

## Revision Questions

1. A turbine-engined aircraft burns fuel at 200 gals per hour (gph) with a Fuel Density of 0.8. What is the fuel flow if Fuel Density is 0.75?
  - a. 213 gph
  - b. 208 gph
  - c. 200 gph
  - d. 188 gph
2. An aircraft flying at 7500 ft, is cleared to descend to be level at 1000 ft, 6 NM before reaching a beacon. If ground speed is 156 kt and Rate of Descent is 800 fpm, how many miles before the beacon should descent begin?
  - a. 15.0
  - b. 30.2
  - c. 27.1
  - d. 11.1
3. After flying for 16 minutes at 100 kt TAS with a 20 kt tailwind, you have to return to the airfield of departure.  
You will arrive after:
  - a. 10 min 40 sec
  - b. 20 min
  - c. 24 min
  - d. 16 min
4. An aircraft is in cruising flight at FL095, IAS 155 kt.  
The pilot intends to descend at 500 ft/min to arrive overhead the MAN VOR at 2000 ft (QNH 1030 hPa).  
The TAS remains constant in the descent, wind is negligible, temperature standard.  
At which distance from MAN should the pilot commence the descent?
  - a. 42 NM
  - b. 40 NM
  - c. 45 NM
  - d. 48 NM
5. At a fuel check you have 60 US gallons (US.gal) of usable fuel remaining.  
Alternative fuel required is 12 US.gal. The flight time remaining is 1 hour 35 min.  
What is the highest consumption rate acceptable?
  - a. 33.0 US.gal/h
  - b. 37.9 US.gal/h
  - c. 30.3 US.gal/h
  - d. 21.3 US.gal/h
6. ATC require a descent from FL270 to FL160 to be level 6 NM before a VOR.  
If rate of descent is 800 feet per minute, mean ground speed is 256 kt, how far out from the VOR must descent be started?
  - a. 59 NM
  - b. 65 NM
  - c. 144 NM
  - d. 150 NM

7. **Given:**  
Track 355(T), wind velocity 340/30 kt, TAS 140 kt, total distance A to B 350 NM.  
What are the time and distance to the point of equal time between A and B?
- 75 min, 211 NM
  - 75 min, 140 NM
  - 50 min, 140 NM
  - 114 min, 211 NM
8. The fuel burn-off is 200 kg/h with a relative fuel density of 0.8. If the relative fuel density is 0.75, the fuel burn will be:
- 267 kg/h
  - 213 kg/h
  - 200 kg/h
  - 188 kg/h
9. You are flying at FL330, M 0.84, OAT -48°C, headwind 52 kt. The time is 1338 UTC. ATC clear you to be at 030W (570 NM away) at 1500 UTC. To what Mach No. do you have to adhere?
- 0.72
  - 0.76
  - 0.80
  - 0.84
10. Where would you find information regarding Customs and Health facilities?
- ATCC broadcasts
  - NOTAMs
  - NAV/RAD supplementments
  - AIPs
11. Where would you find information regarding Search and Rescue procedures?
- ATCC broadcasts
  - NOTAMs
  - SIGMETs
  - AIPs
12. An aircraft climbs from an airfield, elevation 1500 ft, QNH 1023 hPa, to FL75. What height does the aircraft have to climb?  
(Assume 1 hPa = 30 ft.)
- 6600 ft
  - 7800 ft
  - 6300 ft
  - 6000 ft
13. Given by a met station elevation at 4000 ft where QNH is 1003 hPa. The minimum obstruction clearance altitude (MOCA) is 8500 ft. Assume 30 ft per hPa. What is the minimum pressure altitude?
- 1280 ft
  - 8500 ft
  - 8200 ft
  - 8800 ft

14. Given:  
Magnetic track 215; mountain elevation 11 600 ft; local airfield gives QNH as 1035 hPa;  
Required terrain clearance 1500 ft; temperature ISA - 15°C.
- Which of the following is the minimum flight level considering the temperature?
- a. FL150
  - b. FL140
  - c. FL120
  - d. FL110
15. Multi-engine a/c on IFR flight.  
Given:  
trip fuel 65 US.gal;  
contingency 5% trip;  
alternate fuel including final reserve 17 US.gal; usable fuel at departure 93 US.gal. At a point halfway to destination, fuel consumed is 40 US.gal.
- Assuming fuel consumption is unchanged, which of the following is correct?
- a. At departure reserve fuel was 28 US.gal
  - b. At destination required reserves remain intact
  - c. Remaining fuel is insufficient to reach destination with reserves intact
  - d. Remaining fuel is insufficient to reach the destination
16. Refer to ED-6. You are at position N4759 E01015. Which Flight Information Service should you contact?
- a. MEMMINGEN 117.20 MHz
  - b. MEMMINGEM 135.60 MHz
  - c. MUNCHEN 126.95 MHz
  - d. MUNCHEN 131.22 MHz
17. Refer to Jeppesen Manual ED-6.  
An aeroplane is flying VFR and approaching position TANGO (N4837 E00916) at FL55 and on a magnetic track of 090.  
The distance from TANGO is 20 NM.  
The navigation aid and frequency at TANGO is:
- a. VORTAC 112.50 kHz
  - b. DME 112.50 MHz
  - c. VOR 112.50 with no DME
  - d. VORTAC 112.50 MHz
18. Refer to Jeppesen Manual ED-6.  
Flying from position ERBACH (N4821 E00955) to POLTRINGEN airport (N4833 E00857).  
Find the magnetic course and distance.
- a. 108/60 NM
  - b. 252/41 NM
  - c. 287/41 NM
  - d. 287/60 NM

19. Refer to Jeppesen Manual ED-6.  
Flying from position SIGMARINGEN (N4805 E00913) to BIBERACH airport (N4807 E00946).  
Find the magnetic course and distance.
- a. 093/41 NM
  - b. 086/22 NM
  - c. 267/22 NM
  - d. 086/32 NM
20. Refer to Jeppesen Manual ED-6.  
Flying VFR from PEITING (4748N 01055.5E) to IMMENSTADT (4733.5N 01013.0E)  
determine the magnetic course.
- a. 077
  - b. 243
  - c. 257
  - d. 063
21. Refer to Jeppesen Manual ED-6.  
Flying VFR from VILLINGEN (N4758 E00831) to FREUDENSTADT (N4828 E00824),  
determine the distance.
- a. 54 NM
  - b. 29 km
  - c. 29 NM
  - d. 33 NM
22. Refer to Jeppesen Manual ED-6.  
Give the frequency of the GRENCHE VOR at N4711 E00725.
- a. 108.65 MHz
  - b. 326 kHz
  - c. channel 23
  - d. 120.1 MHz
23. Refer to Jeppesen Manual ED-6.  
Give the frequency of ZURICH VOLMET.
- a. 127.2 MHz
  - b. 127.2 kHz
  - c. 128.525 MHz
  - d. 118.1 MHz
24. Refer to Jeppesen Manual ED-6.  
The GRENCHE LSZG aerodrome (N4711 E00725) has a tower frequency of 120.10 MHz. The "(V)" after the frequency indicates:
- a. available on request
  - b. only to be used during daylight
  - c. available for VFR flight only
  - d. VDF available

25. Refer to Jeppesen Manual ED-6.  
The magnetic track from VILLINGEN (N4803.5 E00827.0) to FREUDENSTADT (N4828.0 E00824.0) is:
- a. 176
  - b. 004
  - c. 185
  - d. 356
26. Refer to Jeppesen Manual ED-6.  
What is the frequency for Stuttgart ATIS?
- a. 126.12 MHz
  - b. 128.95 MHz
  - c. 118.60 MHz
  - d. 115.45 MHz
27. Refer to Jeppesen Manual ED-6.  
What is the navaid at 4830N 00734E?
- a. VORTAC/NDB
  - b. NDB
  - c. TACAN
  - d. VOR/DME
28. Refer to Jeppesen Manual ED-6.  
What navigation or communications facilities are at N4855 E00920?
- a. NDB
  - b. TACAN
  - c. VOR/DME
  - d. VORTAC
29. Refer to Jeppesen Manual ED-6.  
What navigation or communications facilities are at N4822.9 E00838.7?
- a. NDB
  - b. VOR
  - c. VOR/DME
  - d. VORTAC
30. The quantity of fuel which is calculated to be necessary for a jet aeroplane to fly IFR from departure to destination aerodrome is 5325 kg.  
Fuel consumption in holding mode is 6000 kg/h. Alternate fuel is 4380 kg.  
Contingency should be 5% of trip fuel.
- What is the minimum required quantity of fuel which should be on board at take-off?
- a. 13 220 kg
  - b. 14 500 kg
  - c. 12 970 kg
  - d. 13 370 kg

31. Turbojet a/c, flying to an isolated airfield, with no destination alternative. On top of taxi, trip and contingency fuel, what fuel is required?
- Greater of 45 min + 15% of trip or 2 hours
  - 30 min holding @ 450 m AMSL
  - 30 min holding @ 450 m AAL
  - 2 hours at normal cruise consumption
32. CAP 697 SEP1 Fig 2.5.  
For a flight departing from MSL at 3663 lb, cruising at FL80 @2300 rpm, 20°C lean of peak EGT, in 40 kt headwind, calculate endurance.
- 4.75 h
  - 5.3 h
  - 6.1 h
  - 6.55 h
33. Minimum planned take-off fuel is 160 kg (30% total reserve is included). Assume the ground speed on this trip is constant.  
When half the distance has been flown, the remaining fuel is 70 kg.
- Is it necessary to divert to a nearby alternate?
- Diversion to a nearby alternate is necessary, because the remaining fuel is not sufficient
  - Diversion to a nearby alternate is not necessary, because the reserve fuel has not been used completely
  - Diversion to a nearby alternate is necessary, because it is allowed to calculate the fuel without the reserve
  - Diversion to a nearby alternate is necessary, unless the captain decides to continue on his own responsibility
34. Refer to CAP 697 MRJT Fig 4.4  
Given:  
DOM - 35 000 kg  
Expected Load - 12 000 kg  
Contingency, approach and hold fuel - 2500 kg  
Departure aerodrome elevation - 500 ft  
Alternate aerodrome elevation - 30 ft
- Find (i) Final Reserve Fuel (Jet aircraft) and (ii) the relevant elevation
- 2360 Alternate elevation
  - 1180 Destination elevation
  - 1180 Alternate elevation
  - 2360 Destination elevation

35. Refer to CAP 697 SEP1, Fig 2.1.  
Aerodrome elevation 2500 ft, OAT +10°C.  
Initial weight 3500 lb.  
Climb to FL140, OAT -5°C.

