-out path, long runway and a high ambient temperature.	Low field elevation, close-in obstacles in the climb-out path, long runway and a high ambient temperature.	High field elevation, no obstacles in the climb-out path, low ambient temperature and short runway.	Low field elevation, no obstacles in the climb-out path, short runway and a low ambient temperature.	1	0	0	0
1885	32	Which of the following sets of factors will increase the climb-limited TOM?	Low flap setting, high PA, high OAT.	Low flap setting, high PA, low OAT.	Low flap setting, low PA, low OAT.	High flap setting, low PA, low OAT.	0	0	1	0
1886	32	If there is a tail wind, the climb limited TOM will:	increase.	decrease.	increase in the flaps extended case.	not be affected.	0	0	0	1
1887	32	Other factors remaining constant and not limiting, how does increasing pressure altitude affect allowable take-off mass?	There is no effect on allowable take-off mass.	Allowable take-off mass remain s uninfluenced up to 5000 ft PA.	Allowable take-off mass decrea ses.	Allowable take-off mass increases.	0	0	1	0
1888	32	In which of the following distances can the length of a stopway be included?	In the one-engine failure case, take-off distance.	In the all-engine take-off distance.	In the take-off run available.	In the accelerate stop distance available.	0	0	0	1
1889	32	If the antiskid system is inoperative, which of the following statements is true?	The accelerate stop distance incr eases.	The accelerate stop distance decr eases.	It has no effect on the accelerate stop distance.	Take-off with antiskid inoperative is not permitted.	1	0	0	0

1890	32	The maximum operating altitude for a certain aeroplane with a pressurised cabin	is only certified for four-engine aeroplanes.	is the highest pressure altitude certified for normal operation.	is dependent on aerodynamic ceiling.	is dependent on the OAT.	0	1	0	0
1891	32	The pilot of a light twin engine aircraft has calculated a 4 000 m service ceiling, based on the forecast general conditions for the flight and a take-off mass of 3 250 kg. If the take-off mass is 3 000 kg, the service ceiling will be:	less than 4 000 m.	unchanged, equal to 4 000 m.	only a new performance analysis will determine if the service ceiling is higher or lower than 4 000 m.	higher than 4 000 m.	0	0	0	1
1892	32	(For this question use annex 032-4733A or Performance Manual MRJT 1 Figure 4.28) 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	2600 m.	2700 m.	2900 m.	3100 m.	0	0	0	1
1893	32	What will be the effect on an aeroplane's performance if aerodrome pressure altitude is decreased?	It will increase the take-off distance required.	It will increase the take-off ground run.	It will increase the accelerate stop distance.	It will decrease the take-off distance required.	0	0	0	1
1894	32	The absolute ceiling	is the altitude at which the best climb gradient attainable is 5%	is the altitude at which the aeroplane reaches a maximum rate of climb of 100 ft/min.	is the altitude at which the rate of climb theoretically is zero.	can be reached only with minimim steady flight speed	0	0	1	0
1895	32	The induced drag of an aeroplane	is independent of the airspeed.	increases with increasing airspeed.	decreases with increasing airspeed.	decreases with increasing gross weight.	0	0	1	0
1896	32	Can the length of a stopway be added to the runway length to determine the take-off distance available ?	Yes, but the stopway must have the same width as the runway.	No.	No, unless its centerline is on the extended centerline of the runway.	Yes, but the stopway must be able to carry the weight of the aeroplane.	0	1	0	0
1897	32	May anti-skid be considered to determine the take-off and landing data ?	Only for landing.	Yes.	No.	Only for take-off.	0	1	0	0
1898	32	In case of an engine failure recognized below V1	the take-off must be rejected.	the take-off may be continued if a clearway is available.	the take-off should only be rejected if a stopway is available.	the take-off is to be continued unless V1 is less than the balanced V1.	1	0	0	0
1899	32	In case of an engine failure which is recognized at or above V1	the take-off must be rejected if the speed is still below VLOF.	a height of 50 ft must be reached within the take-off distance.	the take-off should be rejected if the speed is still below VR.	the take-off must be continued.	0	0	0	1

1900	32	The take-off distance available is	the total runway length, without clearway even if this one exists.	the length of the take-off run available plus the length of the clearway available.	the runway length minus stopway.	the runway length plus half of the clearway.	0	1	0	0
1901	32	The result of a higher flap setting up to the optimum at take-off is	a higher V1.	a longer take-off run.	a shorter ground roll.	an increased acceleration.	0	0	1	0
1902	32	Reduced take-off thrust	has the benefit of improving engine life.	can be used if the actual take-off mass is higher than the performance limited take-off mass.	is not recommended at very low temperatures (OAT).	can be used if the headwind component during take-off is at least 10 kt.	1	0	0	0
1903	32	The speed for best rate of climb is called	VY.	VX.	V2.	VO.	1	0	0	0
1904	32	The aerodynamic ceiling	is the altitude at which the aeroplane reaches 50 ft/min.	is the altitude at which the speeds for low speed buffet and for high speed buffet are the same.	depends upon thrust setting and increase with increasing thrust.	is the altitude at which the best rate of climb theoretically is zero.	0	1	0	0
1905	32	Which statement is correct?	VR is the speed at which rotation should be initiated.	VR is the lowest climb speed after engine failure.	In case of engine failure below VR the take-off should be aborted.	VR is the lowest speed for directional control in case of engine failure.	1	0	0	0
1906	32	Given: VS= Stalling speed VMCA= Air minimum control speed VMU= Minimum unstick speed (disregarding engine failure) V1= take-off decision speed VR= Rotation speed	VS< VMCA< V2 min	VR< VMCA< VLOF	VMU<= VMCA< V1	V2min< VMCA> VMU	1	0	0	0
1907	32	Required runway length at destination airport for turboprop aeroplanes	is less then at an alternate airport.	is more than at an alternate airport.	is 60% longer than at an alternate airport.	is the same as at an alternate airport.	0	0	0	1
1908	32	Which of the following are to be taken into account for the runway in use for take-off ?	Airport elevation, runway slope, outside air temperature, pressure altitude and wind components.	Airport elevation, runway slope, standard temperature, standard pressure and wind components.	Airport elevation, runway slope, standard temperature, pressure altitude and wind components.	Airport elevation, runway slope, outside air temperature, standard pressure and wind components.	1	0	0	0
1909	32	Which of the following will decrease V1?	Increased take-off mass.	Inoperative flight management system.	Increased outside air temperature.	Inoperative anti-skid.	0	0	0	1

