

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

STUDENT NAME:

DATE AND TIME:

---

**01. What phrase is used by a pilot if a transmission is to be answered with "yes"?**

- a) Affirmative
- b) Affirm
- c) Roger
- d) Yes

---

**02. Doubling the pressure of a dry gas at constant temperature results in a change of the volume to:**

- a) Double the previous value
- b) Four times the previous value.
- c) Half the previous value.
- d) A quarter of the previous value.

---

**03. Weather phenomena are most common to be found in which atmospheric layer?**

- a) Thermosphere
- b) Troposphere
- c) Tropopause
- d) Stratosphere

---

**04. What wind conditions can be expected in areas showing large distances between isobars?**

- a) Formation of local wind systems with strong prevailing westerly winds
- b) Strong prevailing westerly winds with rapid veering
- c) Variable winds, formation of local wind systems
- d) Strong prevailing easterly winds with rapid backing

---

**05. Which characteristic is important when choosing sunglasses used by pilots?**

- a) Curved sidepiece
- b) Unbreakable
- c) No UV filter
- d) Non-polarised

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

---

**06. Which instrument can be affected by the hysteresis error?**

- a) Tachometer
- b) Altimeter
- c) Vertical speed indicator
- d) Direct reading compass

---

**07. With regard to gases, which statement is correct?**

- a) Temperature decreases with increasing pressure and constant volume
- b) Volume increases with increasing temperature and constant pressure.
- c) Pressure decreases with increasing temperature and constant volume.
- d) Temperature increases with increasing volume and decreasing pressure.

---

**08. From which altitude on does the body usually react to the decreasing atmospheric pressure?**

- a) 7000 feet
- b) 12000 feet
- c) 2000 feet
- d) 10000 feet

---

**09. A boundary between a cold polar air mass and a warm subtropical air mass showing no horizontal displacement is called...**

- a) Warm front.
- b) Occluded front.
- c) Cold front.
- d) Stationary front

---

**10. How can the vents be checked before take-off with a gas balloon?**

- a) Connecting the filling nozzle with the static line loop.
- b) Strongly shaking the vent rope
- c) Perform a valve slide
- d) Check if the ropes are clear and working.

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

---

**11. Which of the following symptoms may indicate hypoxia?**

- a) Blue marks all over the body
- b) Blue discolouration of lips and fingernails
- c) Muscle cramps in the upper body area
- d) Joint pain in knees and feet

---

**12. In case of radio communication failure within a CTR (control zone), the pilot has to ...**

- a) This has no consequences while in VMC
- b) Maintain current altitude until leaving the control zone.
- c) Squawk transponer code A 7500.
- d) Continue the ride according to last clearance; in case of imminent danger land immediately

---

**13. What phrase is used by a pilot to inform the tower about a go-around?**

- a) Approach canceled
- b) Going around
- c) No landing
- d) Pulling up

---

**14. The distance between two airports is 220 NM. On an aeronautical navigation chart the pilot measures 40.7 cm for this distance. The chart scale is...**

- a) 1 : 2000000.
- b) 1 : 1000000.
- c) 1 : 500000.
- d) 1 : 250000.

---

**15. The ongoing process to monitor the current flight situation is called...**

- a) Anticipatory check procedure.
- b) Situational thinking.
- c) Constant flight check.
- d) Situational awareness.

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

**16. In a METAR, "(moderate) showers of rain" are designated by the identifier...**

- a) .+TSRA.
- b) TS.
- c) SHRA.
- d) .+RA.

**17. Carbon monoxide poisoning can be caused by...**

- a) Unhealthy food
- b) Alcohol.
- c) Smoking.
- d) Little sleep.