What are the climb time, fuel, NAM?

- a. 22 min, 6.5 US.gal, 46 NAM
  - b. 24 min, 7.5 US.gal, 50 NAM
  - c. 2 min, 1.0 US.gal, 4 NAM
  - d. 26 min, 8.5 US.gal, 54 NAM
36. Refer to CAP 697 SEP1, Fig 2.1.  
Given:  
FL75, OAT +5°C,  
during climb, average headwind component 20 kt,  
take-off from MSL with initial mass of 3650 lb.

Find time and fuel to climb.

- a. 11 min, 3.6 US.gal
  - b. 7 min, 2.6 US.gal
  - c. 9 min, 2.7 US.gal
  - d. 9 min, 3.3 US.gal
37. Refer to CAP 697 SEP1, Fig 2.2.3.  
Given:  
FL75, OAT +10°C,  
Lean mixture, 2300 rpm.

Find fuel flow (GPH) gallons per hour and TAS.

- a. 11.6 GPH 160 kt
  - b. 68.5 GPH 160 kt
  - c. 71.1 GPH 143 kt
  - d. 11.6 GPH 143 kt
38. Refer to CAP 697 SEP1 Fig 2.4  
Given:  
Aeroplane mass at start up 3663 lb  
fuel load (density 6 lb/gal) 74 gal  
Take-off altitude sea level  
Headwind 40 kt  
Cruise altitude 8000 ft  
Power setting full throttle 2300 rpm  
20°C lean of peak

Calculate the range.

- a. 633 NM
- b. 844 NM
- c. 730 NM
- d. 547.5 NM

39. Refer to CAP 697, SEP1, Fig 2.5.

Given: FL75;

Lean mixture; Full throttle/2300 rpm;

Take-off fuel 444 lb;

Take-off from MSL.

Find endurance in hours.

- a. 5 h 12 min
  - b. 5 h 20 min
  - c. 4 h 42 min
  - d. 5 h 23 min
40. The still air distance in the climb is 189 nautical air miles and time 30 minutes. What ground distance would be covered in a 30 kt headwind?

- a. 189 NM
- b. 203 NM
- c. 174 NM
- d. 193 NM

41. Turbojet a/c;  
taxi fuel 600 kg; fuel flow cruise 10 000 kg/h;  
fuel flow hold 8000 kg/h; alternate fuel 10 200 kg;  
flight time 6 hours; visibility at destination 2000 m.

What is the minimum ramp fuel?

- a. 80 500 kg
  - b. 79 200 kg
  - c. 77 800 kg
  - d. 76 100 kg
42. What is Decision Point Procedure?  
It is a procedure to reduce the amount of fuel carried on a flight by:
- a. reducing contingency fuel from 10% to 5% of trip fuel
  - b. reducing contingency fuel to only that required from Decision Point to Destination
  - c. reducing trip fuel to only that required from Decision Aerodrome to Destination
  - d. reducing trip distance
43. What is the purpose of Decision Point Procedure?
- a. Carry minimum fuel to increase Traffic Load
  - b. Increase safety of the flight
  - c. Reduce landing mass to avoid stressing the aircraft
  - d. To assist in decision making at refuelling



44. When calculating the fuel required to carry out a given flight, one must take into account:

1. the wind
2. foreseeable airborne delays
3. other weather forecasts
4. any foreseeable conditions which may delay landing

The combination which provides the correct statement is:

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

45. Refer to CAP 697 MEP1 Fig 3.2.  
A flight is to be made in a multi-engine piston aeroplane.

Given:

Cruising level 11 000 ft

OAT in the cruise -15°C

Usable fuel 123 US gallons

The power is set to economy cruise.

Find the range in NM with 45 min reserve fuel at 45% power.

- a. 752 NM
- b. 852 NM
- c. 610 NM
- d. 602 NM

46. CAP 697 MRJT1 Fig 4.5.2 & 4.5.3.2  
For a flight from B to C at FL310. M 0.74, ISA - 12°C,  
957 NGM, 40 kt tailwind;  
weight 50 100 kg.

How much fuel is required to fly to C?

- a. 4570 kg
- b. 4600 kg
- c. 4630 kg
- d. 4170 kg

47. CAP 697 MRJT1 Fig 4.7.2.  
ETOPS - a/c can not travel more than 120 minutes from a suitable (sic, should read "Adequate") airfield. Assume LRC and diversion weight of 40 000 kg.

What is the still air diversion distance?

- a. 735
- b. 794
- c. 810
- d. 875

48. Ref CAP 697 MRJT1 Fig 4.2 & 4.5.3.2  
Estimated take-off mass 57 000 kg. Trip distance 150 NM. Temperature ISA-10°C.  
Cruise at M 0.74.

What is the short distance cruise altitude and TAS?

- a. 25 000 ft & 445 kt
- b. 33 000 ft & 420 kt
- c. 25 000 ft & 435 kt
- d. 33 000 ft & 430 kt

49. Ref CAP 697 MRJT1, Fig 4.5.3.1. Aircraft mass at top of climb 61 500 kg. Distance 385 NM. FL350, OAT -54.3°C. Tailwind of 40 kt.

Using Long Range Cruise, how much fuel is required?

- a. 2200 kg
- b. 2100 kg
- c. 2300 kg
- d. 2000 kg

50. Refer CAP 697 MRJT Fig 4.3.5  
Tailwind component 10 kt  
Temp ISA -10°C Break release 63 000 kg  
Trip fuel overall 20 000 kg

What is the maximum possible trip distance?

- a. 3640
- b. 3740
- c. 3500
- d. 3250

51. Refer CAP 697 MRJT Fig 4.4  
Given:  
Mean gross mass 47 000 kg  
The fuel required for a 45 min holding at racetrack pattern at 5000 ft is:

- a. 1090
- b. 1690
- c. 1635
- d. 1125

52. Refer to CAP 697 Fig 4.1  
Given:  
Cruise weight 53 000 kg; LRC/ M 0.74; cruise at FL310. What is the fuel penalty?

- a. 0%
- b. 1%
- c. 4%
- d. 10%

53. Refer to CAP 697 Fig 4.5.1.  
Given:  
aerodrome at MSL; cruise at FL280; ISA-10°C; Brake release mass 57 500 kg. What is the climb fuel required?
- a. 1100 kg
  - b. 1150 kg
  - c. 1138 kg
  - d. 2200 kg
54. Refer to CAP 697 Fig 4.5.1.  
Given:  
Track 340(T); W/V 280/40 kt; aerodrome elevation 387 ft; ISA -10°C; Brake release mass 52 000 kg; cruise at FL280.  
What are the climb fuel and time?
- a. 15 min, 1100 kg.
  - b. 12 min, 1100 kg.
  - c. 10 min, 1000 kg.
  - d. 11 min, 1000 kg.
55. Refer to CAP 697 MRJT Fig 4.3.1.  
Trip distance 1900 NM, fuel on board 15 000 kg, landing weight 50 000 kg. What is the minimum pressure altitude for this flight?
- a. 17 000 ft
  - b. 10 000 ft
  - c. FL370
  - d. FL250
56. Refer to CAP 697 MRJT1 Fig 4.2 and 4.5.3.2.  
Given:  
Brake release weight 45 000 kg, trip distance 120 NM, temperature ISA-10°C, cruise at M 0.74.  
Find short distance cruise altitude and TAS.
- a. FL370 / 424 kt
  - b. FL250 / 435 kt
  - c. FL370 / 414 kt
  - d. FL250 / 445 kt
57. Refer to CAP 697, MRJT1 Fig 4.1.  
Find the OPTIMUM ALTITUDE for the twin-jet aeroplane.  
Given: Cruise mass = 54 000 kg,  
Long Range Cruise or 0.74 Mach.
- a. 35 300 ft
  - b. 34 600 ft
  - c. maximum operating altitude
  - d. 33 800 ft

58. Refer to CAP 697 MRJT1, Fig 4.2.  
Find the **SHORT DISTANCE CRUISE ALTITUDE** for the twin-jet aeroplane.  
Given: Brake release mass = 45 000 kt, Temperature = ISA + 20°C,  
Trip distance = 50 Nautical Air Miles (NAM).
- 11 000 ft
  - 12 500 ft
  - 10 000 ft
  - 7500 ft
59. Refer to CAP 697 MRJT1 Fig 4.3.1.  
Given: Tailwind component 45 kt  
Temperature ISA -10°C      Cruise altitude 29 000 ft      Landing mass 55 000 kg
- For a flight of 2800 nautical ground miles, the (i) trip fuel and (ii) trip time respectively are:
- (i) 16 000 kg      (ii) 6 h 25 min
  - (i) 18 000 kg      (ii) 5 h 50 min
  - (i) 20 000 kg      (ii) 6 h 40 min
  - (i) 17 100 kg      (ii) 6 h 07 min
60. Refer to CAP 697, MRJT1 Fig 4.3.1c.  
For a flight of 2400 nautical ground miles the following apply:  
Temperature ISA -10°C      Cruise altitude 29 000 ft      Landing mass 45 000 kg  
Trip fuel available 16 000 kg
- What is the maximum headwind component which may be accepted?
- 35 kt
  - 15 kt
  - 0
  - 70 kt
61. Refer to CAP 697 MRJT1 Fig 4.3.3a  
Given:  
Cruise M 0.78, FL280, 50 000 kg, 200 NM, wind component 30 kt head. Find the fuel required.
- 1700 kg
  - 1740 kg
  - 1620 kg
  - 1970 kg
62. Refer to CAP 697 MRJT1, Fig 4.3.6.  
In order to find **ALTERNATE FUEL** and **TIME TO ALTERNATE**, the **AEROPLANE OPERATING MANUAL** shall be entered with:
- distance in NM, wind component, zero fuel mass
  - distance in NM, wind component, dry operating mass plus holding fuel
  - distance in NM, wind component, landing mass at alternate
  - distance in NM (NAM), wind component, landing mass at alternate

63. Refer to CAP 697, MRJT1, Fig 4.5.1. Given:  
Brake release mass = 58 000 kg, Temperature = ISA + 15°C.

The fuel required to climb from an airfield at elevation 4000 ft to FL300 is:

- a. 1350 kg
- b. 1400 kg
- c. 1450 kg
- d. 1250 kg

64. Refer to CAP 697 MRJT1 Fig 4.5.2 & 4.5.3.1.  
Given:

Long range cruise at FL340

Distance C-D 3200 NM      Temperature deviation from ISA +12°C

Tailwind component 50 kt

Gross mass at C 55 000 kg

The fuel required C-D is:

- a. 17 500 kg
- b. 14 300 kg
- c. 17 700 kg
- d. 14 500 kg

65. Refer to CAP 697 MRJT1, Fig 4.5.2 and 4.5.3.4.  
Given:

Distance C - D 540 NM

Low Level Cruise 300 KIAS at FL210,

Temperature Deviation from ISA = +20°C      Headwind component = 50 kt

Gross mass at C = 60 000 kg

The fuel required from C to D is:

- a. 4250 kg
- b. 4620 kg
- c. 3680 kg
- d. 3350 kg

66. Refer to CAP 697 MRJT1, Fig 4.5.3.1.  
Given :

flight time from top of climb to the en route point in FL280 is 48 min. Cruise procedure is long range cruise (LRC), Temperature is ISA - 5°C.