1910	32	Which of the following is true with regard to VMCA (air minimum control speed)?	The aeroplane will not gather the minimum required climb gradient	VMCA only applies to four-engine aeroplanes	Straight flight can not be maintained below VMCA, when the critical engine has failed.	The aeroplane is uncontrollable below VMCA	0	0	1	0
1911	32	During take-off the third segment begins:	when acceleration starts from VLOF to V2.	when flap retraction is completed.	when acceleration to flap retraction speed is started.	when landing gear is fully retracted.	0	0	1	0
1912	32	What margin above the stall speed is provided by the landing reference speed VREF?	1,10 VSO	VMCA x 1,2	1,30 VSO	1,05 VSO	0	0	1	0
1913	32	How does runway slope affect allowable take-off mass, assuming other factors remain constant and not limiting?	Allowable take-off mass is not affected by runway slope.	A downhill slope decreases allowable take-off mass.	A downhill slope increases allowable take-off mass.	An uphill slope increases take-off mass.	0	0	1	0
1914	32	Provided all other parameters stay constant. Which of the following alternatives will decrease the take-off ground run?	Increased pressure altitude, increased outside air temperature, increased take-off mass.	Increased outside air temperature, decreased pressure altitude, decreased flap setting.	Decreased take-off mass, increased pressure altitude, increased temperature.	Decreased take-off mass, increased density, increased flap setting.	0	0	0	1
1915	32	The required Take-off Distance (TOD) and the field length limited Take-off Mass (TOM) are different for the zero flap case and take-off position flap case. What is the result of flap setting in take-off position compared to zero flap position?	Decreased TOD required and decreased field length limited TOM.	Decreased TOD required and increased field length limited TOM.	Increased TOD required and decreased field length limited TOM.	Increased TOD required and increased field length limited TOM.	0	1	0	0
1916	32	The second segment begins	when flaps are selected up.	when acceleration starts from V2 to the speed for flap retraction.	when landing gear is fully retracted.	when flap retraction begins.	0	0	1	0
1917	32	Which one of the following is not affected by a tail wind?	the field limited take-off mass.	the obstacle limited take-off mass.	the take-off run.	the climb limited take-off mass.	0	0	0	1
1918	32	Field length is balanced when	take-off distance equals accelerate-stop distance.	calculated V2 is less than 110% VMCA and V1, VR, VMCG.	all engine acceleration to V1 and braking distance for rejected take-off are equal.	one engine acceleration from V1 to VLOF plus flare distance between VLOF and 35 feet are equal.	1	0	0	0
1919	32	A jet aeroplane is climbing at a constant IAS and maximum climb thrust, how will the climb angle / the pitch angle change?	Reduce / decrease.	Reduce / remain constant.	Remain constant / decrease.	Remain constant / become larger.	1	0	0	0

1920	32	Which of the following statements is correct ?	If a clearway or a stopway is used, the liftoff point must be attainable at least at the end of the permanent runway surface.	A stopway means an area beyond the take-off runway, able to support the aeroplan e during an aborted take-off.	An underrun is an area beyond the runway end which can be used for an aborted take-off.	A clearway is an area beyond the runway which can be used for an aborted take-off.	0	1	0	0
1921	32	For take-off obstacle clearance calculations, obstacles in the first segment may be avoided	by banking not more than 15° between 50 ft and 400 ft above the runway elevation.	by banking as much as needed if aeroplane is more than 50 ft above runway elevation.	only by using standard turns.	by standard turns - but only after passing 1500 ft.	1	0	0	0
1922	32	Which of the following is true according to JAA regulations for turbopropeller powered aeroplanes not performing a steep approach?	Maximum Take-off Run is 0,5 x runway.	Maximum use of clearway is 1,5 x runway.	Maximum Landing Distance at the destination aerodrome and at any alternate aerodrome is 0,7 x LDA (Landing Distance Available).	Maximum Landing Distance at destination is 0,95 x LDA (Landing Distance Available).	0	0	1	0
1923	32	The net flight path climb gradient after take-off compared to the gross climb gradient is:	smaller.	larger.	equal.	depends on type of aircraft.	1	0	0	0
1924	32	The lowest take-off safety speed (V2 min) is:	1.20 Vs for all turboprop powered aeroplanes.	1.15 Vs for four-engine turboprop aeroplanes and 1.20 Vs for two or three-engine turboprop aeroplanes.	1.20 Vs for all turbojet aeroplanes.	1.15 Vs for all turbojet aeroplanes.	0	1	0	0
1925	32	(For this question use annex 032-1562A or Performance Manual MRJT 1 Figure 4.4) For a twin engine turbojet aeroplane two take-off flap settings (5° and 15°) are certified. Given: Field length avalaible= 2400 m	52 000 kg	56 000 kg	55 000 kg	70 000 kg	0	1	0	0
1926	32	An airport has a 3000 metres long runway, and a 2000 metres clearway at each end of that runway. For the calculation of the maximum allowed take-off mass, the take-off distance available cannot be greater than:	4500 metres.	6000 metres.	4000 metres.	5000 metres.	1	0	0	0

		During certification test flights for a turbojet aeroplane, the actual measured take-off runs from brake release to a point equidistant between the point at which VLOF is reached and the point at which the aeroplane is 35 feet above the take-off surface are: - 1747 m, all engines operating - 1950 m, with the critical engine failure recognized at V1, the other factors remaining unchanged. Considering both possibilities to determine the take-off run (TOR). What is the correct distance?	2096 m.	1950 m.	2009 m.	2243 m.				
1927	32						0	0	1	0
		Which of the following statements is correct?	When determining the obstacle clearance during drift down, fuel dumping may be taken into account.	The drift down regulations require a minimum descent angle after an engine failure at cruising altitude.	The drift down procedure requires a minimum obstacle clearance of 35 ft.	An engine failure at high cruising altitude will always result in a drift down, because it is not permitted to fly the same altitude as with all engines operating.				
1928	32						1	0	0	0
		How is VMCA influenced by increasing pressure altitude?	VMCA increases with increasing pressure altitude.	VMCA is not affected by pressure altitude.	VMCA decreases with increasing pressure altitude.	VMCA increases with pressure altitude higher than 4000 ft.				
1929	32						1	0	0	0
		Regarding the obstacle limited take-off mass, which of the following statements is correct?	The obstacle limited mass can never be lower than the climb limited take-off mass.	The maximum bank angle which can be used is 10°.	A take-off in the direction of an obstacle is also permitted in tail wind condition.	Wind speed plays no role when calculating this particular mass.				
1930	32						0	0	1	0
		For jet aeroplanes which of the following statements is correct?	The required landing field length is the distance from 35 ft to the full stop point.	When determining the maximum all owable landing mass at destination, 60% of the available distance is taken into account, if the runway is expected to be dry.	In any case runway slope is one of the factors taken into account when determining the required landing field length.	An anti-skid system malfunction has no effect on the required landin g field length.				
1931	32						0	1	0	0
		Which statement is correct?	The performance limited take-off mass is the highest of: field length limited take-off mass climb limited take-off mass obstacle limited take-off	The climb limited take-off mass will increase if the headwind co mponent increases.	The climb limited take-off mass increas es when a larger take-off flap setting is used.	The climb limited take-off mass depends on pressure altitude and outer air temperature				
1932	32						0	0	0	1