**18. Which answer contains every state of water found in the atmosphere?**

- a) Liquid, solid, and gaseous
- b) Gaseous and liquid
- c) Liquid and solid
- d) Liquid

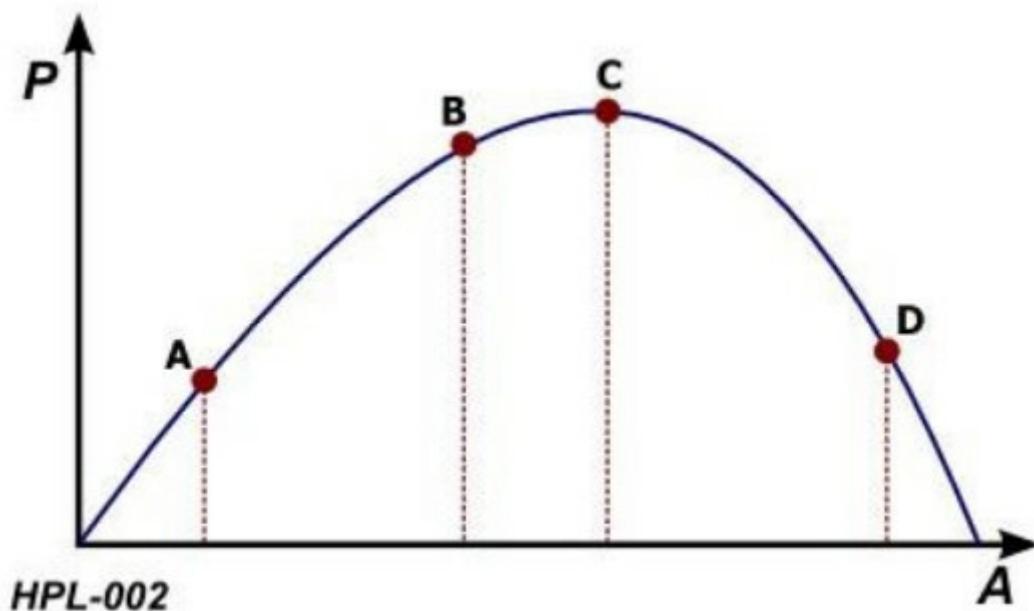
# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

19. The ideal level of arousal is at which point in the diagram? See figure (HPL- 002) P = Performance A = Arousal / Stress Siehe Anlage 1



- a) Point A
- b) Point C
- c) Point D
- d) Point B

20. What type of fog emerges if humid and almost saturated air, is forced to rise upslope of hills or shallow mountains by the prevailing wind?

- a) Orographic fog
- b) Radiation fog
- c) Steaming fog
- d) Advection fog

21. What is the approximate speed of electromagnetic wave propagation?

- a) 300000 m/s
- b) 123000 m/s
- c) 300000 km/s
- d) 123000 km/s

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

---

## 22. The minimum length of the towing rope is:

- a) 20 m
- b) 50 m
- c) 100 m
- d) 30 m

---

## 23. What distance corresponds to one degree difference in latitude along any degree of longitude?

- a) 60 km
- b) 30 NM
- c) 1 NM
- d) 60 NM

---

## 24. Which are the different parts of the Aeronautical Information Publication (AIP)?

- a) GEN ENR AD
- b) GEN MET RAC
- c) GEN COM MET
- d) GEN AGA COM

---

## 25. In which way may an altimeter subscale which is set to an incorrect QNH lead to an incorrect altimeter reading?

- a) If the subscale is set to a higher than actual pressure, the indication is too low. This may lead to much greater heights above the ground than intended
- b) If the subscale is set to a lower than actual pressure, the indication is too high. This may lead to much closer proximity to the ground than intended
- c) If the subscale is set to a lower than actual pressure, the indication is too low. This may lead to much closer proximity to the ground than intended
- d) If the subscale is set to a higher than actual pressure, the indication is too high. This may lead to much closer proximity to the ground than intended

---

## 26. What is the meaning of the phrase "Correction"?

- a) Permission for proposed action is granted
- b) An error has been made in this transmission. The correct version is...
- c) I have received all of your last transmission
- d) I understand your message and will comply with it