Take-off mass = 56 000 kg,

Climb fuel = 1100 kg.

Find distance in NAM for this leg and fuel consumption.

- a. 437 NAM, 2106 kg
- b. 350 NAM, 2000 kg
- c. 345 NAM, 1994 kg
- d. 345 NAM, 2006 kg

67. Refer to CAP 697, MRJT1, Fig 4.1.  
Given:  
Brake release weight 55 500 kg; LRC/M 0.74. Find optimum altitude.
- 33 800 ft
  - 34 500 ft
  - 35 300 ft
  - maximum operating altitude
68. Refer to CAP 697 MRJT1, Fig 4.3.1.  
Given:  
estimated zero fuel mass 50 t; estimated landing mass at destination 52 t ; final reserve fuel 2 t; alternate fuel 1 t; flight to destination, distance 720 NM, true course 030, W/V 340/30; cruise: LRC, at FL330 outside air temperature -30°C. Find estimated trip fuel and time.
- 4800 kg / 01 h 45 min
  - 4400 kg / 02 h 05 min
  - 4750 kg / 02 h 00 min
  - 4600 kg / 02 h 05 min
69. Refer to CAP 697 MRJT1 Fig 4.3.1c.  
Within the limits of the data given, a mean temperature increase of 30°C will affect the trip time by approximately:
- 5%
  - +5%
  - +8%
  - 7%
70. Refer to CAP 697 MRJT1 Fig 4.3.2a.  
Planning a flight from Paris (Charles de Gaulle) to London (Heathrow) for a twin-jet aeroplane. Power setting: M 0.74; FL280; Landing mass 50 000 kg; Distance to use 200 NM; W/V from Paris to London is 280/40, Mean track 340(T). Find the estimated trip fuel.
- 1550 kg
  - 1740 kg
  - 1900 kg
  - 1450 kg
71. Refer to CAP 697 MRJT1 Fig 4.3.3c  
Given:  
Twin-jet aeroplane, ground distance to destination 1600 NM, headwind component 50 kt, FL330, cruise 0.78 Mach, ISA Deviation +20°C and landing mass 55 000 kg. Find fuel required and trip time with simplified flight planning.
- 12 250 kg, 04 h 00 min
  - 11 400 kg, 04 h 12 min
  - 11 600 kg, 04 h 15 min
  - 12 000 kg, 03 h 51 min

72. Refer to CAP 697 MRJT1 Fig 4.3.5.  
Given:  
Headwind 50 kt; Temperature ISA+10°C; Brake release mass 65 000 kg; Trip fuel 18 000 kg. What is the maximum possible trip distance?
- a. 3480 NGM
  - b. 2540 NGM
  - c. 3100 NGM
  - d. 2740 NGM
73. Refer to CAP 697 MRJT1 Fig 4.3.6.  
Given: Distance to alternate 400 NM      Landing mass at alternate 50 000 kg  
Headwind component 25 kt
- The alternate fuel required is:
- a. 2550 kg
  - b. 2800 kg
  - c. 2900 kg
  - d. 2650 kg
74. Refer to CAP 697 MRJT1, Fig 4.3.6.  
Given:  
DOM 35 500 kg, estimated load 14 500 kg, final reserve fuel 1200 kg,  
distance to alternate 95 NM, average true track 219, headwind component 10 kt.
- Find fuel and time to alternate.
- a. 800 kg / 24 min
  - b. 1100 kg / 44 min
  - c. 1100 kg / 25 min
  - d. 800 kg / 40 min
75. Refer to CAP 697 MRJT1 Fig 4.4.  
Given:  
Mean gross mass 47 000 kg  
The fuel required for 50 minutes holding in a racetrack pattern at 5000 ft is:
- a. 2180 kg
  - b. 1850 kg
  - c. 1817 kg
  - d. 1125 kg
76. Refer to CAP 697 MRJT1, Fig 4.4.  
The final reserve fuel taken from the HOLDING PLANNING table for the twin-jet aeroplane is based on the following parameters:
- a. pressure altitude, aeroplane mass and flaps up with minimum drag airspeed
  - b. pressure altitude, aeroplane mass and flaps down with maximum range speed
  - c. pressure altitude, aeroplane mass and flaps up with maximum range speed
  - d. pressure altitude, aeroplane mass and flaps down with minimum drag airspeed

77. Refer to CAP 697 MRJT1, fig 4.5.1.  
Given:  
Brake release mass 57 500 kg, temperature ISA - 10°C, headwind component 16 kt  
initial FL280,

Find: still air distance (NAM) and ground distance for the climb.

- a. 67 NAM / 71 NM
- b. 59 NAM / 62 NM
- c. 62 NAM / 59 NM
- d. 71 NAM / 67 NM

78. Refer to CAP 697 MRJT1, fig 4.5.1.  
Planning an IFR flight from Paris (Charles de Gaulle) to London (Heathrow) for the twin-jet aeroplane.  
Given:  
Estimated take-off mass 52 000 kg, Airport elevation 387 ft, FL280,  
W/V 280/40 kt, ISA deviation -10°C, average true course 340.

Find the time to top of climb.

- a. 3 min
- b. 11 min
- c. 12 min
- d. 15 min

79. Refer to CAP 697 MRJT1 fig 4.5.3.1.  
Given:  
FL330; COAT -63°C; Weight 50 500 kg What is TAS?

- a. 411 kt
- b. 433 kt
- c. 421 kt
- d. 423 kt

80. Refer to CAP 697 MRJT1 fig 4.5.3.1.  
Given:  
Long Range Cruise at FL350  
OAT -45°C  
Gross mass at the beginning of the leg 40 000 kg  
Gross mass at the end of the leg 39 000 kg

Find: True airspeed (TAS) and cruise distance (NAM) for a twin-jet aeroplane

- a. TAS 433 kt, 227 NAM
- b. TAS 423 kt, 227 NAM
- c. TAS 433 kt, 1163 NAM
- d. TAS 423 kt, 936 NAM

81. Refer to CAP 697 MRJT1 fig 4.5.3.1.  
LRC FL330 Temp -63°C Mass 54 100 kg time 29 min  
Find the fuel consumed.

- a. 1207 kg
- b. 1191 kg
- c. 1092 kg
- d. 1107 kg



82. Refer to CAP 697 MRJT1 fig 4.5.4.

A descent is planned at M 0.74/250 KIAS from 35 000 ft to 5000 ft.

How much fuel will be consumed during this descent?

- a. 278 kg
- b. 290 kg
- c. 150 kg
- d. 140 kg

83. Refer to CAP 697 MRJT1 fig 4.5.4a and Jeppesen Manual LONDON Heathrow 10-2 STAR

Aircraft mass 49 700 kg, FL280.

Plan a descent to Heathrow elevation. What is the descent time?

- a. 8 min
- b. 10 min
- c. 17 min
- d. 19 min

84. Refer to CAP 697 MRJT1 simplified flight planning.

Planning a flight from Paris (CDG) to London Heathrow for a twin-jet aeroplane. The wind from London to Manchester is 250/30 kt; mean track 350; distance 160 NM.

Assume the landing mass at alternate is about 50 000 kg.

Find the alternate fuel and time.

- a. 1200 kg, 20 min
- b. 1300 kg, 28 min
- c. 1600 kg, 36 min
- d. 1450 kg, 32 min

85. Reference computer flight plans. Are they able to account for bad weather in calculating fuel required?

- a. can automatically allow extra consumption for anti-icing use
- b. can automatically divert route around forecast thunderstorms
- c. no
- d. can automatically allow for poorly maintained engines

86. Which statements are correct about computer flight plans?

- 1) They can file the flight plan for you.
- 2) In the event of an in-flight re-routing computer automatically generates a new flight plan.

- a. 1 only
- b. 2 only
- c. Neither
- d. Both

87. A flight is planned from L to M, distance 850 NM. Wind component out is 35 kt (TWC), TAS 450 kt. Mean fuel flow out is 2500 kg/h, mean fuel flow inbound is 1900 kg/h and the fuel available is 6000 kg.

The time and distance to PSR is :

- a. 1 h 30 min, 660 NM
- b. 1 h 30 min, 616 NM
- c. 1 h 16 min, 606 NM
- d. 1 h 16 min, 616 NM

88. Find the distance to the POINT OF SAFE RETURN (PSR).

Given:

Maximum useable fuel = 15 000 kg, minimum reserve fuel = 3500 kg,

Outbound: TAS 425 kt, headwind component = 30 kt, fuel flow = 2150 kg/h.

Return: TAS 430 kt, tailwind component = 20 kt, fuel flow = 2150 kg/h.

- a. 1491 NM
- b. 1125 NM
- c. 1143 NM
- d. 1463 NM

- 89.

Given:

15 000 kg total fuel, reserve 1500 kg, TAS 440 kt,

wind component 45 kt head outbound, average fuel flow 2150 kg/h.