1933	32	Which of the following factors determines the maximum flight altitude in the "Buffet Onset Boundary" graph?	Aerodynamics.	Theoretical ceiling.	Service ceiling.	Economy.	1	0	0	0
1934	32	Maximum endurance for a piston engined aeroplane is achieved at:	The speed for maximum lift coefficient.	The speed for minimum drag.	The speed that corresponds to the speed for maximum climb angle.	The speed that approximately corresponds to the maximum rate of climb speed.	0	0	0	1
1935	32	The pilot of a jet aeroplane wants to use a minimum amount of fuel between two airfields. Which flight procedure should the pilot fly?	Maximum endurance.	Holding.	Long range.	Maximum range.	0	0	0	1
1936	32	Before take-off the temperature of the wheel brakes should be checked. For what reason?	To ensure that the brake wear is not excessive.	To ensure that the wheels have warmed up evenly.	To ensure that the thermal blow-out plugs are not melted.	Because overheated brakes will not perform adequately in the event of a rejected take-off.	0	0	0	1
1937	32	The stopway is an area which allows an increase only in :	the take-off run available.	the take-off distance available.	the landing distance available.	the accelerate-stop distance available.	0	0	0	1
1938	32	Which is the correct sequence of speeds during take-off?	V1, VMCG, VR, V2.	V1, VR, VMCG, V2.	V1, VR, V2, VMCA.	VMCG, V1, VR, V2.	0	0	0	1
1939	32	A jet aeroplane is climbing with constant IAS. Which operational speed limit is most likely to be reached?	The Minimum control speed air.	The Mach limit for the Mach trim system.	The Maximum operating Mach number.	The Stalling speed.	0	0	1	0
1940	32	A jet aeroplane descends with constant Mach number. Which of the following speed limits is most likely to be exceeded first?	Never Exceed Speed	High Speed Buffet Limit	Maximum Operational Mach Number	Maximum Operating Speed	0	0	0	1
1941	32	Maximum and minimum values of V1 are limited by :	VR and VMCG	V2 and VMCA	VR and VMCA	V2 and VMCG	1	0	0	0
1942	32	Which statement, in relation to the climb limited take-off mass of a jet aeroplane, is correct?	The climb limited take-off mass decreases with increasing OAT.	The climb limited take-off mass is determined at the speed for best rate of climb.	50% of a head wind is taken into account when determining the climb limited take-off mass.	On high elevation airports equipped with long runways the aeroplane will always be climb limited.	1	0	0	0
1943	32	The minimum value of V2 must exceed "air minimum control speed" by:	15%	20%	30%	10%	0	0	0	1
1944	32	Which statement regarding V1 is correct?	When determining the V1, reverse thrust is only allowed to be taken into account on the remaining symmetric engines.	The V1 correction for up-slope is negative.	V1 is not allowed to be greater than VR.	V1 is not allowed to be greater than VMCG.	0	0	1	0

1945	32	When an aircraft takes off with the mass limited by the TODA:	the actual take-off mass equals the field length limited take-off mass.	the distance from brake release to V1 will be equal to the distance from V1 to the 35 feet point.	the "balanced take-off distance" equals 115% of the "all engine take-off distance".	the end of the runway will be cleared by 35 feet following an engine failure at V1.	1	0	0	0
1946	32	For a take-off from a contaminated runway, which of the following statements is correct?	The greater the depth of contamination at constant take-off mass, the more V1 has to be decreased to compensate for decreasing friction.	Dry snow is not considered to affect the take-off performance.	A slush covered runway must be cleared before take-off, even if the performance data for contaminated runway is available.	The performance data for take-off must be determined in general by means of calculation, only a few values are verified by flight tests.	0	0	0	1
1947	32	To minimize the risk of hydroplaning during landing the pilot should:	use maximum reverse thrust, and should start braking below the hydroplaning speed.	use normal landing-, braking- and reverse technique.	postpone the landing until the risk of hydroplaning no longer exists.	make a "positive" landing and apply maximum reverse thrust and brakes as quickly as possible.	0	0	0	1
1948	32	What is the advantage of a balanced field length condition ?	For a balanced field length the required take-off runway length always equals the available runway length.	A balanced field length provides the greatest margin between "net" and "gross" take-off flight paths.	A balanced field length gives the minimum required field length in the event of an engine failure.	A balanced take-off provides the lowest elevator input force requirement for rotation.	0	0	1	0
1949	32	The maximum indicated air speed of a piston engined aeroplane, in level flight, is reached:	at the lowest possible altitude.	at the optimum cruise altitude.	at the service ceiling.	at the practical ceiling.	1	0	0	0
1950	32	During a descent at constant Mach Number, the margin to low speed buffet will:	increase, because the lift coefficient increases.	decrease, because the lift coefficient decreases.	increase, because the lift coefficient decreases.	remain constant, because the Mach number remains constant.	0	0	1	0
1951	32	(For this question use annex 032-2219A or Performance Manual SEP1 1 Figure 2.4) With regard to the graph for landing performance, what is the minimum headwind component required in order to land at Helgoland airport? Given: Runway length: 1300 ft Runway elevation: MSL	10 kt.	No wind.	5 kt.	15 kt.	1	0	0	0

1952	32	The landing reference speed VREF has, in accordance with international requirements, the following margins above stall speed in landing configuration:	15%	20%	10%	30%	0	0	0	1
1953	32	Changing the take-off flap setting from flap 15° to flap 5° will normally result in :	a better climb and an equal take-off distance.	a shorter take-off distance and a better climb.	a longer take-off distance and a better climb.	a shorter take-off distance and an equal climb.	0	0	1	0
1954	32	Which statement about reduced thrust is correct?	In case of reduced thrust V1 should be decreased.	Reduced thrust can be used when the actual take-off mass is less than the field length limited take-off mass.	Reduced thrust is primarily a noise abatement procedure.	Reduced thrust is used in order to save fuel.	0	1	0	0
1955	32	What is the effect of tail wind on the time to climb to a given altitude?	The time to climb does not change.	The time to climb increases.	The time to climb decreases.	The effect on time to climb will depend on the aeroplane type.	1	0	0	0
1956	32	Regarding take-off, the take-off decision speed V1:	is an airspeed at which the aeroplane is airborne but below 35 ft and the pilot is assumed to have made a decision to continue or discontinue the take-off .	is the airspeed of the aeroplane upon reaching 35 feet above the take-off surface.	is the airspeed on the ground at which the pilot is assumed to have made a decision to continue or discontinue the take-off.	is always equal to VEF (Engine Failure speed).	0	0	1	0
1957	32	A flight is planned with a turbojet aeroplane to an aerodrome with a landing distance available of 2400 m. Which of the following is the maximum landing distance for a dry runway?	1 250 m.	1 090 m.	1 655 m.	1 440 m.	0	0	0	1
1958	32	A twin engined 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:	the long range speed.	the speed correspondin g to the minimum value of (lift / drag)^3/2.	the speed at the maximum lift.	the speed corresponding to the maximum value of the lift / drag ratio.	0	0	0	1
1959	32	Long range cruise is a flight procedure which gives:	a specific range which is about 99% of maximum specific range and higher cruise speed.	a 1% higher TAS for maximum specific range.	an IAS which is 1% higher than the IAS for maximum specific range.	a specific range which is 99% of maximum specific range and a lower cruise speed.	1	0	0	0
1960	32	(For this question use annex 032-1014A) Assuming constant L/D ratio, which of the diagrams provided correctly shows the movement of the "Thrust	d	c	a	b	0	1	0	0
1961	32	For jet-engined aeroplanes, what is the effect of increased altitude on specific range?	Decreases.	Does not change.	Increases only if there is no wind.	Increases.	0	0	0	1