# Exam simulation

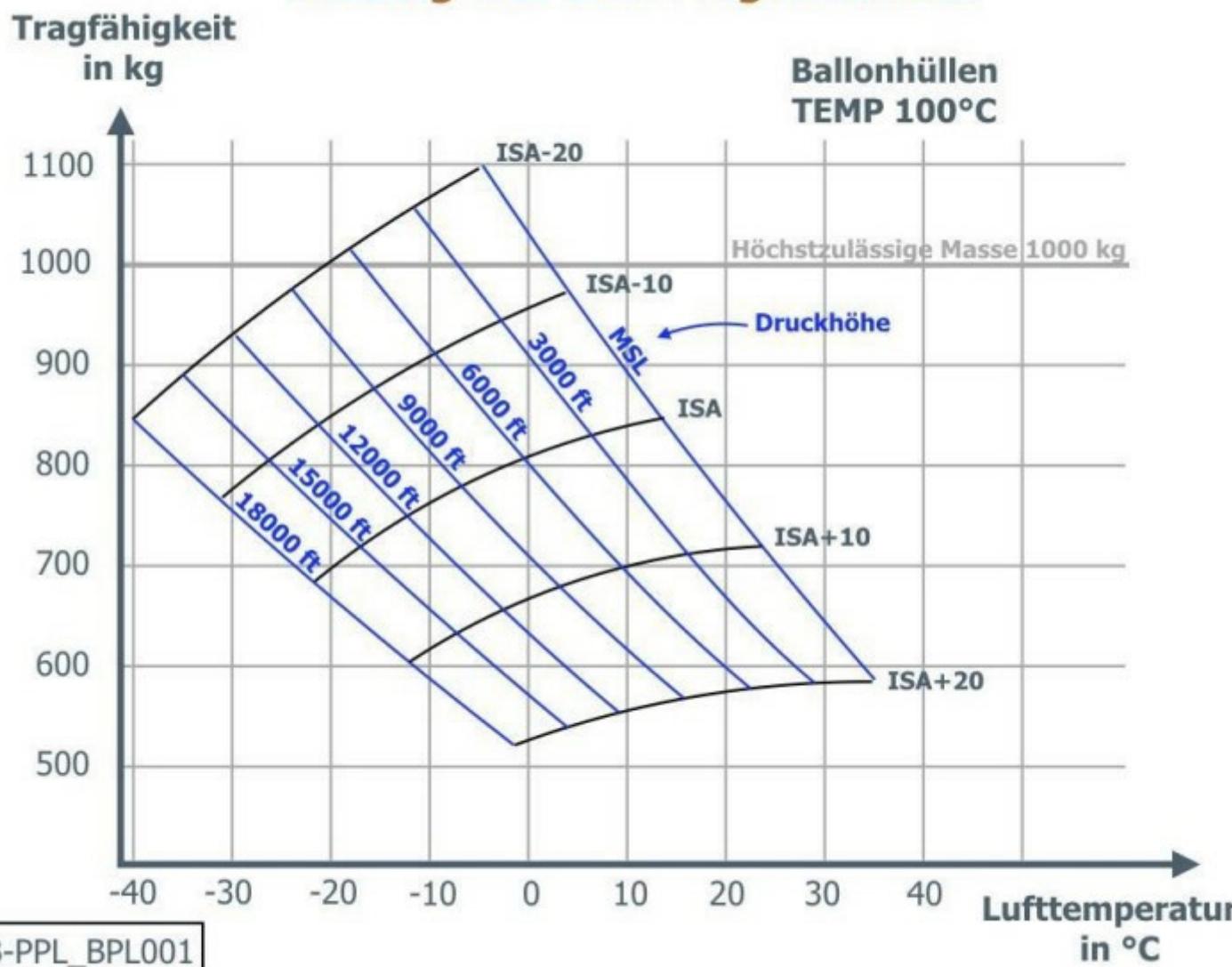
Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

