

60 Questions in 60 minutes

-Math

1. What is the sum of prime numbers between 10 and 20? (60)
2. What is the value for gravitational acceleration? (9.81m/s^2)
3. $50\text{cm} \times 50\text{cm} \times 50\text{cm}$ in m^3 (0.125m^3)
4. A triangle has two 60 degrees angles and one side is 5 cm , what is the length of the other side? (5)
5. Average of 15, 25, 35, 45, 55? (35)

-Wizz

1. Difference between A320 and A321? (length)
2. Number of seats for A321NEO (239)
3. What does NEO mean? (New Engine Option)

-ATPL

1. What does SBAS mean?
2. What are irreversible controls?
3. The prop drag is higher or lower for a windmilling/feathered prop?
4. What is the equator?
5. What is the inclination of the magnetic field to the magnetic equator? (0)
6. What should the planning alternate minima be for a CAT 2?
7. What is ASDA?
8. If mass is increased, what happens to the glide angle and speed?
9. Autothrottle provides protection for what?
10. If fuel is moved from the wings to the horizontal stabilizer, what happens with CG and range?
11. The CG of an aircraft is at 25% MAC. MAC is in relation to what? (leading edge or datum)
12. What is the aerodynamic center? (fixed at 25%)
13. Where does the boundary layer separate near a shockwave? (behind/in front?)
14. The wind in metar is true or magnetic?
15. What is the VFR visibility and cloud clearance minima above FL100 ? (8KM, 1500M, 1000FT)
16. There was a NOTAM we had to extract some info.
17. The phrase "West is Best, East is Least" uses which type of memory? (mnemonic)

18. How is an autocratic captain? (Over-Loaded)
19. What is the average vertical extent of radiation fog?
20. Find the QDM if the heading is X and bearing is X.
21. What is QDR?
22. How does the critical angle of attack change with the deployment of trailing edge flaps?
23. What is the vertical extent of a CB?
24. It is 13:20 and you have a delay of 30 minutes. How will ATC announce this? (Estimated approach time : one three five zero)
25. What happens during a coordinated turn with the blood pressure? (increases)
26. Final responsibility of aircraft ops? (PIC)
27. When is carb icing more probable to occur?
28. What happens to the Take off Run and Climb performance if we use flaps 5 instead of 15?
29. What is an example of Dry Operating Index? ($DOI = DOM/12000$)
30. Why does V_s increase in a turn? (component of lift decreases)
31. Why is it dangerous to fly in leeward side of the mountain?
32. Which of the following is a high level cloud? (Ci)
33. What should you do if microburst is reported on take off path? (Delay departure)
34. What is the best action after an abortive take off?
35. What type of message is PAN PAN? (urgency)
36. Runways 01/19 and 25/07 , wind from 350/10kt, which runway to take for landing?
37. Where can you find the hottest surface? (over rocks)
38. Given 145W and 165E what is the difference in longitude?
39. How can you check time deviation when flying North? (East-West railroad)
40. When can you use abbreviated callsign? (when the ground station uses it first)
41. If cargo added in aft but not updated in loadsheet chart, what happens with V_1 and performance?
42. When does the take off second segment start?
43. FL for VFR flying 200(M) track? (085 105 125)
44. Downslope effect on V_1 and ASD?

Group Exercise

-There are 5 planes parked at an airport, each having different AOC, time of departure, destination, tail color, cargo. We had to find which one carries crystal and which one flies to Lisbon.

-We had 10 minutes to solve, we could not find the answer in the given time, but we communicated well, everyone spoke up and we managed to complete a table with quite a few bits of information. After the time was up, they asked us if we could solve it if they gave us more time, we said we can try, and they gave us 5 more minutes, but we still did not solve it.

-They asked what is our opinion about the exercise and if we think it is solvable, I said yes and that was the end.

HR/Technical Interview

HR:

1. Tell me about yourself in 2 minutes.
2. Did you have disagreements with your flight instructors?
3. Tell me a time you deviated from SOP. Would you have done something different?
4. How do you work under stress?
5. Base preference and notice period.

Technical:

1. Write a METAR based on the outside conditions
2. How to calculate cloud base from the temperature and dewpoint?
3. How close should a CB be to the aerodrome to change the CAVOK in the METAR.
4. What is NOSIG?
5. You are heading north, what entry do you fly if I told you to hold on radial 110 inbound standard hold.
6. What is a standard hold?
7. Difference between Boeing and Airbus?
8. What is fly by wire? Advantages?
9. What is a swept wing? Advantages/Disadvantages
10. Previous flown aircraft: What engines does it have? What is VNE VNO? Explain brake system.
11. What is Final Reserve Fuel?
12. If you have only 40 min of fuel going to the alternate, what should you tell ATC?(I talked about minimum fuel and mayday fuel calls.)

Scenario: You are flying with me, we are descending below 1000ft and we forget to arm the spoilers. At 800ft I arm the spoilers and say it's ok, we continue. What do you do? In the end we still land, what do you do?

Simulator

Gatwick 26L

- Take off, climb to 4000ft
- Left heading 150 30deg bank while climbing
- Descend 3000ft with 1000ft/min
- 45 deg bank 360 deg turn
- What radial from MAY VOR are we on?
- After MAY VOR intercept radial 170. (I missed the 'after MAY VOR' part and started intercepting the radial straight away, he said "confirm intercept radial after passing..." I said I misunderstood and he then said to fly towards the VOR, I took a heading and flew to the VOR)
- Vectors for ILS 26L, flew the ILS, landed and that was the end of the assessment
- No hold entries, no questions during the assessment.
- As pilot monitoring same scenario (Gatwick 26L), did the callouts, stated deviations. I was told to shut up at some point to assess the other guy.

Psychometrics

Completed from home after one week.

- 1.FAST test (2 attempts)
- 2.Cognitive test (36 questions – Verbal Reasoning, Numerical Reasoning, Working Memory, Perceptual Speed & Accuracy, Spatial Relationship Reasoning and Abstract Reasoning.)
- 3.CRM (50 questions)
- 4.Personality questionnaire (~330 questions)