1962	32	Considering TAS for maximum range and maximum endurance, other factors remaining constant,	TAS for maximum range will increase with increased altitude while TAS for maximum endurance will decrease with increased altitude.	both will increase with increasing altitude.	both will decrease with increasing altitude.	both will stay constant regardless of altitude.	0	1	0	0
1963	32	The optimum long-range cruise altitude for a turbojet aeroplane:	is always equal to the powerplant ceiling.	is independent of the aeroplane mass.	is only dependent on the outside air temperature.	increases when the aeroplane mass decreases.	0	0	0	1
1964	32	How does TAS vary in a constant Mach climb in the troposphere?	TAS decreases.	TAS increases.	TAS is constant.	TAS is not related to Mach Number.	1	0	0	0
1965	32	Other factors remaining constant, how does increasing altitude affect Vx and Vy:	Both will increase.	Both will remain the same.	Both will decrease.	Vx will decrease and Vy will increase.	1	0	0	0
1966	32	With zero wind, the angle of attack for maximum range for an aeroplane with turbojet engines is:	equal to that maximum endurance.	equal to that corresponding to zero induced drag.	lower than that of maximum lift to drag ratio.	equal to that of maximum lift to drag ratio.	0	0	0	1
1967	32	The angle of climb with flaps extended, compared to that with flaps retracted, will normally be:	Increase at moderate flap setting, decrease at large flap setting.	Smaller.	Larger.	Not change.	0	1	0	0
1968	32	Two identical turbojet aeroplane (whose specific fuel consumptions are considered to be equal) are at holding speed at the same altitude. The mass of the first aircraft is 130 000 kg and its hourly fuel consumption is 4300 kg/h. The mass of the second aircraft is 115 000 kg and its hourly fuel consumption is:	3365 kg/h.	3578 kg/h.	3804 kg/h.	4044 kg/h.	0	0	1	0
1969	32	An operator shall ensure that the net take-off flight path clears all obstacles. The half-width of the obstacle-corridor at the distance D from the end of the TODA is at least:	-90m + 1.125D	90m + D/0.125	90m + 0.125D	0.125D	0	0	1	0
1970	32	How does the best angle of climb and best rate of climb vary with increasing altitude?	Best angle of climb increases while best rate of climb decreases.	Best angle of climb decreases while best rate of climb increases.	Both decrease.	Both increase.	0	0	1	0
1971	32	Assuming that the required lift exists, which forces determine an aeroplane's angle of climb?	Weight and drag only.	Thrust and drag only.	Weight and thrust only.	Weight, drag and thrust.	0	0	0	1
1972	32	A head wind will:	increase the climb flight path angle.	increase the angle of climb.	increase the rate of climb.	shorten the time of climb.	1	0	0	0
1973	32	At which minimum height will the second climb segment end?	When gear retraction is completed.	1500 ft above field elevation.	400 ft above field elevation.	35 ft above ground.	0	0	1	0

1974	32	The requirements with regard to take-off flight path and the climb segments are only specified for:	2 engined aeroplane.	the failure of two engines on a multi-engined aeroplane.	the failure of the critical engine on a multi-engines aeroplane.	the failure of any engine on a multi-engined aeroplane.	0	0	1	0
1975	32	In the event of engine failure below V1, the first action to be taken by the pilot in order to decelerate the aeroplane is to:	deploy airbrakes or spoilers.	reduce the engine thrust.	reverse engine thrust.	apply wheel brakes.	0	1	0	0
1976	32	During certification flight testing on a four engine turbojet aeroplane the actual take-off distances measured are: - 3050 m with failure of the critical engine recognised at V1 - 2555 m with all engines operating and all other things being equal The take-off distance adopted for the certification file is:	2938 m	3050 m	3513 m	2555 m	0	1	0	0
1977	32	Which of the following represents the maximum value for V1 assuming max tyre speed and max brake energy speed are not limiting?	VREF	VR	VMCA	V2	0	1	0	0
1978	32	Which of the following represents the minimum for V1?	VMCG	VLOF	VMU	VR	1	0	0	0
1979	32	Vx and Vy with take-off flaps will be:	higher than that for clean configu ration.	same as that for clean configuration.	changed so that Vx increases and Vy decreases compared to clean configuration.	lower than that for clean configuration.	0	0	0	1
1980	32	Two identical aeroplanes at different masses are descending at idle thrust. Which of the following statements correctly describes their descent characteristics ?	At a given angle of attack the heavier aeroplane will always glide further than the lighter aeroplane.	At a given angle of attack the lighter aeroplane will always glide further than the heavier aeroplane.	At a given angle of attack, both the vertical and the forward speed are greater for the heavier aeroplane.	There is no difference between the descent characteristics of the two aeroplanes.	0	0	1	0
1981	32	Take-off run is defined as the	horizontal distance along the take-off path from the start of the take-off to a point equidistant between the point at which VLOF is reached and the point at which the aeroplane is 35 ft above the take-off surface.	distance to V1 and stop, assuming an engine failure at V1.	distance to 35 feet with an engine failure at V1 or 115% all engine distance to 35 feet.	Distance from brake release to V2.	1	0	0	0
1982	32	A jet aeroplane is flying long range cruise. How does the specific range / fuel flow change?	Decrease / decrease.	Increase / decrease.	Increase / increase.	Decrease / increase.	0	1	0	0
1983	32	During a glide at constant Mach number, the pitch angle of the aeroplane will:	remain constant.	decrease.	increase.	increase at first and decrease later on.	0	1	0	0