27. Given the following masses: Empty mass 260 kg Instruments 20 kg per gas container (full): 30 kg per person: 80 kg Assuming ISA temperatures, how many persons may be carried in the basket at maximum, if the balloon with 4 gas containers has to climb up to pressure altitude 9.000 ft ? (use attachment ECQB-PPL\_BPL001) Siehe Anlage 1

## Auszug aus dem Flughandbuch



- a) 4
- b) 5
- c) 2
- d) 3

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

---

## 28. What is the correct term for a message used for air traffic control?

- a) Flight safety message
- b) Flight regularity message
- c) Message related to direction finding
- d) Meteorological message

---

## 29. Urgency messages are defined as...

- a) Messages concerning aircraft and their passengers which face a grave and imminent threat and require immediate assistance.
- b) Messages concerning urgent spare parts which are needed for a continuation of flight and which need to be ordered in advance.
- c) Messages concerning the safety of an aircraft, a watercraft or some other vehicle or person in sight.
- d) Information concerning the apron personell and which imply an imminent danger to landing aircraft.

---

## 30. A risk factor for decompression sickness is...

- a) Scuba diving prior to flight
- b) 100 % oxygen after decompression.
- c) Sports
- d) Smoking.

---

## 31. A vertical speed indicator connected to a too big equalizing tank results in...

- a) Mechanical overload
- b) No indication
- c) Indication too low
- d) Indication too high

---

## 32. Aerostatic lift, amongst other factors, depends on...

- a) On the speed.
- b) Balloon mass.
- c) Shape of the envelope.
- d) Air density.

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

---

**33. Which air traffic services can be expected within an FIR (flight information region)?**

- a) FIS (flight information service) ALR (alerting service)
- b) ATC (air traffic control) FIS (flight information service)
- c) AIS (aeronautical information service) SAR (search and rescue)
- d) ATC (air traffic control) AIS (aeronautical information service)

---

**34. How many satellites are necessary for a precise and verified three-dimensional determination of the position?**

- a) Four
- b) Five
- c) Two
- d) Three

---

**35. The density of helium gas under standard conditions is:**

- a) 0,2 kg / m<sup>3</sup>
- b) 2 kg / m<sup>3</sup>
- c) 0,02 g / m<sup>3</sup>
- d) 0,2 g / m<sup>3</sup>

---

**36. Which abbreviation is used for the term "visual flight rules"?**

- a) VFS
- b) VRU
- c) VMC
- d) VFR

---

**37. What is the minimum flight visibility in airspace "C" at and above FL 100 for an aircraft operating under VFR?**

- a) 10 km
- b) 8 km
- c) 5 km
- d) 1.5 km

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

---

## 38. Distress messages are messages...

- a) Sent by a pilot or an aircraft operating agency which have an imminent meaning for aircraft in flight.
- b) Concerning aircraft and their passengers which face a grave and imminent threat and require immediate assistance.
- c) Concerning the safety of an aircraft, a watercraft or some other vehicle or person in sight.
- d) Concerning the operation or maintenance of facilities which are important for the safety and regularity of flight operations.

---

## 39. The purpose of the drag lines of the parachute is ...

- a) To transfer the carrying force of the balloon in the top opening area
- b) To transfer the force from the pull rope to the parachute.
- c) To keep the parachute in the center of the top opening.
- d) To transfer the force from the pull rope to the free-balloon hull.

---

## 40. The term 'True Course' (TC) is defined as...

- a) The direction from an arbitrary point on Earth to the geographic North Pole.
- b) The angle between true north and the course line
- c) The angle between magnetic north and the course line.
- d) The direction from an arbitrary point on Earth to the magnetic north pole.

---

## 41. Before buildup, the buildup team has to be informed about correct behaviour at sudden critical situations how?

- a) Only at gusty winds
- b) Twice
- c) At least two days before
- d) By the balloon pilot

---

## 42. The aerostatic lift corresponds to which force?

- a) The dynamic force due to airstream across the top of the hull
- b) The weight of the displaced air
- c) The drag due to airstream around the balloon envelope
- d) The weight of the balloon less ballast

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

---

## 43. The correct transponder code for emergencies is...

- a) 7500.
- b) 7600.
- c) 7000.
- d) 7700.

