

DGCA CPL Practice Paper 04

Aviation Meteorology — Set B

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. In the training METAR group 24015G25KT, what is reported?

- | | |
|---|---|
| A. Wind from 024 degrees at 15 kt | B. Wind from 240 degrees magnetic at 25 kt steady |
| C. Wind from 240 degrees true at 15 kt, gusting 25 kt | D. Wind toward 240 degrees at 25 kt |

02. What does BKN020 indicate in a METAR?

- | | |
|----------------------------|--|
| A. Two oktas at 200 ft AGL | B. Broken cloud at 20,000 ft AMSL |
| C. Overcast at 20 ft AGL | D. Broken cloud with base 2,000 ft above aerodrome level |

03. In a METAR using metric visibility, 9999 indicates:

- | | |
|-------------------------------|-----------------------------|
| A. Visibility exactly 9,999 m | B. Visibility 10 km or more |
| C. Visibility below 1 km | D. RVR exactly 9,999 ft |

04. The temperature/dew-point group 18/16 shows a spread of:

- | | |
|---------|---------|
| A. 16 C | B. 2 C |
| C. 34 C | D. 18 C |

05. The METAR group Q1008 represents:

- | | |
|----------------------------|---------------------------|
| A. QNH of 1008 hPa | B. Temperature of 10.08 C |
| C. Cloud base of 10,080 ft | D. Visibility of 1,008 m |

06. What is the key distinction between a METAR and a TAF?

- | | |
|--|--|
| A. METAR reports observed weather; TAF forecasts aerodrome weather | B. METAR is only a turbulence warning |
| C. Both are forecasts only | D. TAF is always an aircraft position report |

07. A TAF contains TEMPO for a specified period. This signals:

- | | |
|--|---------------------------------|
| A. Temporary fluctuations in the stated conditions | B. That all weather is missing |
| C. A permanent change beginning at issue time | D. Only temperature information |

08. A SPECI is primarily:

- | | |
|--------------------------------------|---|
| A. A long-term climate average | B. A special aerodrome weather report issued when specified changes occur |
| C. A type-specific engine limitation | D. A flight-plan acceptance message |

09. Which product warns of specified significant en-route meteorological phenomena?

- | | |
|--------------------------------------|-----------------------|
| A. Airport parking chart | B. SIGMET |
| C. Aircraft registration certificate | D. Passenger manifest |

10. What does -RA mean in a METAR?

- | | |
|----------------|-----------------------|
| A. Recent hail | B. Light freezing fog |
| C. Light rain | D. Heavy rain |

11. Which set of ingredients supports thunderstorm development?

- | | |
|-----------------------------------|--|
| A. Dry stable air with no lifting | B. Moisture, instability and a lifting mechanism |
| C. Only light surface wind | D. Only low temperature and high pressure |

12. The mature stage of a typical single-cell thunderstorm is characterised by:

- | | |
|---|--|
| A. Only an updraft and no precipitation | B. A complete absence of cloud water |
| C. Only calm air | D. Both updrafts and downdrafts with precipitation |

13. In the dissipating stage of a typical thunderstorm cell, which motion generally dominates?

- | | |
|------------------------------------|--------------------------------|
| A. Uniform updrafts only | B. No vertical motion anywhere |
| C. A steady climb of all cloud air | D. Downdrafts |

14. A microburst is best described as:

- | | |
|--|---|
| A. A steady high-altitude tailwind | B. A type of benign cirrus cloud |
| C. A small intense downdraft that spreads outward near the surface | D. A warm front extending thousands of kilometres |

15. Wind shear means a change in wind velocity:

- | | |
|---|---------------------------------------|
| A. Over a short horizontal or vertical distance | B. Only when pressure is standard |
| C. Only in direction, never in speed | D. Only over a complete calendar year |

16. Clear-air turbulence is often associated with:

- | | |
|---------------------------------------|---------------------------|
| A. Strong wind shear near jet streams | B. Only surface fog |
| C. Only heavy rain below cloud | D. An absence of all wind |

17. What combination favours mountain-wave development?

- | | |
|--|---|
| A. Stable air with strong flow across a mountain ridge | B. Flow parallel to a flat coastline only |
| C. Completely calm unstable air | D. No wind above the ridge |

18. Lenticular clouds near mountains may indicate:

- | | |
|---|-------------------------------------|
| A. Guaranteed smooth air at all heights | B. A sea-breeze front in every case |
| C. Standing-wave activity | D. Only radiation fog |

19. Airframe icing in cloud most directly requires:

- A. Supercooled liquid water striking a surface cold enough to freeze it
- B. Only dry air below freezing
- C. Only high altitude with no moisture
- D. Only sunlight on a cold wing

20. Small supercooled droplets that freeze rapidly and trap air tend to produce:

- A. Clear ice only
- B. Dry snow inside the fuel tank
- C. Rime ice
- D. No ice under any condition

21. Larger supercooled droplets that spread before freezing are more associated with:

- A. An automatic rise in lift
- B. Only loose dry snow
- C. Only rime with no runback
- D. Clear or glaze ice

22. A typical warm front with stable warm air often produces:

- A. Only a sharp clear-air boundary
- B. A permanent absence of low cloud
- C. Only isolated dry thermals
- D. Widespread layered cloud and prolonged precipitation

23. A cold front advancing into warm moist unstable air is more likely to produce:

- A. No lifting of warm air
- B. Showers and convective cloud along the frontal zone
- C. Only high thin cirrus with no other weather
- D. A temperature inversion at every altitude

24. An occluded front generally develops when:

- A. A runway changes direction
- B. Two sea breezes stop permanently
- C. An inversion disappears at sunrise
- D. A cold front overtakes a warm front

25. Why is a METAR reporting good surface visibility insufficient by itself to establish safe weather for an entire route?

- A. It guarantees cloud-free air everywhere
- B. It contains aircraft performance limits
- C. It describes limited observation conditions, not every en-route hazard
- D. It replaces all forecasts and warnings