1984	32	During a cruise flight of a jet aeroplane at constant flight level and at the maximum range speed, the IAS / the drag will:	decrease / decrease.	increase / decrease.	increase / increase.	decrease / increase.	1	0	0	0
1985	32	An aeroplane carries out a descent from FL 410 to FL 270 at cruise Mach number, and from FL 270 to FL 100 at the IAS reached at FL 270. How does the angle of descent change in the first and in the second part of the descent? Assume idle thrust and clean configuration and ignore	Is constant in the first part; decreases in the second.	Decreases in the first part; increases in the second.	Increases in the first part; is constant in the second.	Increases in the first part; decreases in the second.	0	0	1	0
1986	32	Which statement with respect to the step climb is correct?	Executing a desired step climb at high altitude can be limited by buffet onset at g-loads larger than 1.	A step climb must be executed immediately after the aeroplane has exceeded the optimum altitude.	A step climb is executed because ATC desires a higher altitude.	A step climb is executed in principle when, just after leveling off, the 1.3g altitude is reached.	1	0	0	0
1987	32	Given that: VEF= Critical engine failure speed VMCG= Ground minimum control speed VMCA= Air minimum control speed VMU= Minimum unstick speed Vlof= Take-off climb speed	V2min<= VEF<= VMU	VMCG<=VEF < V1	1.05 VMCA<= VEF<= V1	1.05 VMCG< VEF<= VR	0	1	0	0
1988	32	The determination of the maximum mass on brake release, of a certified turbojet aeroplane with 5°, 15° and 25° flaps angles on take-off, leads to the following values, with wind: Flap angle: 5° 15° 25° Runway limitation (kg): 66 000 69 500 71 500 2nd segment slope limitation: 72 200 69 000 61 800 Wind correction: Head wind:+120kg / kt Tail wind: -360kg / kt Given that the tail wind component is equal to 5 kt, the maximum mass on brake release and corresponding flap	67 700 kg / 15 deg	69 000 kg / 15 deg	72 200 kg / 5 deg	69 700 kg / 25 deg	1	0	0	0
1989	32	On a reciprocating engined aeroplane, with increasing altitude at constant gross mass, angle of attack and configuraton the power required	increases and the TAS increases by the same percentage.	increases but TAS remains constant.	decreases slightly because of the lower air density.	remains unchanged but the TAS increases.	1	0	0	0
1990	32	The speed range between low speed buffet and high speed buffet	narrows with increasing mass and increasing altitude.	decreases with increasing mass and is independent of altitude.	is only limiting at low altitudes.	increases with increasing mass.	1	0	0	0
1991	32	For a turbojet aeroplane, what is the maximum landing distance for wet runways when the landing distance available at an aerodrome is 3000 m?	2 070 m.	1565 m.	1800 m.	2609 m.	0	1	0	0
1992	32	Which of the following combinations basically has an effect on the angle of descent in a glide? (Ignore compressibility effects.)	Configuration and angle of attack.	Mass and altitude.	Altitude and configuration.	Configuration and mass.	1	0	0	0

1993	32	Which data can be extracted from the Buffet Onset Boundary Chart?	The value of the critical Mach number at various masses and altitudes.	The value of the Mach number at which low speed and shockstall occur at various weights and altitudes.	The values of the Mach number at which low speed and Mach buffet occur at various masses and altitudes.	The value of maximum operating Mach number (MMO) at various masses and power settings.	0	0	1	0
1994	32	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?	Maximum range speed decreases and maximum climb angle speed decreases.	Maximum range speed increases and maximu m climb angle speed increases.	Maximum range speed increases and maximu m climb angle speed stays constant.	Maximum range speed decreases and maximum climb angle speed increases.	0	0	1	0
1995	32	The airspeed for jet aeroplanes at which power required is a minimum	is lower than the minimum drag speed in the climb and higher than the minimum drag speed in the descent.	is the same as the minimum drag speed.	is always lower than the minimum drag speed.	is always higher than the minimum drag speed.	0	0	1	0
1996	32	Given a jet aircraft. Which order of increasing speeds in the performance diagram is correct?	Vs, Maximum ra nge speed, Vx	Maximum endurance speed, Maximum range speed, Vx	Vs, Vx, Maximum range speed	Maximum endurance speed, Long range speed, Maximum range speed	0	0	1	0
1997	32	The point where Drag coefficient/Lift coefficient is a minimum is	the point where a tangent from the origin touches the drag curve.	the lowest point of the drag curve.	at stalling speed (VS).	on the "back side" of the drag curve.	1	0	0	0
1998	32	The lowest point of the drag or thrust required curve of a jet aeroplane, respectively, is the point for	minimum specific range.	minimum drag.	maximum specific range.	maximum endurance.	0	1	0	0
1999	32	The centre of gravity near, but still within, the aft limit	improves the maximum range.	increases the stalling speed.	improves the longitudinal stabiity.	decreases the maximum range.	1	0	0	0
2000	32	The Density Altitude	is used to calculate the FL above the Transition Altitude.	is used to determine the aeroplane performance.	is equal to the pressure altitude.	is used to establish minimum clearance of 2.000 feet over mountain s.	0	1	0	0
2001	32	Which of the following combinations adversely affects take-off and initial climb performance ?	High temperature and high relative humidity	Low temperature and high relative humidity	High temperature and low relative humidity	Low temperature and low relative humidity	1	0	0	0
2002	32	What effect has a downhill slope on the take-off speeds? The slope	has no effect on the take-off speed V1.	decreases the take-off speed V1.	decreases the TAS for take-off.	increases the IAS for take-off.	0	1	0	0

2003	32	A jet aeroplane equipped with old engines has a specific fuel consumption of 0.06 kg per Newton of thrust and per hour and, in a given flying condition, a fuel mileage of 14 kg per Nautical Mile. In the same flying conditions, the same aeroplane equipped with modern engines with a specific fuel consumption of 0.035 kg per Newton of thrust and per hour, has a fuel mileage of:	14 kg/NM.	11.7 kg/NM.	10.7 kg/NM.	8.17 kg/NM.	0	0	0	1
2004	32	Moving the center of gravity from the forward to the aft limit (gross mass, altitude and airspeed remain unchanged)	decreases the induced drag and reduces the power required.	increases the power required.	affects neither drag nor power required.	increases the induced drag.	1	0	0	0
2005	32	With a jet aeroplane the maximum climb angle can be flown at approximately:	1.1 Vs	The highest CL/CD ratio.	The highest CL/CD^2 ratio.	1.2 Vs	0	1	0	0
2006	32	A higher outside air temperature	increases the angle of climb but decreases the rate of climb.	does not have any noticeable effect on climb performance.	reduces the angle of climb but increases the rate of climb.	reduces the angle and the rate of climb.	0	0	0	1
2007	32	Which of the following provides maximum obstacle clearance during climb?	1.2Vs.	The speed for maximum rate of climb.	The speed, at which the flaps may be selected one position further UP.	The speed for maximum climb angle Vx.	0	0	0	1
2008	32	What happens when an aeroplane climbs at a constant Mach number?	The "1.3G" altitude is exceeded, so Mach buffet will start immediately.	The lift coefficient increases.	The TAS continues to increase, which may lead to structural problems.	IAS stays constant so there will be no problems.	0	1	0	0
2009	32	The speed for maximum lift/drag ratio will result in :	The maximum endurance for a propeller driven aeroplane.	The maximum angle of climb for a propeller driven aeroplane.	The maximum range for a propeller driven aeroplane.	The maximum range for a jet aeroplane.	0	0	1	0
2010	32	For a jet transport aeroplane, which of the following is the reason for the use of 'maximum range speed' ?	Longest flight duration.	Minimum drag.	Minimum specific fuel consumption.	Minimum fuel flow.	0	0	1	0
2011	32	If a flight is performed with a higher "Cost Index" at a given mass which of the following will occur?	A better maximum range.	A better long range.	A higher cruise mach number.	A lower cruise mach number.	0	0	1	0
2012	32	Which of the following sequences of speed for a jet aeroplane is correct ? (from low to high speeds)	Maximum endurance speed, maximum range speed, maximum angle of climb speed.	Maximum endurance speed, long range speed, maximum range speed.	Vs, maximum angle climb speed, maximum range speed.	Vs, maximum range speed, maximum angle climb speed.	0	0	1	0
2013	32	What happens to the drag of a jet aeroplane if, during the initial climb after take off, constant IAS is maintained? (Assume a constant mass.)	The drag remains almost constant.	The drag increases considerably.	The drag decreases.	The drag increases initially and decreases thereafter.	1	0	0	0