---

## 44. The burst of a hydrogen pressure line may result in what risk?

- a) The risk of hydrogen collecting in the basket and causing breath shortness.
- b) The risk of hydrogen self-igniting and burning with a bright flame.
- c) The risk of hydrogen dissipating to the atmosphere and poisoning the air
- d) The risk of hydrogen self-igniting and burning with invisible flame.

---

## 45. How may passengers assist the balloon pilot during landing preparation?

- a) By activating the emergency opening
- b) By stowing of loose parts
- c) By activating the vents
- d) By activating the pull rope

---

## 46. What is meant by "inversion layer"?

- a) An atmospheric layer where temperature increases with increasing height
- b) A boundary area between two other layers within the atmosphere
- c) An atmospheric layer with constant temperature with increasing height
- d) An atmospheric layer where temperature decreases with increasing height

---

## 47. The vertical speed indicator measures the difference of pressure between...

- a) The present dynamic pressure and the dynamic pressure of a previous moment.
- b) The present total pressure and the total pressure of a previous moment.
- c) The present dynamic pressure and the static pressure of a previous moment
- d) The present static pressure and the static pressure of a previous moment.

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

---

**48. A flight is called a "visual flight", if the...**

- a) Flight is conducted in visual meteorological conditions.
- b) Visibility in flight is more than 8 km
- c) Flight is conducted under visual flight rules.
- d) Visibility in flight is more than 5 km.

---

**49. The shortest distance between two points on Earth is represented by a part of...**

- a) A small circle.
- b) A great circle.
- c) A rhumb line
- d) A parallel of latitude.

---

**50. What is the difference in time when the sun moves 20° of longitude?**

- a) 1:00 h
- b) 1:20 h
- c) 0:20 h
- d) 0:40 h

---

**51. What is the percentage of oxygen in the atmosphere at 6000 ft?**

- a) 78 %
- b) 21 %
- c) 12 %
- d) 18.9 %

---

**52. A pilot license issued in accordance with ICAO Annex 1 is valid in...**

- a) The country where the license was acquired.
- b) All ICAO countries
- c) The country where the license was issued
- d) Those countries that have accepted this license on application.

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

---

## 53. Which dangerous attitudes are often combined?

- a) Impulsivity and carefulness
- b) Macho and invulnerability
- c) Self-abandonment and macho
- d) Invulnerability and self-abandonment

---

## 54. What effect has the elevation above MSL of an airfield on the carrying force and maximum take-off mass of a balloon?

- a) The lower the elevation, the lower the maximum take-off mass.
- b) The lower the elevation, the greater the carrying force.
- c) The lower the elevation, the higher the maximum take-off mass.
- d) The higher the elevation, the greater the carrying force.

---

## 55. What effect can sudden insolation from sunlight have on a gas balloon?

- a) The height at maximum differential pressure decreases.
- b) The height at maximum differential pressure increases.
- c) The hull pressure decreases.
- d) A sudden increase in rate of descent.

---

## 56. How can wind speed and wind direction be derived from surface weather charts?

- a) By annotations from the text part of the chart
- b) By alignment of lines of warm- and cold fronts
- c) By alignment and distance of isobaric lines
- d) By alignment and distance of hypsometric lines

---

## 57. Visual illusions are mostly caused by...

- a) Misinterpretation of the brain.
- b) Binocular vision.
- c) Rapid eye movements.
- d) Colour blindness.

