

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

STUDENT NAME:

DATE AND TIME:

01. 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

02. The term 'civil twilight' is defined as...

- a) The period of time before sunrise or after sunset where the midpoint of the sun disk is 12 degrees or less below the true horizon
- b) The period of time before sunrise or after sunset where the midpoint of the sun disk is 6 degrees or less below the apparent horizon
- c) The period of time before sunrise or after sunset where the midpoint of the sun disk is 6 degrees or less below the true horizon
- d) The period of time before sunrise or after sunset where the midpoint of the sun disk is 12 degrees or less below the apparent horizon

03. What values are usually marked with a red line on instrument displays?

- a) Operational limits
- b) Caution areas
- c) Recommended areas
- d) Operational areas

04. What technical measure provides electric conductivity to the hull ropes of a web-less gas balloon?

- a) Wrapping with plastic tape
- b) A surface painting
- c) Impregnation of the ropes
- d) Embedded steel threads (filaments)

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

05. What kind of reduction in visibility is not very sensitive to changes in temperature?

- a) Haze (HZ)
- b) Radiation fog (FG)
- c) Mist (BR)
- d) Patches of fog (BCFG)

06. Regularity messages are messages...

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

07. What is the difference in time when the sun moves 10° of longitude?

- a) 0:04 h
- b) 0:40 h
- c) 0:30 h
- d) 1:00 h

08. The Empty Mass of a gas balloon includes:

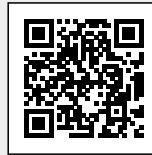
- a) Ballast packages, basket, hull, valve and towing rope
- b) Basket, burner, ballast packages, hull, net and towing rope
- c) Basket, basket ring, valve, net, hull and towing rope
- d) Burner, ballast packages, instruments, net and towing rope

09. What is the minimum flight visibility in airspace "C" for an aircraft operating under VFR at FL110?

- a) 1500 m
- b) 3000 m
- c) 8000 m
- d) 5000 m

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

10. 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

11. 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

12. What is the difference between a gas balloon at or below maximum differential pressure during climb?

- a) The balloon at maximum differential pressure climbs with constant rate to unlimited height
- b) The balloon below maximum differential pressure climbs with constant rate up to maximum differential pressure height
- c) The balloon below maximum differential pressure climbs with constant rate to unlimited height
- d) The balloon at maximum differential pressure climbs with constant rate up to maximum differential pressure height

13. What has to be considered before a balloon ride across water surfaces?

- a) A transponder has to be installed and carried aboard
- b) For all people inside the basket life jackets have to be carried aboard
- c) A flight plan with detailed routing has to be filed
- d) Continuous radio communication has to be established with air traffic control

14. What information can be obtained from satellite images?

- a) Flight visibility, ground visibility, and ground contact
- b) Overview of cloud covers and front lines
- c) Turbulence and icing
- d) Temperature and dew point of environmental air

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

15. At equilibrium the inner overpressure of a free balloon is highest at:

- a) At the equator
- b) The upper pole
- c) At the center of the hull
- d) At the lower opening

16. 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

17. During a flight in colder-than-ISA air the indicated altitude is...

- a) Higher than the true altitude
- b) Equal to the standard altitude
- c) Lower than the true altitude
- d) Equal to the true altitude

18. What information is provided in the part "AD" of the AIP?

- a) Access restrictions for airfields, passenger controls, requirements for pilots, license samples and validity periods
- b) Table of content, classification of airfields with corresponding maps, approach charts, taxi charts
- c) Warnings for aviation, ATS airspaces and routes, restricted and dangerous airspaces
- d) Map icons, list of radio nav aids, time for sunrise and sunset, airport fees, air traffic control fees

19. What does the abbreviation "FIR" stand for?

- a) Flight integrity receiver
- b) Flow integrity required
- c) Flow information radar
- d) Flight information region

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

20. What is the meaning of the abbreviation "ARC"?

- a) Airspace Restriction Criteria
- b) Airworthiness Recurring Control
- c) Airworthiness Review Certificate
- d) Airspace Rulemaking Committee

21. 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

22. 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

23. The majority of aviation accidents are caused by...

- a) Human failure
- b) Technical failure
- c) Geographical influences
- d) Meteorological influences