2014	32	How does the lift coefficient for maximum range vary with altitude? (No compressibility effects.)	The lift coefficient increases with increasing altitude.	Only at low speeds the lift coefficient de creases with increasing altitude.	The lift coefficient is independant of altitude.	The lift coefficient decreases with increasing altitude.	0	0	1	0
2015	32	A four jet-engined aeroplane (mass = 150 000 kg) is established on climb with all engines operating. The lift-to-drag ratio is 14. Each engine has a thrust of 75 000 Newtons. The gradient of climb is:	7.86%.	12.86%.	1.286%.	27%.	0	1	0	0
2016	32	The maximum horizontal speed occurs when:	The thrust is equal to minimum drag.	The thrust does not increase further with increasing speed.	The maximum thrust is equal to the total drag.	The thrust is equal to the maximum drag.	0	0	1	0
2017	32	A twin jet aeroplane is in cruise, with one engine inoperative, and has to overfly a high terrain area. In order to allow the greatest clearance height, the appropriate airspeed must be the airspeed	giving the lowest Cl/Cd ratio.	giving the highest Cd/Cl ratio.	for long-range cr uise.	of greatest lift-to-drag ratio.	0	0	0	1
2018	32	The point at which a tangent out of the origin touches the power required curve	is the maximum drag speed.	is the point where the Lift to Drag ratio is a maximum.	is the point where Drag coefficient is a minimum.	is the point where the Lift to Drag ratio is a minimum.	0	1	0	0
2019	32	An increase in atmospheric pressure has, among other things, the following consequences on landing performance:	an increased landing distance and degraded go-around performance	an increased landing distance and improved go-around performance	a reduced landing distance and degraded go around performance	a reduced landing distance and improved go-around performance	0	0	0	1
2020	32	A decrease in atmospheric pressure has, among other things, the following consequences on take-off performance:	a reduced take-off distance and improved initial climb performance	an increased take-off distance and improved initial climb performance	a reduced take-off distance and degraded initial climb performance	an increased take-off distance and degraded initial climb performance	0	0	0	1
2021	32	An increase in atmospheric pressure has, among other things, the following consequences on take-off performance:	an increases take-off distance and degraded initial climb performance	an increased take-off distance and improved initial climb performance	a reduced take-off distance and degraded initial climb performance	a reduced take-off distance and improved initial climb performance	0	0	0	1
2022	32	The 'maximum tyre speed' limits:	V1 in kt ground speed.	VLOF in terms of ground speed.	V1 in kt TAS.	VR, or VMU if this is lower than VR.	0	1	0	0
2023	32	The lift coefficient decreases during a glide with constant Mach number, mainly because the :	aircraft mass decreases.	TAS decreases.	glide angle increases.	IAS increases.	0	0	0	1
2024	32	(For this question use annex 032-2211A) Which of the following diagrams correctly shows the movement of the power required curve with increasing	Figure b	Figure c	Figure a	Figure d	0	0	0	1
2025	32	In a steady descending flight (descent angle GAMMA) equilibrium of forces acting on the aeroplane is given by: (T = Thrust, D = Drag, W = Weight)	T + W sin GAMMA = D	T - W sin GAMMA = D	T - D = W sin GAMMA	T + D = - W sin GAMMA	1	0	0	0

2026	32	Approaching in turbulent wind conditions requires a change in the landing reference speed (VREF):	Increasing VREF and making a steeper glide path to avoid the use of spoilers.	Increasing VREF	Lowering VREF	Keeping same VREF because wind has no influence on IAS.	0	1	0	0
2027	32	A headwind component increasing with altitude, as compared to zero wind condition, (assuming IAS is constant)	has no effect on rate of climb.	does not have any effect on the angle of flight path during climb.	improves angle and rate of climb.	decreases angle and rate of climb.	1	0	0	0
2028	32	With respect to the optimum altitude, which of the following statements is correct ?	An aeroplane al ways flies at the optimum altitude because this is economically seen as the most attractive altitude.	An aeroplane fli es most of the time above the optimum altitude because this yields the most economic result.	An aeroplane sometimes flies above or below the optimum altitude because optimum altitude increases continuously during flight.	An aeroplane always flies below the optimum altitude, because Mach buffet might occur.	0	0	1	0
2029	32	(For this question use annex 032-4744A) Considering a rate of climb diagram (ROC versus TAS) for an aeroplane. Which of the diagrams shows the correct curves for "flaps down" compared to "clean" configuration?	b	c	d	a	0	0	0	1
2030	32	A jet aeroplane is climbing at constant Mach number below the tropopause. Which of the following statements is correct?	IAS decreases and TAS increases.	IAS increases an d TAS decreases.	IAS decreases and TAS decreases.	IAS increases and TAS increases.	0	0	1	0
2031	32	With all engines out, a pilot wants to fly for maximum time. Therefore he has to fly the speed corresponding to:	the maximum lift.	the minimum drag.	the critical Mach number.	the minimum angle of descent.	0	1	0	0
2032	32	(For this question use annex 032-2929A) Consider the graphic representation of the power required versus true air speed (TAS), for a piston engined aeroplane with a given mass. When drawing the tangent from the origin, the point of contact (A) determines the speed of:	maximum thrust.	critical angle of attack.	maximum specific range.	maximum endurance.	0	0	1	0
2033	32	For a piston engined aeroplane, the speed for maximum range is :	that which givesthe minimum value of drag.	that which givesthe maximun value of lift	1.4 times the stall speed in clean configuration.	that which gives the maximum lift to drag ratio.	0	0	0	1
2034	32	Complete the following statement regarding the take-off performance of an aeroplane in performance class A. Following an engine failure at (i) ..... and allowing for a reaction time of (ii) ..... a correctly loaded aircraft must be capable of decelerating to a halt within the (iii)	(i) V2 (ii) 3 seconds (iii) Take-off distance available.	(i) V1 (ii) 1 second (iii) Accelerate - stop distance avai lable.	(i) V1 (ii) 2 seconds (iii) Take-off distance available.	(i) V1 (ii) 2 seconds (iii) Accelerate - stop distance available.	0	0	0	1
2035	32	What is the effect of increased mass on the performance of a gliding aeroplane?	There is no effect.	The gliding angle decreases.	The lift/drag ratio decreases.	The speed for best angle of descent increases.	0	0	0	1
2036	32	If the take-off mass of an aeroplane is tyre speed limited, downhill slope would	increase the required take-off distance.	have no effect on the maximum mass for take-off.	decrease the maximum mass for take-off.	increase the maximum mass for take-off.	0	1	0	0