What is the distance to the point of safe return?

- a. 1520 NM
- b. 1368 NM
- c. 1702 NM
- d. 1250 NM

- 90.

Given:

fuel flow 2150 kg/h,

total fuel in tanks 15 000 kg,

fuel reserve required on arrival 3500 kg, TAS outbound 420 kt, wind -30 kt,

TAS home bound 430 kt, wind +20 kt.

Find the time to point of safe return.

- a. 2 h 06 min
- b. 1 h 26 min
- c. 3 h 33 min
- d. 2 h 52 min

91. Given:  
Safe endurance = 5 hours  
True track = 315  
W/V = 100/20  
TAS = 115

What is distance to PSR?

- a. 205 NM
  - b. 100 NM
  - c. 282 NM
  - d. 141 NM
92. Distance between airports = 340 NM  
True track = 320  
W/V = 160/40  
TAS = 110

Distance to PET is:

- a. 121 NM
  - b. 219 NM
  - c. 112 NM
  - d. 228 NM
93. Flying from A to B, 270 NM, true track 030, wind velocity 120/35, TAS 125 kt.

What are the distance and time to the point of equal time?

- a. 141 NM, 65 min
  - b. 141 NM, 68 min
  - c. 135 NM, 68 min
  - d. 150 NM, 65 min
94. Given:  
Course A to B 088(T) Distance 1250 NM Mean TAS 330 kt  
Mean W/V A to B 340/60 kt

The time from A to the point of equal time between A and B is:

- a. 1 hour 54 minutes
  - b. 1 hour 44 minutes
  - c. 1 hour 39 minutes
  - d. 2 hours 02 minutes
95. Given:  
distance A to B = 2050 NM. Mean ground speed "on" = 440 kt  
Mean ground speed "back" = 540 kt

The distance to the point of equal time (PET) between A and B is:

- a. 1153 NM
- b. 1025 NM
- c. 920 NM
- d. 1130 NM

96. If CAS is 190 kt, altitude 9000 ft, temperature ISA -10°C True course 350, W/V 320/40, distance from departure to destination is 350 NM and endurance 3 hours, actual time of departure is 1105 UTC.

The PET is reached at:

- a. 1233 UTC
- b. 1221 UTC
- c. 1214 UTC
- d. 1203 UTC

97. If CAS is 190 kt, altitude 9000 ft, temperature ISA - 10°C true course 350, W/V 320/40 distance from departure is 350 NM, endurance 3 hours.

The distance to PET is:

- a. 203 NM
- b. 170 NM
- c. 211 NM
- d. 330 NM

98. An appropriate flight level for IFR flight in accordance with semi-circular height rules on a course of 180 degrees magnetic is:

- a. FL105
- b. FL90
- c. FL95
- d. FL100

99. For an IFR flight using ICAO semi-circular cruising levels on a magnetic track of 200, which is a suitable level?

- a. FL290
- b. FL300
- c. FL310
- d. FL320

100. Refer to Annex A and Jeppesen E(HI)4 SID Paris (Charles de Gaulle) 20-3. Planning an IFR flight from Paris to London (Heathrow) for the MRJT. Departure SID ABB 8A. Assume variation 3°W. Determine the magnetic course, ground speed and wind correction angle from TOC to ABB 116.6:

- a. MC 349, GS 416 kt, WCA -5
- b. MC 169, GS 416 kt, WCA +5
- c. MC 349, GS 416 kt, WCA +5
- d. MC 169, GS 450 kt, WCA +4

101. Refer to Jeppesen E(LO)1. What is the NBD serving Belfast City airport?

- a. BEL 117.2 MHz
- b. OY 332 kHz
- c. HB 420 kHz
- d. BEL 117.2 kHz

102. Refer to Jeppesen E(LO)6.  
Airways routing between CHEB (OKG - N5003.3 E01224.4) to RODING (RDG - N4902.4 E01231.6).  
Which is the lowest usable Flight Level?
- a. FL40
  - b. FL70
  - c. FL80
  - d. FL50
103. Refer to Jeppesen Manual AMSTERDAM SCHIPOL 11-6. ILS DME RWY 22.  
Complete the blanks for the missed approach:  
"Turn ..... on track ..... climbing to ..... (.....)"
- a. left, 005, 2000' 2012'
  - b. left, 266, 2000' 2102'
  - c. right, 240, 2000' 2011'
  - d. left, 160, 2000' 2014'
104. Refer to Jeppesen Manual, any SID chart for London Heathrow.  
Which of the following is the correct Minimum Safe Altitude (MSA) for the airport?
- a. East sector 2300 ft within 50 NM
  - b. West sector 2300 ft within 25 NM
  - c. East sector 2100 ft within 50 NM
  - d. West sector 2100 ft within 25 NM
105. Refer to Jeppesen Manual chart E(HI) 4 FOR EXAMS.  
An aeroplane has to fly from about 10 NM south east of Salzburg (N4800 E01254) to Klagenfurt (N4636 E01434).  
Which statement is correct?
- a. The minimum obstacle clearance altitude (MOCA) on this route is 10 800 ft AMSL
  - b. The minimum en route altitude (MEA) is 13 400 ft
  - c. The minimum sector altitude (MSA) is 13 400 ft
  - d. The minimum grid safe altitude is 13 400 AMSL
106. Refer to Jeppesen Manual chart E(HI)4 FOR EXAMS.  
An appropriate flight level for flight on airway UG1 from ERLANGEN ERL 114.9 (4939N 01109E) to FRANKFURT FFM 114.2 (5003N 00838E) is:
- a. FL300
  - b. FL290
  - c. FL310
  - d. FL320
107. Refer to Jeppesen Manual chart E(HI)4 FOR EXAMS.  
The magnetic course and distance from ST PREX SPR 113.9 (N4628 E00627) to FRIBOURG FRI 115.1 (N4647 E00714) on airway UG60.
- a. 048 / 46 NM
  - b. 061 / 37 NM
  - c. 061 / 28 NM
  - d. 041 / 78 NM

108. Refer to Jeppesen Manual chart E(HI)4 FOR EXAMS.  
The radio aid at STAD (N5145 E00415) is:
- an NDB , frequency 386 kHz
  - a VOR frequency 386 MHz
  - a VOR/DME on channel 386
  - a TACAN on channel 386
109. Refer to Jeppesen Manual chart E(HI)4 FOR EXAMS.  
The radio aid at ZURICH (N4735.6 E00849.1) is:
- an NDB , frequency 115.0 kHz
  - a VOR , frequency 115.0 MHz
  - a VOR/DME, frequency 115.0 MHz
  - a TACAN on channel 11
110. Refer to Jeppesen Manual chart E(HI)5 FOR EXAMS.  
An appropriate FL for flight along airway UG5 from MENDE-NASBINALS MEN 115.3 (N4436 E00310) to GAILLAC GAI 115.8 (N4357 E00150) is:
- FL280
  - FL290
  - FL300
  - FL310
111. Refer to Jeppesen Manual chart E(HI)5.  
The magnetic course and distance from LIMOGES LMG 114.5 (N4549 E00102) to CLERMONT FERRAND CMF 117.5 (N4547 E00311) on airway UG22 are:
- 046 / 70 NM
  - 067 / 122 NM
  - 113 / 142 NM
  - 094 / 90 NM
112. Refer to Jeppesen Manual chart E(LO)1.  
The magnetic course / distance from WALLASEY WAL 114.1 (N5324 W00308) to LIFFY (N5329 W00530) on airway B1 are:
- 279 / 114 NM
  - 279 / 85 NM
  - 311 / 114 NM
  - 311 / 85 NM
113. Refer to Jeppesen Manual chart E(LO)5.  
The airway intersection at RONNEBY (N5618 E01516) is marked by:
- a fan marker call sign LP
  - a TACAN call sign RON
  - an NDB call sign N
  - an NDB call sign LF

114. Refer to Jeppesen Manual chart E(LO)5.  
The magnetic course/ distance from EELDE EEL 112.4 (N5310 E00640) to WELGO (N5418 E00725) on airway A7 are:
- 024 / 023 / 73 NM
  - 024 / 023 / 47 NM
  - 024 / 023 / 67 NM
  - 037 / 038 / 50 NM
115. Refer to Jeppesen Manual E(HI)3.  
Are the VOR and TACAN nav aids at OSNABRUCH (N5212 E00817) co-located?
- Yes
  - VOR/DME only
  - VOR/NDB only
  - No
116. Refer to Jeppesen Manual E(HI)4 for exams.  
An aeroplane has to fly from Abbeville (5008.1N 00151.3E) to Biggin (5119.8 00000.2E).  
At Biggin you can find 141. This is:
- the average true course of the great circle from Biggin to Abbeville
  - the magnetic course to fly inbound to Biggin
  - the magnetic great circle course from Biggin to Abbeville
  - the radial, referenced to true north, of Biggin to fly inbound
117. Refer to Jeppesen Manual E(HI)4 for exams.  
Flying from ABBEVILLE (N5008.1 E00151.3) by UA20 to BIGGIN (N5119.8 E00002.2).  
What is the first suitable IFR FL above FL295?
- 300
  - 310
  - 320
  - 330
118. Refer to Jeppesen Manual E(HI)4 for exams.  
For a flight from Paris Charles de Gaulle to London Heathrow, what is the average true course?
- 320
  - 300
  - 120
  - 140
119. Refer to Jeppesen Manual E(HI)4 for exams.  
Of the following, the preferred airways routing from FRANKFURT FFM 114.2 (5003N 00838E) to KOKSY (5106N 00239E) above FL245, on a Wednesday is:
- UR10 NTM UB6 BUB ATS
  - UG108 SPI UG1
  - UB69 DINKI UB6 BUB ATS
  - UG1