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

**58. The vertical extend of air with pressure changing by 1% with 80 m difference in height is referred to as ...**

- a) Unstable
- b) Homogene
- c) Stable
- d) Inhomogene

**59. According ISA, what is the density of air at MSL?**

- a) 1.225 g/m<sup>3</sup>
- b) 1225 kg/m<sup>3</sup>
- c) 1.225 kg/m<sup>3</sup>
- d) 12.25 kg/m<sup>3</sup>

**60. At time of take-off, ground wind speed is 2 m/s. Along take-off flight path, at a distance of 320 m obstacles erect up to 30 m. What is the minimum rate of climb to keep a clearance of 50 m above the obstacles? (Consider double the ground wind speed for the flight path)**

- a) 1 m/s
- b) 1.5 m/s
- c) 2 m/s
- d) 0.5 m/s

**61. At time of take-off, ground wind speed is 3 m/s. Along take-off flight path, at a distance of 270 m obstacles erect up to 40 m. What is the minimum rate of climb to keep a clearance of 50 m above the obstacles? (Consider double the ground wind speed for the flight path)**

- a) 1 m/s
- b) 2 m/s
- c) 1.5 m/s
- d) 0.5 m/s

**62. The ratio between air pressures at different heights is referred to as:**

- a) Height value
- b) Pressure number
- c) Height ratio
- d) Height number

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

**63. Environmental air temperature and filling gas temperature are the same. Now, the free balloon descents into warmer air. What statement is correct?**

- a) Descent force increases.
- b) Descent force decreases.
- c) Weight force increases.
- d) Weight force decreases.

**64. What is the mean height of the tropopause according to ISA (ICAO Standard Atmosphere)?**

- a) 36000 m
- b) 11000 ft
- c) 11000 m
- d) 18000 ft

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

65. What cloud type does the picture show? See figure (MET-002). Siehe Anlage 2



- a) Altus
- b) Stratus
- c) Cumulus
- d) Cirrus

66. In what case is the pilot allowed to abbreviate the call sign of his aircraft?

- a) After the ground station has used the abbreviation
- b) Within controlled airspace
- c) If there is little traffic in the traffic circuit
- d) After passing the first reporting point

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

---

**67. Which of the following options are possible SSR-Transponder modes?**

- a) B, R, S
- b) A, C, S
- c) A, C, R
- d) B, C, V

---

**68. What is the correct way of acknowledging "You are now entering airspace Delta"?**

- a) Entering
- b) Airspace Delta
- c) Wilco
- d) Roger

---

**69. Which transponder code indicates a loss of radio communication?**

- a) 7700
- b) 7600
- c) 7000
- d) 2000

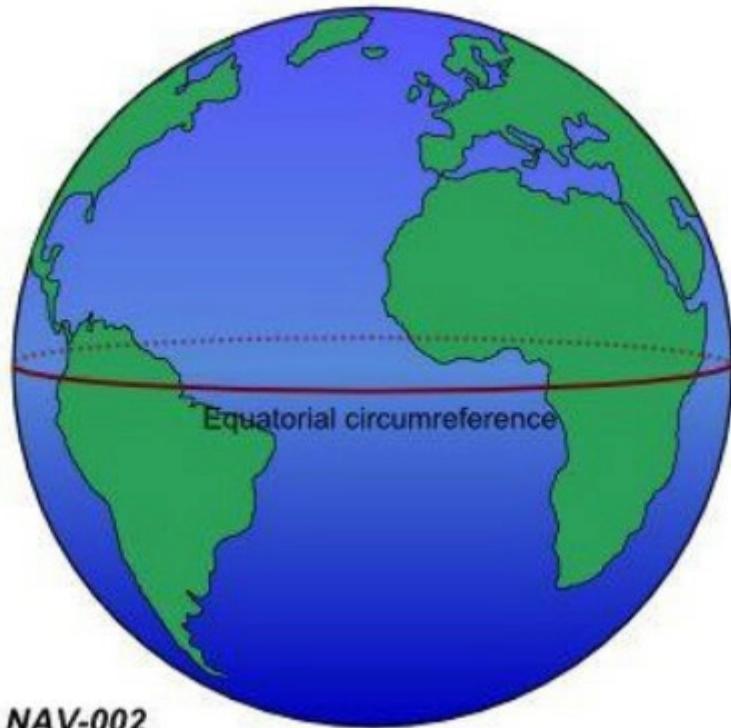
# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

70. The circumference of the Earth at the equator is approximately... See figure (NAV-002) Siehe Anlage 1



- a) 40000 NM
- b) 12800 km
- c) 10800 km.
- d) 21600 NM.