2037	32	The first segment of the take-off flight path ends	at 35 ft above the runway.	at completion of gear retraction.	at completion of flap retraction.	at reaching V2.	0	1	0	0
2038	32	The take-off mass could be limited by	the take-off distance available (TODA) only.	the take-off distance available (TODA), the maximum brake energy and the climb gradient with one engine inoperative.	the maximum brake energy only.	the climb gradient with one engine inoperative only.	0	1	0	0
2039	32	Which of the following factors will lead to an increase of ground distance during a glide, while maintaining the appropriate minimum glide angle speed?	Increase of aircraft mass.	Decrease of aircraft mass.	Headwind.	Tailwind.	0	0	0	1
2040	32	What is the most important aspect of the 'backside of the power curve'?	The speed is unstable.	The aeroplane will not stall.	The altitude cannot be maintained.	The elevator must be pulled to lower the nose.	1	0	0	0
2041	32	Which of the following three speeds of a jet aeroplane are basically identical? The speeds for:	maximum climb angle, minimum glide angle and maximum range.	holding, maximum climb angle and minimum glid e angle.	maximum drag, maximum endurance and maximum climb angle.	maximum range, minimum drag and minimum glide angle.	0	1	0	0
2042	32	(For this question use annex 032-4743A or Performance Manual MEP1 Figure 3.2) With regard to the graph for the light twin aeroplane, will the accelerate and stop distance be achieved in a take-off where the brakes are released before take-off power is set?	Yes, the chart has been made for this situation.	It does not matter which take-off technique is being used.	No, the performance will be worse than in the chart.	Performance will be better than in the chart.	0	0	1	0
2043	32	In the event that the take-off mass is obstacle limited and the take-off flight path includes a turn, the bank angle should not exceed	15 degrees up to height of 400 ft.	10 degrees up to a height of 400 ft.	20 degrees up to a height of 400 ft.	25 degrees up to a height of 400 ft.	1	0	0	0
2044	32	You climb with a climb speed schedule 300/.78. What do you expect in the crossover altitude 29 200 ft (OAT = ISA) ?	During the acceleration to the Mach number .78 the rate of climb is approximatel y zero.	No noticeable eff ect since the true airspeed at 300 kt IAS and .78 Mach are the same (at ISA temperature TAS=460 kt)	The rate of climb increases since the constant IAS-climb is replaced by the constant Mach-climb.	The rate of climb decreases since climb performance at a constant Mach number is grossly reduced as compared to constant IAS.	0	0	1	0
2045	32	If the climb speed schedule is changed from 280/.74 to 290/.74 the new crossover altitude is	lower.	higher.	unchanged.	only affected by the aeroplane gross mass.	1	0	0	0
2046	32	The optimum cruise altitude is	the pressure altitude at which the best specific range can be achieved.	the pressure altitude at which the fuel flow is a maximum.	the pressure altitude up to which a cabin altitude of 8000 ft can be maintained.	the pressure altitude at which the speed for high speed buffet as TAS is a maximum.	1	0	0	0

2047	32	The optimum cruise altitude increases	if the temperature (OAT) is increased.	if the tailwind component is decreased.	if the aeroplane mass is increased.	if the aeroplane mas s is decreased.	0	0	0	1
2048	32	Below the optimum cruise altitude	the TAS for long range cruise increases continuously with decreasing altitude.	the Mach number for long range cruise increases continuously with decreasing altitude.	the Mach number for long range cruise decreases continuously with decreasing altitude.	the IAS for long range cruise increases continuously with decreasing altitude.	0	0	1	0
2049	32	Under which condition should you fly considerably lower (4 000 ft or more) than the optimum altitude ?	If at the lower altitude either more headwind or less tailwind can be expected.	If at the lower altitude either considerably less headwind or considerably more tailwind can be expected.	If the maximum altitude is below the optimum altitude.	If the temperature is lower at the low altitude (high altitude inversion).	0	1	0	0
2050	32	Which of the following is a reason to operate an aeroplane at 'long range speed'?	In order to achieve speed stability.	The aircraft can be operated close to the buffet onset speed.	In order to prevent loss of speed stability and tuck-under.	It is efficient to fly slightly faster than with maximum range speed.	0	0	0	1
2051	32	Which of the following factors leads to the maximum flight time of a glide?	High mass.	Headwind.	Tailwind.	Low mass.	0	0	0	1
2052	32	The climb limited take-off mass can be increased by	selecting a lower V1.	selecting a lower V2.	selecting a lower VR.	a lower flap setting for take-off and selecting a higher V2.	0	0	0	1
2053	32	Reduced take-off thrust should normally not be used when:	the runway is contaminated.	it is dark.	the runway is wet.	obstacles are present close to the end of the runway.	1	0	0	0
2054	32	When V1 has to be reduced because of a wet runway the one engine out obstacle clearance / climb performance:	decreases / remains constant.	increases / increases.	remains constant / remains constant.	decreases / decreases.	1	0	0	0
2055	32	The landing field length required for turbojet aeroplanes at the destination (wet condition) is the demonstrated landing distance plus	43%	92%	67%	70%	0	1	0	0
2056	32	Which statement is correct for a descent without engine thrust at maximum lift to drag ratio speed?	A tailwind component increases fuel and time to descent.	A tailwind component decreases the ground distance.	A tailwind component increases the ground distance.	A headwind component increases the ground distance.	0	0	1	0
2057	32	If the level-off altitude is below the obstacle clearance altitude during a drift down procedure	the recommende d drift down speed should be disregarded and it should be flown at the stall speed plus 10 kt.	fuel jettisoning should be started when the obstacle clearance altitude is reached.	the drift down should be flown with flaps in the approach configuration.	fuel jettisoning should be started at the beginning of drift down.	0	0	0	1

