PRERNA AVIATION

DGCA CPL Practice Paper 09

Mixed Revision — Set A

QUESTION PAPER

Original educational practice set. Not an official DGCA paper or a full-length examination simulation.

25 MCQs • 25 marks • Suggested practice time: 40 minutes

Choose one answer per question. Practice scoring: +1 for a correct answer; 0 for an incorrect or blank answer. This timing and scoring are for this practice set only. A calculator may be used for practice. Use the assumptions stated in each question.

Name: _____ Date: _____ Score: ____ / 25

01. An aircraft flies 80 NM at 120 kt and then 90 NM at 180 kt. Total airborne time is:

A. 70 minutes
B. 60 minutes
C. 75 minutes
D. 85 minutes

02. After flying 60 NM, an aircraft is 4 NM left of track with 60 NM remaining. Using the 1-in-60 rule, the approximate heading change to regain track at destination is:

A. 4 degrees right
B. 2 degrees right
C. 8 degrees left
D. 8 degrees right

03. Wind is 20 kt at 30 degrees to the runway direction from ahead. The crosswind component is:

A. 17.3 kt
B. 10 kt
C. 5 kt
D. 20 kt

04. An aircraft departs at 2340 UTC for a 95-minute flight. Its estimated arrival is:

A. 0115 UTC the same day
B. 0015 UTC the next day
C. 0115 UTC the next day
D. 0125 UTC the next day

05. A training plan requires 45 minutes at 36 L/h and 30 minutes at 30 L/h, plus a specified 20 L reserve. Required fuel is:

A. 62 L
B. 86 L
C. 47 L
D. 71 L

06. At 30 degrees north, two points differ by 2 degrees longitude. Using cos 30 degrees = 0.866, the approximate distance along the parallel is:

A. 208 NM
B. 120 NM
C. 104 NM
D. 60 NM

07. A 1,200 kg aircraft has a CG 2.5 m aft of datum. Removing 100 kg from an arm of 4.0 m gives a new CG of approximately:

A. 2.64 m aft of datum
B. 2.50 m aft of datum
C. 2.36 m aft of datum
D. 3.00 m aft of datum

08. A shallow layer of cold air is trapped beneath warmer air near the surface. Which result is most likely?

A. Uniform strong turbulence throughout the troposphere

B. Rapid deep convection solely because of the inversion

C. Automatic disappearance of all fog

D. Suppressed vertical mixing and possible trapped pollution

09. A synthetic METAR contains 08008KT 4000 BR SCT010. What does BR indicate?

A. Thunderstorm

B. Mist

C. Heavy rain

D. Blowing sand

10. Air at 28 degrees C has a dew point of 20 degrees C. Using 400 ft per degree C of spread, estimate convective cloud base above the surface:

A. 800 ft

B. 1,600 ft

C. 3,200 ft

D. 11,200 ft

11. An aircraft leaves a warm air mass for a much colder one while retaining the same pressure setting and indicated altitude. Ignoring pressure changes, true altitude tends to be:

A. Unaffected by temperature

B. Lower than indicated

C. Higher than indicated

D. Exactly equal to indicated

12. Which condition is most directly associated with a strong downdraught spreading outward near the surface?

A. A smooth geostrophic wind

B. A microburst

C. A stationary inversion without cloud

D. A sea-breeze front in every case

13. A TAF covers the arrival period but was issued several hours earlier. Which planning approach is best?

A. Use only the original TAF because forecasts never change

B. Assume conditions remain equal to departure weather

C. Replace every forecast with destination elevation

D. Check current observations, amendments and relevant warnings as well

14. At a fixed angle of attack and air density, wing area doubles while speed remains unchanged. Lift becomes:

A. Four times the original value

B. Unchanged

C. Twice the original value

D. Half the original value

15. A wing's stalling speed is 60 kt at load factor 1. What is its approximate stalling speed at load factor 1.44, with other conditions unchanged?

A. 86.4 kt

B. 50 kt

C. 60 kt

D. 72 kt

16. A 12 V supply feeds two 3 ohm resistors connected in series. Circuit current is:

A. 2 A

B. 8 A

C. 0.5 A

D. 4 A

17. A hydraulic actuator has a piston area of 5 square centimetres under 200 newtons per square centimetre. Ignoring losses, force is:

A. 205 N
B. 40 N
C. 1,000 N
D. 10,000 N

18. A pitot inlet is blocked but its drain hole remains open; the static source is normal. A conventional airspeed indicator will tend to:

A. Over-read by exactly 20 kt
B. Under-read towards zero
C. Indicate ground speed
D. Become an accurate altimeter

19. An aircraft's indicated airspeed is unchanged while air density decreases. Neglecting instrument and compressibility errors, true airspeed will:

A. Increase
B. Become equal to vertical speed
C. Remain unchanged
D. Decrease

20. A pilot sees a current NOTAM closing a runway that is shown as available in the AIP. What should the pilot conclude?

A. The current closure must be considered in planning
B. The AIP always cancels any NOTAM
C. A NOTAM is only a weather forecast
D. The runway is available if no map is revised

21. ATC asks a pilot to READ BACK a clearance. Which response meets that request?

A. Repeat only the pilot's destination
B. Repeat the specified clearance details
C. Say only STANDBY
D. Say only ROGER

22. A pilot approaching another aircraft from behind should not assume that being faster grants priority because:

A. The overtaken pilot must always turn left
B. The faster aircraft always has right of way
C. All right-of-way rules cease above cloud
D. The aircraft being overtaken has right of way

23. During a briefing, a junior crew member notices an incorrect fuel calculation. The best CRM response is to:

A. Change the figures privately without informing anyone
B. State the concern clearly and verify the figures with the crew
C. Wait until fuel is exhausted
D. Remain silent because rank determines arithmetic accuracy

24. A pilot accepts only reports supporting a preferred route and dismisses conflicting weather evidence. This primarily illustrates:

A. Confirmation bias
B. A reliable instrument cross-check
C. Perfect risk management
D. Improved night vision

25. A pilot feels compelled to continue because passengers expect an on-time arrival. This pressure is best managed by:

A. Treating the schedule as a substitute for weather information
B. Reducing all safety margins to recover time
C. Ignoring new information once airborne
D. Reassessing conditions against limits and accepting delay or diversion if needed