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

## Response Scheme

Compare your answers with the following diagram and mark your score!

01: **B**

02: **C**

03: **B**

04: **C**

05: **D**

06: **B**

07: **B**

08: **A**

09: **D**

10: **C**

11: **B**

12: **D**

13: **B**

14: **B**

15: **D**

16: **C**

17: **C**

18: **A**

19: **D**

20: **A**

21: **C**

22: **D**

23: **D**

24: **A**

25: **D**

26: **B**

27: **A**

28: **A**

29: **C**

30: **A**

31: **D**

32: **D**

33: **A**

34: **A**

35: **A**

36: **D**

37: **B**

38: **B**

39: **B**

40: **B**

41: **D**

42: **B**

43: **D**

44: **D**

45: **B**

46: **A**

47: **D**

48: **C**

49: **B**

50: **B**

51: **B**

52: **B**

53: **B**

54: **B**

55: **A**

56: **C**

57: **A**

58: **B**

59: **C**

60: **A**

61: **B**

62: **D**

63: **A**

64: **C**

65: **C**

66: **A**

67: **B**

68: **D**

69: **B**

70: **D**

# Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

## Response form

Use this form to mark your answers

01: \_\_\_\_\_

02: \_\_\_\_\_

03: \_\_\_\_\_

04: \_\_\_\_\_

05: \_\_\_\_\_

06: \_\_\_\_\_

07: \_\_\_\_\_

08: \_\_\_\_\_

09: \_\_\_\_\_

10: \_\_\_\_\_

11: \_\_\_\_\_

12: \_\_\_\_\_

13: \_\_\_\_\_

14: \_\_\_\_\_

15: \_\_\_\_\_

16: \_\_\_\_\_

17: \_\_\_\_\_

18: \_\_\_\_\_

19: \_\_\_\_\_

20: \_\_\_\_\_

21: \_\_\_\_\_

22: \_\_\_\_\_

23: \_\_\_\_\_

24: \_\_\_\_\_

25: \_\_\_\_\_

26: \_\_\_\_\_

27: \_\_\_\_\_

28: \_\_\_\_\_

29: \_\_\_\_\_

30: \_\_\_\_\_

31: \_\_\_\_\_

32: \_\_\_\_\_

33: \_\_\_\_\_

34: \_\_\_\_\_

35: \_\_\_\_\_

36: \_\_\_\_\_

37: \_\_\_\_\_

38: \_\_\_\_\_

39: \_\_\_\_\_

40: \_\_\_\_\_

41: \_\_\_\_\_

42: \_\_\_\_\_

43: \_\_\_\_\_

44: \_\_\_\_\_

45: \_\_\_\_\_

46: \_\_\_\_\_

47: \_\_\_\_\_

48: \_\_\_\_\_

49: \_\_\_\_\_

50: \_\_\_\_\_

51: \_\_\_\_\_

52: \_\_\_\_\_

53: \_\_\_\_\_

54: \_\_\_\_\_

55: \_\_\_\_\_

56: \_\_\_\_\_

57: \_\_\_\_\_

58: \_\_\_\_\_

59: \_\_\_\_\_

60: \_\_\_\_\_

61: \_\_\_\_\_

62: \_\_\_\_\_

63: \_\_\_\_\_

64: \_\_\_\_\_

65: \_\_\_\_\_

66: \_\_\_\_\_

67: \_\_\_\_\_

68: \_\_\_\_\_

69: \_\_\_\_\_

70: \_\_\_\_\_