2058	32	'Drift down' is the procedure to be applied	after cabin depressurization.	to conduct an instrument approach at the alternate.	to conduct a visual approach if VASI is available.	after engine failure if the aeroplane is above the one engine out maximum altitude.	0	0	0	1
2059	32	The use of reduced take-off thrust is permitted, only if:	The take-off distance available is lower than the take-off distance required one engine out at V1.	The actual take-off mass (TOM) including a margin is greater than the performance limited TOM.	The actual take-off mass (TOM) is greater than the climb limited TOM.	The actual take-off mass (TOM) is lower than the field length limited TOM.	0	0	0	1
2060	32	The landing field length required for jet aeroplanes at the alternate (wet condition) is the demonstrated landing distance plus	67%	92%	43%	70%	0	1	0	0
2061	32	Higher gross mass at the same altitude decreases the gradient and the rate of climb whereas	VY and VX are not affected by a higher gross mass.	VY and VX are decreased.	VY and VX are increased.	VX is increased and VY is decreased.	0	0	1	0
2062	32	The maximum mass for landing could be limited by	the climb requirements with one engine inoperative in the landing configuration.	the climb requirements with all engines in the approach configuration.	the climb requirements with all engines in the landing configuration but with gear up.	the climb requirements with one engine inoperative in the approach configuration.	0	0	0	1
2063	32	An aeroplane executes a steady glide at the speed for minimum glide angle. If the forward speed is kept constant, what is the effect of a lower mass? Rate of descent / Glide angle / CL/CD ratio	increases / increases / decreases	decreases / constant / decreases	increases / increases / constant	increases / constant / increases	1	0	0	0
2064	32	An aeroplane is in a power off glide at best gliding speed. If the pilot increases pitch attitude the glide distance:	remains the same.	may increase or decrease depending on the aeroplane.	decreases.	increases.	0	0	1	0
2065	32	The speed V2 of a jet aeroplane must be greater than:	1.05VLOF.	1.3V1.	1.2Vs.	1.2VMCG.	0	0	1	0
2066	32	Which of the following speeds can be limited by the 'maximum tyre speed'?	Lift-off IAS.	Lift-off TAS.	Lift-off EAS.	Lift-off groundspeed.	0	0	0	1
2067	32	Reduced take-off thrust should normally not be used when:	windshear is reported on the take-off path.	it is dark.	the runway is dry.	the runway is wet.	1	0	0	0
2068	32	Reduced take-off thrust should normally not be used when:	the runway is wet.	the OAT is ISA +10°C	anti skid is not usable.	it is dark.	0	0	1	0
2069	32	After engine failure the aeroplane is unable to maintain its cruising altitude. What is the procedure which should be applied?	Emergency Descent Procedure.	ETOPS.	Long Range Cruise Descent.	Drift Down Procedure.	0	0	0	1
2070	32	Which of the following statements is correct?	VR is the speed at which the pilot should start to rotate the aeroplane.	VR should not be higher than V1.	VR should not be higher than 1.05 VMCG.	VR is the speed at which, during rotation, the nose wheel comes off the runway.	1	0	0	0

2071	32	The 'climb gradient' is defined as the ratio of	true airspeed to rate of climb.	rate of climb to true airspeed.	the increase of altitude to horizontal air distance expressed as a percentage.	the increase of altitude to distance over ground expressed as a percentage.	0	0	1	0
2072	32	The best rate of climb at a constant gross mass	decreases with increasing altitude since the thrust available decreases due to the lower air density.	increases with increasing altitude since the drag decreases due to the lower air density.	increases with increasing altitude due to the higher true airspeed.	is independent of altitude.	1	0	0	0
2073	32	As long as an aeroplane is in a positive climb	VX is sometimes below and sometimes above VY depending on altitude.	VX is always above VY.	VY is always above VMO.	VX is always below VY.	0	0	0	1
2074	32	Any acceleration in climb, with a constant power setting,	improves the climb gradient if the airspeed is below VX.	improves the rate of climb if the airspeed is below VY.	decreases rate of climb and increses angle of climb.	decreases the rate of climb and the angle of climb.	0	0	0	1
2075	32	If the thrust available exceeds the thrust required for level flight	the aeroplane ac celerates if the altitude is maintained .	the aeroplane de scends if the airspeed is maintained.	the aeroplane de celerates if it is in the region of reversed command.	the aeroplane decelerates if the altitude is maintained.	1	0	0	0
2076	32	The rate of climb	is angle of climb times true airspeed.	is the horizontal component of the true airspeed.	is approximatel y climb gradient times true airspeed divided by 100.	is the downhill component of the true airspeed.	0	0	1	0
2077	32	Which of the equations below expresses approximately the unaccelerated percentage climb gradient for small climb angles?	Climb Gradient = ((Thrust - Drag)/Weight) x 100	Climb Gradient = ((Thrust + Drag)/Lift) x 100	Climb Gradient = ((Thrust - Mass)/Lift) x 100	Cimb Gradient = (Lift/Weight) x 100	1	0	0	0
2078	32	Which statement is correct for a descent without engine thrust at maximum lift to drag ratio speed?	The higher the gross mass the greater is the speed for descent.	The higher the gross mass the lower is the speed for descent.	The higher the average temperature (OAT) the lower is the speed for descent.	The mass of an aeroplane does not have any effect on the speed for descent.	1	0	0	0
2079	32	In unaccelerated climb	lift equals weight plus the vertical component of the drag.	thrust equals drag plus the uphill component of the gross weight in the flight path direction.	thrust equals drag plus the downhill component of the gross weight in the flight path direction.	lift is greater than the gross weight.	0	0	1	0

2080	32	With one or two engines inoperative the best specific range at high altitudes is	reduced.	improved.	not affected.	first improved and later reduced.	1	0	0	0
2081	32	Which statement concerning the inclusion of a clearway in take-off calculation is correct?	V1 is increased.	V1 remains constant.	The field length limited take-off mass will increase.	The usable length of the clearway is not limited.	0	0	1	0
2082	32	Which of the following statements, concerning the obstacle limited take-off mass for performance class A aeroplane, is correct?	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".	It cannot be lower than the corresponding climb limited take-off mass.	It should be determined on the basis of a 35 ft obstacle clearance with the respect to the "net take-off flight path".	It should not be corrected for 30° bank turns in the take-off path.	0	0	1	0
2083	32	Concerning the landing gear, which of the following factors would limit the take-off mass?	Nitrogen pressure in the strut and brake temperature.	Rate of rotation of the wheel at lift off and brake energy.	Tyre pressure and brake temperature.	Rate of rotation of the wheel and tyre pressure.	0	1	0	0
2084	32	On a long distance flight the gross mass decreases continuously as a consequence of the fuel consumption. The result is:	The specific range and the optimum altitude increases.	The speed must be increased to compensate the lower mass.	The specific range increases and the optimum altitude decreases.	The specific range decreases and the optimum altitude increases.	1	0	0	0