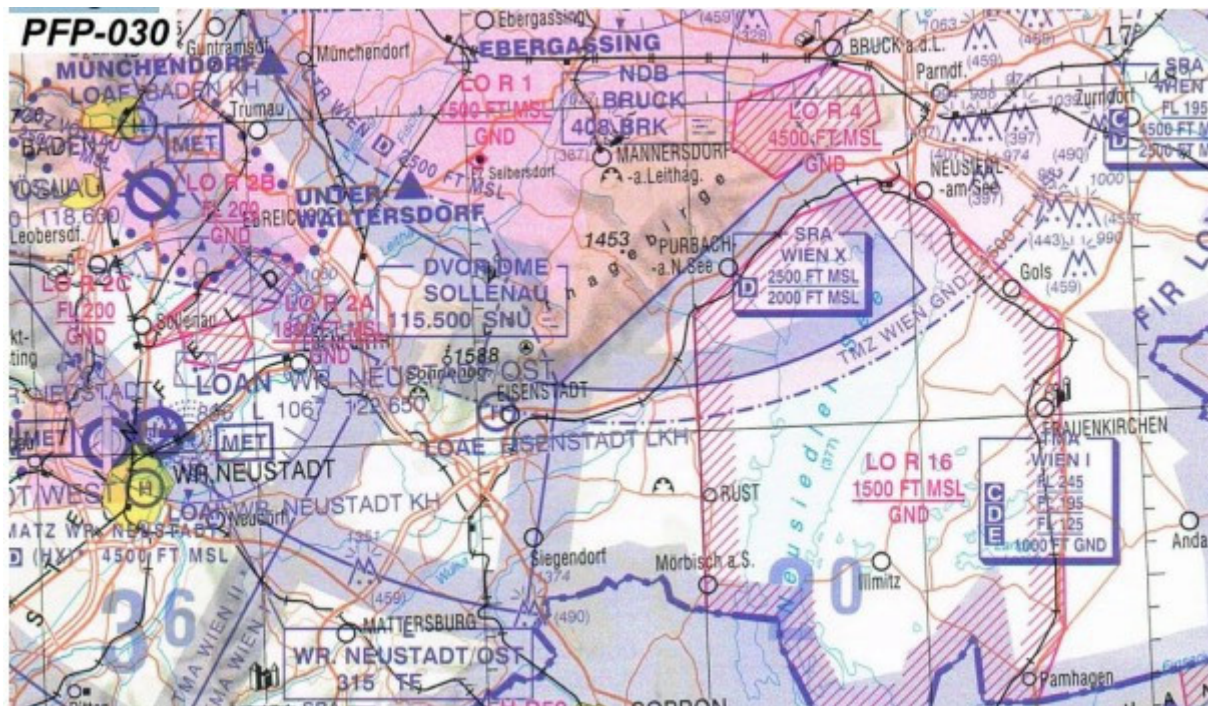
Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

24. The upper limit of LO R 4 equals... See annex (PFP-030)



- a) 1500 ft MSL
- b) 1500 ft AGL
- c) 4500 ft MSL
- d) 4500 ft AGL

25. A gas balloon has to be equipped with which tethers?

- a) 1 at 40 m or 4 at 10 m
- b) 1 at 30 m or 3 at 10 m
- c) 2 at 10 m or 1 at 20 m
- d) 2 at 20 m or 1 at 10 m

26. 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

27. An aircraft travels 100 km in 56 minutes. The ground speed (GS) equals...

- a) 93 kt
- b) 198 kt
- c) 107 km/h
- d) 58 km/h

28. What statement is correct with regard to the density of a gas?

- a) The density increases with increasing temperature and constant volume
- b) The density decreases with increasing temperature and constant volume
- c) The density decreases with increasing temperature and constant pressure
- d) The density decreases with decreasing volume and constant temperature

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

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

30. Which force causes "wind"?

- a) Thermal force
- b) Pressure gradient force
- c) Coriolis force
- d) Centrifugal force

31. A vertical speed indicator measures the difference between...

- a) Instantaneous total pressure and previous total pressure
- b) Total pressure and static pressure
- c) Dynamic pressure and total pressure
- d) Instantaneous static pressure and previous static pressure

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

32. What is the meaning of the abbreviation "AIREP"?

- a) Aeronautical instrument requirement report
- b) Aircraft report
- c) Automatic identification report
- d) Aeronautical information report

33. Which of the following messages has the highest priority?

- a) Turn left
- b) Request QDM
- c) QNH 1013
- d) Wind 300 degrees, 5 knots

34. Which validity does the "Certificate of Airworthiness" have?

- a) 12 years
- b) 12 months
- c) Unlimited
- d) 6 months

35. 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

36. Why should balloon pilot or passengers not wear any clothes made of silk or synthetic fibers during ride with a gas balloon?