120. Refer to Jeppesen Manual E(HI)4 for exams.  
The magnetic course/ distance from DINKESBUHL DKB 117.8 (4909N 01014E) to ERLANGEN ERL 114.9 (4939N 01109E) on airway UR11 are:
- 052/ 97 NM
  - 050/ 47 NM
  - 133/ 85 NM
  - 230/ 97 NM
121. Refer to Jeppesen Manual E(HI)4 for exams.  
The magnetic course and distance from SALZBURG SBG 113.8 (N4800 E01254) to STAUB (N4844 E01238) on airway UB5 is:
- 346/ 43 NM
  - 166/ 64 NM
  - 346/ 64 NM
  - 346/ 45 NM
122. Refer to Jeppesen Manual E(HI)4 for exams.  
What is the best route from CLACTON CLN (N5150.9 E00109.0) to MIDHURST MID (N5103.2 W00037.4)?
- UR12
  - TRIPO UR1 LAM UR1
  - UR123
  - UB29 LAM UR1
123. Refer to Jeppesen Manual E(HI)4 for exams.  
What is the lowest continuous MEA from WALLASEY (N5323.5 W00308.0) to MIDHURST (N5103.2 W00037.4) on UA34?
- FL245
  - FL290
  - 5300 ft
  - 16 800 ft
124. Refer to Jeppesen Manual E(HI)5 for exams.  
Given Leg MOULINS (N4642 E00338.0)/ DIJON (N4716.3 E00505.9).  
Find route designator and distance.
- UG12, 69 NM
  - D, 44 NM
  - UG21, 26 NM
  - Direct route, 69 NM
125. Refer to Jeppesen Manual E(HI)5 for exams.  
On a flight from AMBOISE (N4725.7 E00103.9) to AGEN (N4353.3 E00052.4)  
What is the best airway route above FL200?
- UB19 POI UB195
  - UH40 FOU CO UH20 PERIG UA34
  - UA34
  - UB19 CGC UA25



126. Refer to Jeppesen Manual E(HI)5 for Exams.  
The minimum en route altitude available on airway UR160 from NICE NIZ 112.4 (4346N 00715E) to BASTIA BTA 116.2 (4232N 00929E) is:
- a. FL250
  - b. FL260
  - c. FL210
  - d. FL200
127. Refer to Jeppesen Manual E(HI)5 for exams.  
What radio nav aids are shown at CHIOGGIA (4504N E01216)?
- a. VOR/DME freq 114.1, NDB freq 408
  - b. VOR freq 114.1, TACAN freq 408
  - c. VOR freq 114.1, TACAN channel 408
  - d. VOR/DME 114.1, DME freq 408
128. Refer to Jeppesen Manual E(LO)1.  
From SHANNON (N5243.3 W00853.1) by W13 to KORAK. What is meant by "5000" by the route centre line?
- a. MORA 5000 ft
  - b. MAA 5000 ft
  - c. MOCA 5000 ft
  - d. MEA 5000 ft
129. Refer to Jeppesen Manual E(LO)1.  
The minimum en route altitude that can be maintained continuously on airway G1 from STUMBLE 113.1 (5200N 00502W) to BRECON 117.45 (5143N 00316W) is:
- a. FL80
  - b. FL110
  - c. 4100 ft AMSL
  - d. 2900 ft AMSL
130. Refer to Jeppesen Manual E(LO)1.  
What nav aids are shown at TOPCLIFFE (N5412.2 W00122.4)?
- a. TACAN only, channel 84, TOP
  - b. TACAN and VOR, channel 84, 113.7, TOP
  - c. NDB 92 kHz, AB
  - d. VOR, 113.7 MHz, TOP
131. Refer to Jeppesen Manual E(LO)1.  
What radio navigation aid is at SHANNON (5243N 00853W)?
- a. VOR SHA 113.3 MHz only
  - b. VOR DME SHA 113.3 MHz
  - c. NDB frequency 353 kHz
  - d. TACAN frequency 113.3 kHz

132. Refer to Jeppesen Manual E(LO)2.  
What is the lowest MEA that can be flown continuously between Jersey (N4913.3 W00202.7) and LIZAD (N4935.4 W00420.3)?
- a. FL140
  - b. 1000 ft
  - c. FL60
  - d. 2800 ft
133. Refer to Jeppesen Manual E(LO)5.  
Fly by G9 from SUBI (N5222.8 E01435.3) to CZEMPIN (N5207.9 E01643.7).  
What is a suitable FL?
- a. FL50
  - b. FL60
  - c. FL70
  - d. FL80
134. Refer to Jeppesen Manual E(LO)5  
OSNABRUCH VOR and TACAN (5212N 00817E).  
What can be said about the VOR and TACAN?
- a. They are frequency paired
  - b. They are not frequency paired
  - c. They are frequency paired and have the same ident
  - d. They are not frequency paired and have different ident
135. Refer to Jeppesen Manual E(LO)5. See DENKO (N5249 E01550)  
What does "440 DRE" mean?
- a. 440 kHz plus ident
  - b. 440 kHz plus ident only when BFO switched on
  - c. 440 kHz plus ident only when BFO switched off
  - d. 440 MHz plus ADF only when BFO off
136. Refer to Jeppesen Manual E(LO)5.  
What is the lowest MEA that can be flown continuously between RONNE (N5504.0 E01445.7) and DOXON (N5526.9 E01810.0)?
- a. FL100
  - b. 1000 ft
  - c. FL60
  - d. 2500 ft
137. Refer to Jeppesen Manual instrument approach chart:  
LONDON HEATHROW ILS DME Rwy 09R (11-1).  
The Minimum Descent Altitude (MDA) for an ILS approach, glide slope out, is:
- a. 405 ft
  - b. 480 ft
  - c. 275 ft
  - d. 200 ft

138. Refer to Jeppesen Manual instrument approach chart ZURICH ILS Rwy 16 (11-2). The lowest published authorized RVR for an ILS approach, glide slope out, all other aids serviceable, aeroplane category A, is:
- a. 800 m
  - b. 600 m
  - c. 720 m
  - d. 1500 m
139. Refer to Jeppesen Manual LONDON HEATHROW ILS DME Rwy 09L (11-2). The decision altitude for an ILS straight in landing is:
- a. 480 ft
  - b. 280 ft
  - c. 200 ft
  - d. 400 ft
140. Refer to Jeppesen Manual, London page 10-2D, Ockham STARs. At Ockham what are the lowest holding level and maximum speed?
- a. 7000 ft, IAS 250 kt
  - b. 7000 ft, IAS 220 kt
  - c. FL140, IAS 220 kt
  - d. FL140, IAS 250 kt
141. Refer to Jeppesen Manual MADRID BARAJAS 10-2B STAR. Approaching the airfield from the South using UR10. What is the Initial Approach Fix for ILS RWY 33 ?
- a. VTB VOR
  - b. CJN VOR
  - c. CENTA
  - d. MOTIL
142. Refer to Jeppesen Manual MADRID, BARAJAS page 11-1. ILS DME Rwy 33. What is the minimum altitude for glide slope interception?
- a. 3500 ft
  - b. 4000 ft
  - c. 2067 ft
  - d. 1567 ft
143. Refer to Jeppesen Manual MUNICH ILS Rwy 26R (11-4). The ILS frequency and identifier are:
- a. 108.7 IMNW
  - b. 108.7 IMSW
  - c. 108.3 IMNW
  - d. 108.3 IMSW
144. Refer to Jeppesen Manual MUNICH NDB DME Rwy 26L approach (16-3) The frequency and identifier of the NDB for the published approaches are:
- a. 112.3 MUN
  - b. 108.6 DMS
  - c. 338 MNW
  - d. 400 MSW

145. Refer to Jeppesen Manual Munich SID (10-3D).  
Which is the correct departure via KEMPTEN from runway 26L?
- a. KEMPTEN THREE ECHO
  - b. KEMPTEN FIVE SIERRA
  - c. KEMPTEN THREE QUEBEC
  - d. KEMPTEN THREE NOVEMBER
146. Refer to Jeppesen Manual Munich STAR plates.  
With an easterly surface wind, approaching from the west, to Munich via the TANGO VOR. Which is the best STAR and its associated IAF (Initial Approach Fix)?
- a. Kempten 2T / BETOS
  - b. NDG 1T / ROKIL
  - c. RODING 1R / MOOSBURG
  - d. AALEN 1T / ROKIL
147. Refer to Jeppesen Manual Paris Charles-de-Gaulle, (21-7), ILS rwy 10.  
What is the ILS course?
- a. 088
  - b. 100
  - c. 118
  - d. 268
148. Refer to Jeppesen Manual SID chart for AMSTERDAM ARNEM (10-3B).  
The route distance from take-off runway 27 to ARNEM is:
- a. 67 NM
  - b. 35 NM
  - c. 59 NM
  - d. 52 NM
149. Refer to Jeppesen Manual SID chart for AMSTERDAM SCHIPOL (10-3).  
Which statement is correct for ANDIK departures from runway 19L?
- a. Maximum IAS 250 kt turning left at SPL 3.1 DME
  - b. Cross ANDIK below FL60
  - c. Contact SCHIPOL DEPARTURE 119.05 passing 2000 ft and report altitude
  - d. The distance to ANDIK is 25 NM
150. Refer to Jeppesen Manual, SID charts for Paris Charles-de-Gaulle.  
What is the distance to Abbeville on SID ABB 8 A?
- a. 72 NM
  - b. 74 NM
  - c. 72.5 NM
  - d. 74.5 NM

151. Refer to Jeppesen Manual STAR 10-2 and instrument approach chart 11-4 ILS/DME Rwy 27R for London Heathrow.  
Planning an IFR flight from Paris to London (Heathrow).  
Name the identifier and frequency of the initial approach fix (IAF) of the BIG2A arrival route.
- a. EPM 316 kHz
  - b. BIG 115.1 kHz
  - c. BIG 115.1 MHz
  - d. OCK 115.3 MHz
152. Refer to Jeppesen Manual STAR charts PARIS (Charles-de-Gaulle) (20-2).  
The route distance from CHIEVRES (CIV) to BOURSONNE (BSN) is:
- a. 73 NM
  - b. 83 NM
  - c. 88 NM
  - d. 96 NM
153. Refer to Jeppesen SPM, Paris, France plate 21-8 (ILS Rwy 10). What is the localizer course?
- a. 278
  - b. 088
  - c. 108.7
  - d. 178
154. Refer to the Zurich 10 - 2 STAR plate.  
On the BLM ZZ STAR, what is the routing to EKRON?
- a. From Denel Int, proceed to Sopim Int, intercept BLM 111 radial to Golke Int, intercept TRA 247 radial inbound (HOC 067 radial) to Ekro
  - b. Leave HOC VORDME on 067 radial (TRA 067 radial inbound) to Ekron
  - c. Leave WIL VORDME on 018 radial to Ekron
  - d. Leave BLM VORDME on 111 radial to Golke Int, intercept TRA 247 radial inbound (HOC 067 radial) to Ekron
155. Unless otherwise stated on charts for standard instrument departures the routes shown are given with:
- a. magnetic headings
  - b. true course
  - c. magnetic course
  - d. true headings
156. Refer to Jeppesen Manual 5AT(HI).  
Flying from 80N 170E to 75N 011E. Initial track is 177 grid.  
What is the initial true track?
- a. 177
  - b. 357
  - c. 347
  - d. 167

157. Refer to Jeppesen Manual chart 5AT(HI).  
The initial true course from A (65N 006E) to C (62N 020W) is:
- a. 272
  - b. 269
  - c. 256
  - d. 246
158. Refer to Jeppesen Manual chart 5AT(HI).  
What is the initial grid track from Stornoway (N5812.4 W00611.0) to Keflavik (N6400 W02240)?
- a. 320
  - b. 140
  - c. 313
  - d. 133
159. Refer to Jeppesen Manual chart 5AT(HI).  
Route PTS P from VIGRA (N6233.2 E00602.2) to ADOBI (N6830.0 E00300.0).  
What is the grid track?
- a. 353
  - b. 344
  - c. 173
  - d. 349
160. Refer to Jeppesen Manual chart NAP.  
The initial magnetic course from A (64N 006E) to C (62N 020W) is:
- a. 275
  - b. 267
  - c. 271
  - d. 262
161. Refer to Jeppesen Manual North Atlantic Plotting chart.  
Flying from A (N58 E004) to B (N62W020).  
What is the great circle distance?
- a. 775 NM
  - b. 755 NM
  - c. 740 NM
  - d. 720 NM
162. A "current flight plan" is:
- a. flight plan in the course of which radio communication should be practised between aeroplane and ATC
  - b. filed flight plan
  - c. flight plan with the correct time of departure
  - d. filed flight plan with amendments and clearances included

163. A repetitive flight plan (RPL) is filed for a scheduled flight: Paris-Orly to Angouleme, Paris-Orly as alternate.  
Following heavy snow falls, Angouleme airport will be closed at the expected time of arrival. The airline decides before departure to plan a re-routing of that flight to Limoges.
- It is not possible to plan another destination and that flight has to be simply cancelled that day (scheduled flight and not chartered)
  - The airline's Operations department has to transmit a change to the RPL to the ATC office, at least half an hour before the planned time of departure
  - The pilot in command must advise ATC of his intention to divert to Limoges at least 15 minutes before the planned time of arrival
  - The RPL must be cancelled for that day and an individual flight plan must be filed
164. An aircraft in the cruise has a calibrated airspeed of 150 kt, a true airspeed of 180 kt and an average ground speed of 210 kt.  
The speed box of the flight plan must be filled as follows:
- K0210
  - N0150
  - N0180
  - K0180
165. For a flight plan filed before flight, the indicated time of departure is:
- the time overhead the first reporting point after take-off
  - the time at which the flight plan is filed
  - the estimated off-block time
  - the time of take-off
166. For a radio equipped aircraft, the identifier in the ATS flight plan item 7 must always:
- be the RTF call sign to be used
  - include the aircraft registration
  - include the operating agency designator
  - include an indication of the aircraft type
167. For which flights are flight plans required?
- IFR flights.
  - IFR and VFR flights.
  - Flights crossing national boundaries.
  - Flights over water.
  - Public transport flights.
- ii, iii and iv
  - i, iii and v
  - i and iii
  - ii, iii, i and v

168. Given:  
 Maximum certificated take-off mass 137 000 kg  
 Actual take-off mass 135 000 kg

For item 9 of the ATS flight plan the wake turbulence category is:

- a. medium plus "M+"
- b. heavy/medium "H/M"
- c. medium "M"
- d. heavy "H"

169. Given the following flight plan information:

Trip fuel	136 kg		
Flight time	2.75 h	Reserve fuel	30% of trip
Fuel in tanks	Minimum	Taxi fuel	3 kg

State how "endurance" should be completed on the ICAO flight plan:

- a. 0338
- b. 0334
- c. 0245
- d. 0249

170. How many hours in advance of departure time should a flight plan be filed in the case of flights into areas subject to air traffic flow management (ATFM)?

- a. 3.00 h
- b. 0.30 h
- c. 1.00 h
- d. 0.10 h

171. If a pilot lands at an aerodrome other than the destination aerodrome specified in the ICAO flight plan, she must ensure that the ATS unit at the destination is informed within a specified time of her planned ETA at destination.  
 The time is:

- a. 45 min
- b. 30 min
- c. 15 min
- d. 10 min

172. If equipment listed in item 19 is not carried:

- a. circle boxes of equipment not carried
- b. tick the boxes of equipment carried
- c. cross out the boxes for equipment not carried
- d. list equipment carried in box 18 (other information)

173. If the destination airport has no ICAO indicator, in box 16 of your ATS flight plan, you write:

- a. ////
- b. AAAA
- c. XXXX
- d. ZZZZ



174. In an ATS flight plan an aircraft will be classified as "L" if its MTOM is:
- a. 27 000 kg
  - b. 10 000 kg
  - c. 57 000 kg
  - d. 7000 kg
175. In an ATS flight plan item 15 where either a route for which standard departure (SID) and a standard arrival (STAR) are provided:
- a. SID should be entered but not STAR
  - b. both should be entered
  - c. STAR should be entered but not SID
  - d. neither SID nor STAR should be entered
176. In flight, it is possible to:
- i) file an IFR flight plan.
  - ii) modify an active flight plan.
  - iii) cancel a VFR flight plan.
  - iv) close a VFR flight plan.
- (rules of the air annex 2 3.3.5)
- a. i and iii
  - b. i, ii, iii and iv
  - c. ii, iii and iv
  - d. i and iv
177. In order to comply with PANS-RAC, during an IFR flight, deviations from flight plan particulars should be reported to ATC.  
Concerning TAS and time, the minimum deviations which must be reported are:
- a. TAS 3% and time 3 minutes
  - b. TAS 5% and time 3 minutes
  - c. TAS 5 kt and time 5 minutes
  - d. TAS 10 kt and time 2 minutes
178. In the ATS flight plan item 15, for a flight along a designated route, where the departure aerodrome is not on or connected to that route:
- a. it is not necessary to indicate the point of joining that route as it will be obvious to the ATS unit
  - b. it is necessary only to give the first reporting point on that route
  - c. the letters "DCT" should be entered, followed by the point of joining the ATS route
  - d. the words "as cleared" should be entered
179. In the ATS flight plan item 15, it is necessary to enter any point at which a change of cruising speed takes place.  
For this purpose a "change of speed" is defined as:
- a. 10% TAS or 0.05 Mach or more
  - b. 20 kt or 0.05 Mach or more
  - c. 5% TAS or 0.01 Mach or more
  - d. 20 km per hour or 0.1 Mach or more

180. In the event that SELCAL is prescribed by an appropriate authority, in which section of the ATS flight plan will the SELCAL code be entered?
- a. Equipment
  - b. Route
  - c. Aircraft identification
  - d. Other information
181. Item 7 of the flight plan in accordance with PANS-RAC (DOC 4444) should always include, for an aircraft equipped with a radio:
- a. aircraft initialization
  - b. aircraft type
  - c. aircraft call sign
  - d. aircraft operator
182. Prior to an IFR flight, when filling in the ICAO flight plan, the time information which should be entered in box 16 "total elapsed time" is the time elapsed from:
- a. take-off until reaching the IAF (initial approach fix) of the destination aerodrome
  - b. taxi-out prior to take-off until the IAF
  - c. take-off until landing
  - d. taxi-out prior to take-off until completion of taxiing after landing
183. Reference ICAO flight plan.  
What is the maximum estimated elapsed time or distance between points on track mentioned in item 15 of the flight plan, for flights outside designated ATS routes?
- a. 30 min / 200 NM
  - b. 60 min / 370 NM
  - c. 90 min / 370 km
  - d. 120 min / 370 NM
184. Reference item 19 of the ICAO flight plan, endurance is:
- a. maximum flight time plus 45 minutes holding fuel
  - b. maximum flight time plus 30 minutes holding fuel
  - c. fuel endurance of the aircraft
  - d. total usable fuel required for the flight
185. Reference the ICAO flight plan, in item 15 (speed) this speed refers to:
- a. indicated airspeed
  - b. equivalent airspeed
  - c. initial cruising true airspeed
  - d. calculated ground speed
186. Standard equipment in item 10 is considered to be:
- a. VHF, RTF, ADF, VOR, ILS
  - b. HF, RTF, VOR, DME
  - c. VHF, VOR, ADF
  - d. VHF, RTF, ILS, VOR

187. The navigation plan reads:

Trip fuel	100 kg.
Flight time	1 h 35 min.
Taxi fuel	3 kg.
Block fuel	181 kg.

How should "endurance" be shown on the flight plan?

- a. 0204
- b. 0240
- c. 0249
- d. 0252

188. The planned departure time from the parking area is 1815 UTC. The estimated take-off time is 1825 UTC.

The IFR flight plan must be filed with ATC at the latest at:

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

189. "Total Elapsed Time" for an IFR flight, when filling in the ICAO flight plan at box 16, is the time elapsed from:

- a. take-off until landing
- b. take-off until reaching the IAF ( Initial Approach Fix) of the destination aerodrome
- c. taxi-out prior to take-off until taxiing after landing
- d. taxiing until the IAF (Initial Approach Fix) of the destination aerodrome

190. What is Total Elapsed Time on a VFR flight plan?

- a. From take-off to overhead destination
- b. From take-off to overhead destination + 15 min
- c. From take-off to landing
- d. From taxi to arrival on the gate

191. When filling in a flight plan, wake turbulence category is a function of:

- a. max certificated landing mass
- b. max certificated take-off mass
- c. estimated landing mass
- d. estimated take-off mass

192. When filling in item 9 of the flight plan and there is no aircraft designator listed, what should the entry be?

- a. None
- b. ZZZZ followed by an entry at item 18
- c. XXXX followed by an entry at item 18
- d. A descriptive abbreviation of the aircraft type

193. When submitting a flight plan before flight, departure time is:
- a. overhead the first reporting point
  - b. at which the aircraft leaves the parking area
  - c. of take-off
  - d. at which flight plan is filed
194. You have a flight plan, IFR, from Amsterdam to London. In the flight plan it is noted that you will deviate from the ATS route on passing the FIR boundary Amsterdam/London. The airway clearance reads "Cleared to London via flight plan route".

Which of these statements is correct?

- a. The filed deviation is not accepted
  - b. The route according to the flight plan is accepted
  - c. It is not allowed to file such a flight plan
  - d. You will get a separate clearance for the deviation
195. You have a mode A transponder (4 digits, 4096 codes) and mode C. Item 10 of the flight plan should show
- a. C
  - b. A
  - c. P
  - d. S
196. You have filed a flight plan for an uncontrolled flight and suffer a delay prior to departure. After how long a delay must you restate your EOBT?
- a. 30 min
  - b. 40 min
  - c. 60 min
  - d. 90 min
197. You make a diversion from the route given in the flight plan and land at an uncontrolled airfield. Within what time after landing should you inform ATC?
- a. 10 min
  - b. 20 min
  - c. 30 min
  - d. 45 min
198. Refer to Jeppesen Manual - VFR Section Athinai Hellinikon 29-1 What is the variation?
- a. 3° east
  - b. 3° west
  - c. Not shown on chart
  - d. 6° east

199. Refer to Jeppesen Manual - VFR Section De Kooy 19-1  
What is the minimum altitude over the quiet sector?
- a. 32 800 ft
  - b. 1500 ft
  - c. 3500 ft
  - d. 6500 ft
200. Refer to Jeppesen Manual - VFR Section De Kooy 19-1  
What is the frequency and QDM of the ILS for runway 22?
- a. 109.70 MHz 216° (M)
  - b. 109.70 kHz 220° (M)
  - c. 119.10 MHz 216° (T)
  - d. 109.70 MHz 216° (T)
201. Refer to Jeppesen Manual - VFR Section Esbjerg 19-2  
What are the dimensions of runway 08/26?
- a. 2600 ft by 45 ft
  - b. 8530 ft by 45 ft
  - c. 8530 metres by 45 metres
  - d. 2600 metres by 45 metres
202. Refer to Jeppesen Manual - VFR Section Sabadell 19-1  
What is the frequency of the Barcelona ATIS?
- a. 119.10 MHz
  - b. 120.80 MHz
  - c. 118.65 MHz
  - d. 738 kHz
203. Refer to Jeppesen Manual - VFR Section Aberdeen 10-IV  
What frequency is the Aberdeen ATIS on?
- a. 114.30 MHz
  - b. 126.25 MHz
  - c. 119.87 MHz
  - d. 135.17 MHz
204. Refer to Jeppesen Manual - VFR Section Aberdeen 10-IV  
What is the max ground elevation within the CTR?
- a. 1733 ft
  - b. 1733 m
  - c. 2105 ft
  - d. 1245 ft
205. Refer to Jeppesen Manual - VFR Section Aberdeen 19-1  
What frequency/frequencies could you receive ATIS when on the ground?
- a. 114.30 MHz only
  - b. 121.85 MHz only
  - c. 114.30 MHz or 121.85 MHz
  - d. 121.70 MHz

206. Refer to Jeppesen Manual - VFR Section      Aberdeen  
What is the maximum wing span of an aircraft using the eastern apron and taxiway?
- a. 20 ft
  - b. 20 m
  - c. 23 m
  - d. 10 m
207. Refer to Jeppesen Manual - VFR Section      Athinai 29-1  
What are the call sign and frequency for start-up?
- a. ATIS 123.40 MHz
  - b. Approach 119.10 MHz
  - c. Ground 121.70 MHz
  - d. Tower 118.10 MHz

## Specimen Examination Paper

All questions worth one mark unless stated.

1. **Information on Search and Rescue (SAR) procedures may be obtained:**
  - a. from NOTAMs
  - b. from the latest AIC
  - c. from the Aeronautical Information Publication
  - d. by RT communication with the FIR within which the aircraft is operating
  
2. **Refer to ED-6.**  
**The track and distance between Friedrichschafen (EDNY) and Stuttgart (EDDS) are:**
  - a. 350°(M) 62.5 km
  - b. 345°(M) 65 NM
  - c. 349°(M) 62.5 NM
  - d. 351°(M) 116 km
  
3. **Refer to ED-6.**  
**The radio navigation aid at N4854.8 E00920.4 is:**
  - a. a VOR/DME call sign LBU frequency 109.20 kHz
  - b. a Tacan call sign LBU channel number 109.20
  - c. a VOR/TAC call sign LBU frequency 109.20 MHz
  - d. a VOR/DME call sign LBU frequency 109.20 MHz
  
4. **Refer to CAP 697 SEP Figure 2.1.**  
**Given : Airfield elevation 6000 ft OAT 15°C Initial Weight 3525 lb**  
**Cruise altitude 14 000 ft OAT -13°C Wind component 60 kt tail**  
**The time, fuel and nautical ground miles to TOC are:**
  - a. 16 min 5 gal 31 NGM
  - b. 15 min 6 gal 18 NGM
  - c. 17 min 7 gal 46 NGM
  - d. 16 min 5 gal 52 NGM
  
5. **Refer to CAP 697 SEP Figure 2.2.**  
**Given:**  
**Pressure Altitude 10 000 ft OAT -15°C Power 23 inHg @ 2300rpm**  
**The fuel flow and KIAS are:**
  - a. 67.3 PPH 140 kt
  - b. 67.3 GPH 157 kt
  - c. 11.4 GPH 139 kt
  - d. 66.2 GPH 137 kt

6. Refer to CAP 697 MEP Figure 3.4.  
An aircraft is flying at a High Speed Cruise at a pressure altitude of 12 000 ft, temperature ISA +15°C. The TAS is:
- a. 189 kt
  - b. 186 kt
  - c. 183 kt
  - d. 182 kt
7. Refer to CAP 697 MEP Figure 3.5  
The endurance "With 45 Min. Reserve at 45% Power" for an Economy Cruise at 13 000 ft is:
- a. 4 h 25 min
  - b. 4 h 04 min
  - c. 4 h 57 min
  - d. 6 h 18 min
8. The air distance and time to climb is 197 NAM and 33 min respectively. What is the required ground distance with a 40 kt headwind component?
- a. 222 NGM
  - b. 184 NGM
  - c. 157 NGM
  - d. 175 NGM
9. An aircraft is airborne from an airfield, elevation 1560 ft AMSL, on a QNH of 986 mb/hPa.  
On its track of 269°(M) there is a mountain 12 090 ft AMSL. To clear this obstacle by a minimum of 2000 ft its correct ICAO VFR Flight level is: (1 mb/hPa = 30 ft).
- a. FL145
  - b. FL155
  - c. FL160
  - d. FL165
10. On a Jeppesen chart the figures "FL80 2700a" are displayed below an airway. What does the "FL80" indicate?
- a. The route MORA (a safety altitude)
  - b. Minimum en route altitude
  - c. Maximum authorized altitude
  - d. The base of the airway
11. In the Jeppesen SID, STARs & IAP directions are given as:
- a. true course/track
  - b. magnetic course/track
  - c. true heading
  - d. magnetic heading



12. Refer to CAP 697 SIMPLIFIED LRC (use Figures 4.5.3.1 & 4.3.1B)  
Given : Distance 997 NGM tailwind component 160 kt landing weight 45 000 kg  
Cruise weight 56 000 kg FL370 ISA 0°C  
The fuel required and trip time are:
- a. 11 200 kg 4 h 09 min
  - b. 5300 kg 1 h 09 min
  - c. 4200 kg 1 h 51 min
  - d. 5000 kg 2 h 00 min
13. Refer to CAP 697 MRJT Figure 4.4  
Given:  
Aircraft mass 43 000 kg  
Destination airfield elevation = 3500 ft Alternate airfield elevation = 10 ft  
ISA conditions  
What is the final reserve?
- a. 2110 kg
  - b. 1025 kg
  - c. 1038 kg
  - d. 1055 kg
14. Refer to CAP 697 MRJT Figure 4.5.4  
An aircraft with an estimated landing weight of 55 000 kg plans a descent from FL310 through turbulence; the mean wind component in the descent is 45 kt headwind.  
The fuel and ground distance are:
- a. 280 kg 82 NGM
  - b. 270 kg 107 NGM
  - c. 270 kg 79 NGM
  - d. 275 kg 117 NGM
15. Refer to CAP 697 MRJT Fig 4.3.2b  
Given :  
5000 kg fuel available Cruise at FL210 50 kt headwind  
Landing weight 45 000 kg  
How far could you fly?
- a. 600 NGM
  - b. 750 NGM
  - c. 500 NGM
  - d. 670 NGM
16. Refer to CAP 697 MRJT Figure 4.3.1b  
Given  
Trip Distance 1000 NM Nil wind FL290  
For a temperature increase of 30°C the approximate change in trip time is:
- a. +10%
  - b. -5%
  - c. -10%
  - d. +7%

17. Refer to CAP 697 MRJT Figure 4.1  
If an aircraft's cruise weight is 50 000 kg the Optimum Altitude for a 0.78 Mach flight is:
- 35 500 ft pressure altitude
  - 36 200 ft pressure altitude
  - 35 500 ft altitude
  - FL360
18. Reference CAP 697 MRJT Figure 4.5.3.2  
Given:  
Brake Release Mass 62 800 kg      Fuel to TOC 1400 kg  
0.74 Mach Cruise at FL310      ISA -10°C      Wind component 50 kt head  
Mass at first reporting point after TOC 59 500 kg
- The planned ground distance TOC to the first reporting point is:
- 356 NM
  - 314 NM
  - 277 NM
  - 280 NM
19. Given:  
Track 185°(T)      Variation 9° east      Heading 182°(M)  
Which is the lowest suitable ICAO IFR cruising level?
- FL280
  - FL310
  - FL290
  - FL270
20. Reference CAP 697 MRJT Figure 4.5.1  
Given:  
Climb to FL350      ISA+6°C      MSL airfield      Brake Release Weight 57 500 kg
- The time, fuel, TAS and distance covered are:
- 22 min 1625 kg      395 kt      114 NAM
  - 20 min 1625 kg      395 kt      117 NAM
  - 20 min 1630 kg      395 kt      100 NAM
  - 21 min 1675 kg      398 kt      133 NAM
21. Reference CAP 697 MRJT Figure 4.3.6  
Give:  
Time to alternate 54 min      Landing weight 55 000 kg      Wind component 50 kt tail
- The alternate fuel and nautical ground mile distance are:
- 2500 kg      320 NGM
  - 1500 kg      175 NGM
  - 2350 kg      355 NGM
  - 2200 kg      350 NGM

## 22. Reference CAP 697 MRJT Figure 4.5.3.1

Given:

Pressure altitude 33 000 ft LRC      OAT -61°C      Cruise time 29 min  
 Zero wind      Initial gross weight 54 100 kg

The fuel required is:

- a. 1093 kg
- b. 1107 kg
- c. 1100 kg
- d. 1207 kg

## 23. Refer CAP 697 MRJT Fig 4.3.1

Given:

FL370 @ LRC    ISA +20°C      Distance 800 NM  
 50 kt headwind      Landing weight 50 000 kg

What is the trip fuel and flight time?

- a. 5600 kg      2 h 15 min
- b. 4500 kg      2 h 00 min
- c. 4100 kg      1 h 48 min
- d. 4400 kg      1 h 48 min

## 24. A flight is due to operate between London and Glasgow on a Repetitive Flight Plan (RPL). Prior to departure Glasgow is closed due to heavy snow.

The operator intends to operate this flight to Edinburgh instead.

The correct action regarding flight plans is:

- a. this cannot be done, go back to airport hotel
- b. operations should inform the London ATC Unit at least 10 minutes before departure
- c. cancel the RPL and file a standard ICAO flight plan to Edinburgh
- d. take-off for Glasgow and divert along route

## 25. A normal commercial IFR flight has an estimated EOB of 1540 UTC with the estimated take-off time as 1555 UTC.

What is the latest time for filing the ICAO flight plan?

- a. 1510 UTC
- b. 1455 UTC
- c. 1525 UTC
- d. 1440 UTC

## 26. A flight from BIRMINGHAM (EGBB) to DUBLIN (EIDW) has an EOB of 09:30 UTC, actual airborne time of 09:50, expected trip time of 1 hour, estimated flying time to SHANNON FIR (EISN) boundary of 55 minutes.

How should you complete item 18 of the ICAO flight plan regarding your estimate for the FIR boundary?

- a. EET/EIDW1045
- b. EET/EISN1025
- c. EET/EISN0055
- d. EET/EISN0060

27. Refer to Jeppesen MUNICH 10-2B  
When approaching Munich via TANGO with a westerly surface wind, the route and track miles to the IAF are expected to be:
- |    |                           |        |
|----|---------------------------|--------|
| a. | AALEN - WLD - ROKIL – MBG | 90 NM  |
| b. | AALEN - WLD - ROKIL       | 51 NM  |
| c. | AALEN - WLD - ROKIL – MBG | 124 NM |
| d. | WLD-ROKIL                 | 10 NM  |
28. Refer to Jeppesen E(LO)1  
The magnetic course and distance from LIFFY (N5329 W00530) and WAL (N5324 W00308) is:
- |    |         |        |
|----|---------|--------|
| a. | 279°(M) | 85 NM  |
| b. | 099°(M) | 114 NM |
| c. | 099°(M) | 85 NM  |
| d. | 099°(M) | 59 NM  |
29. Refer to Jeppesen Polar High Altitude Chart 5AT(HI).  
What is the Grid track from Stornoway (N58 W006) to Kulusuk (N6530 W03710)?
- |    |      |
|----|------|
| a. | 318° |
| b. | 298° |
| c. | 138° |
| d. | 118° |
30. Given :  
A to B Distance 2050 NM      Safe Endurance 6 hours  
GS OUT = 480 kt      GS ON = 450 kt      GS HOME = 380 kt
- Calculate the distance and time to the Point of Equal Time from A.
- |    |         |            |
|----|---------|------------|
| a. | 1272 NM | 2 h 39 min |
| b. | 906 NM  | 1 h 53 min |
| c. | 1111 NM | 2 h 19 min |
| d. | 939 NM  | 1 h 57 min |
31. Given: GS OUT = 178      GS HOME = 249  
Distance A to B = 450 NM      Endurance 3 hours
- What is the distance to the Point of Safe Return from A?
- |    |        |
|----|--------|
| a. | 204 NM |
| b. | 311 NM |
| c. | 415 NM |
| d. | 262 NM |
32. You plan to fly from A to B at a TAS of 230 kt, a GS of 255 kt and an initial cruising pressure altitude of 15 000 ft.  
How should you complete item 15 of the ICAO Flight Plan?
- |    |             |
|----|-------------|
| a. | K0230 F150  |
| b. | N0230 F150  |
| c. | N0255 S1500 |
| d. | N0230 FL150 |

33. Refer to Jeppesen E(LO)5.  
What is the lowest continuous flight level you should maintain along B45 when flying from Czempin/CZE (N5207 E01643) to Chociwel/CHO (N5328 E01521)?
- FL60
  - FL70
  - FL180
  - FL80
34. A current flight plan is:
- the filed flight plan with amendments and clearances included
  - the filed flight plan without any changes
  - flight plan with correct time of departure
  - one that is stored via repetitive flight plan procedures
35. Refer CAP 697 MRJT Figure 4.3.6  
Flight from Paris to London with Manchester being the alternate.  
Given:  
London - Manchester 160 NM      Mean track 350°(T)    W/V 250/30°(T)  
Estimated landing mass at alternate 50 000 kg
- What is the fuel and time to the alternate?
- 1200 kg      20 min
  - 1600 kg      36 min
  - 1450 kg      32 min
  - 1300 kg      28 min
36. Refer CAP 697 MRJT Fig 4.7.2  
Given:  
ETOPS approval for 120 minutes    Weight at diversion 50 000 kg  
Long Range Cruise
- Your diversion airfield should be within:
- 742 NM
  - 379 NM
  - 768 NM
  - 1101 NM
37. Refer to Jeppesen AMSTERDAM Schiphol SID 10-3  
Which of the following statements is true regarding an ANDIK departure from RWY 19L?
- Contact Schipol Departure on 119.05 MHz when passing 2000 ft and report altitude
  - The distance to ANDIK is 25 NM
  - Cross ANDIK below FL60
  - Maximum IAS 250 kt till turning left at SPL 3.1DME

38. You are cruising at FL250 and need to be at FL50 10 NM before a VOR/DME. Your rate of descent is 1250 ft/min and your GS in the descent 250 kt.

How far before the VOR/DME should you start your descent?

- a. 66.7 NM
- b. 83.3 NM
- c. 98.5 NM
- d. 76.7 NM

39. You are required to uplift 40 US gallons of AVGAS with SG of 0.72. How many litres and kilograms is this?

- a. 109 l 151 kg
- b. 182 l 131 kg
- c. 182 l 289 kg
- d. 151 l 109 kg

40. Refer CAP 697 MRJT Figure 4.3.2c

Given:

Mach 0.74 cruise      Trip fuel available 17 000 kg    FL280  
Estimated landing mass 52 000 kg    Trip distance 2500 NGM

What is the maximum wind component?

- a. Zero
- b. 25 kt head
- c. 25 kt tail
- d. 60 kt head

41. Refer to Jeppesen E(LO)1

What type of radio navigation aid is located at Perth (N5626 W00322)?

- a. VOR on 110.4 MHz and NDB on 394 kHz
- b. TACAN on 110.4 kHz
- c. VOR on 110.4 MHz
- d. VOR/DME on 110.4 MHz

42. Given:

DOM	33 510 kg	Traffic load	7600 kg	Taxi fuel	250 kg
Trip Fuel	2500 kg	Contingency fuel	125 kg	Final reserve fuel	983 kg
Alternate fuel	1100 kg				

What is the estimated landing mass at the destination?

- a. 43 318 kg
- b. 45 818 kg
- c. 42 218 kg
- d. 43 193 kg

43. When completing an IFR flight plan the "Total Elapsed Time" in item 16 is from:

- a. take-off to overhead the destination airport
- b. from first taxiing under own power until the IAF for destination airport
- c. take-off to the IAF for the destination airport
- d. take-off until landing at the destination airport

44. An aircraft has been planned to fly via a significant point based upon the TIR VORDME, QDM120 at range of 95 NM.  
The correct entry for the ICAO flight plan is:
- TIR300095
  - TIR120095
  - TIR30095
  - 300095TIR
45. Reference E(HI)4 (CAA FOR EXAMS)  
GIBSO (N5045.1 W00230.3)  
Aircraft intending to use UR-14 will be expected to cross GIBSO at or above:
- FL200
  - FL250
  - FL280
  - FL310
46. Reference E(HI)5 CAA for examinations  
From Mende-Nasimbals (N4436.4 E00309.7) to Gaillac (N4357.3 E00149.5) via UG5.  
Which of these levels is the lowest available?
- 290
  - 310
  - 330
  - 350
47. Reference E(HI)4 (CAA FOR EXAMS)  
What is the total distance and mean true course between Abbeville (N5008.1 E00151.3) and Biggin (N5119.8 E00002.2) on UA20?
- 100 NM      321°(T)
  - 162 NM      313°(T)
  - 162 NM      316°(T)
  - 100 NM      316°(T)
48. An aircraft is carrying Maritime Survival Equipment.  
The correct entry at item 19 is:
- cross out indicators P, D and J; tick M
  - circle indicator M
  - tick indicator M
  - cross out indicators P, D and J
49. Refer to Training Manual, Amsterdam page 10-9X.  
What is the minimum radio altitude for a Cat 2 ILS DME approach to runway 01L?
- 88 ft
  - 100 ft
  - 300 m
  - 103 ft

50. At a fuel Relative Density of 0.80 an aircraft turbine engine burns 220 litres per hour. If Relative Density is 0.75 what is the fuel burn?
- a. 235 L/h
  - b. 206 L/h
  - c. 220 L/h
  - d. 176 L/h