- a) Because of the danger of explosions induced by sparks after electrical discharge
- b) Because these materials may lead to malfunction of some instruments
- c) Because the total mass will be increased beyond the operating limits
- d) Because these materials may lead to noise in radio reception

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

37. The density of helium gas under standard conditions is:

- a) 0,2 kg / m³
- b) 2 kg / m³
- c) 0,02 g / m³
- d) 0,2 g / m³

38. 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

39. An aerodrome beacon (ABN) is a...

- a) Rotating beacon installed at an airport or aerodrome to indicate its location to aircraft pilots from the ground
- b) Rotating beacon installed at the beginning of the final approach to indicate its location to aircraft pilots from the air
- c) Fixed beacon installed at an airport or aerodrome to indicate its location to aircraft pilots from the air
- d) Rotating beacon installed at an airport or aerodrome to indicate its location to aircraft pilots from the air

40. With Central European Summer Time (CEST) given as UTC+2, what UTC time corresponds to 1600 CEST?

- a) 1700 UTC
- b) 1600 UTC
- c) 1500 UTC
- d) 1400 UTC

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

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

42. Which type of cloud is associated with prolonged rain?

- a) Cirrostratus
- b) Altopumulus
- c) Cumulonimbus
- d) Nimbostratus

43. Before take-off, the balloon pilot realises that the maximum take-off mass has been exceeded by 5%. What has to be done?

- a) The load has to be reduced to maximum take-off mass
- b) During take-off, special care has to be taken for obstacles
- c) With exceeding up to 5%, normal take-off can be performed
- d) Take-off has to be approved by the airfield manager on duty

44. Which distances to clouds have to be maintained during a VFR flight in airspaces C, D and E?

- a) 1000 m horizontally, 300 m vertically
- b) 1000 m horizontally, 1500 ft vertically
- c) 1500 m horizontally, 1000 m vertically
- d) 1500 m horizontally, 1000 ft vertically

45. What has to be expected when diving into an inversion layer from above?

- a) Rate of descent increases
- b) Rate of descent decreases
- c) Sudden drop onto the ground
- d) Uncontrollable oscillation of the basket

46. Which area could be crossed with certain restrictions?

- a) Restricted area
- b) No-fly zone
- c) Prohibited area
- d) Dangerous area

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

47. Which direction corresponds to 'compass north' (CN)?

- a) The most northerly part of the magnetic compass in the aircraft, where the reading takes place
- b) The direction from an arbitrary point on Earth to the geographical North Pole
- c) The angle between the aircraft heading and magnetic north
- d) The direction to which the direct reading compass aligns due to earth's and aircraft's magnetic fields

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

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

49. What is the percentage of nitrogen in the atmosphere?

- a) 0.1 %
- b) 21 %
- c) 78 %
- d) 1 %

50. A cross-country flight is made using the ICAO 1 : 500.000 aeronautical chart. An overflight crosscheck shows that a distance of 6 cm in the chart has been passed within 9 minutes. After how many more minutes, the overflight of another waypoint at a chart distance of additional 4 cm can be expected?

- a) 18 min
- b) 6 min
- c) 12 min
- d) 9 min

51. Under which circumstances is it more likely to accept higher risks?

- a) During check flights due to a high level of nervousness
- b) During flight planning when excellent weather is forecast
- c) Due to group-dynamic effects
- d) If there is not enough information available

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

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

- a) 1.225 g/m³
- b) 1225 kg/m³
- c) 1.225 kg/m³
- d) 12.25 kg/m³

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

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

54. What is the distance between the parallels of latitude 48°N and 49°N along a meridian line?

- a) 10 NM
- b) 111 NM
- c) 60 NM
- d) 1 NM

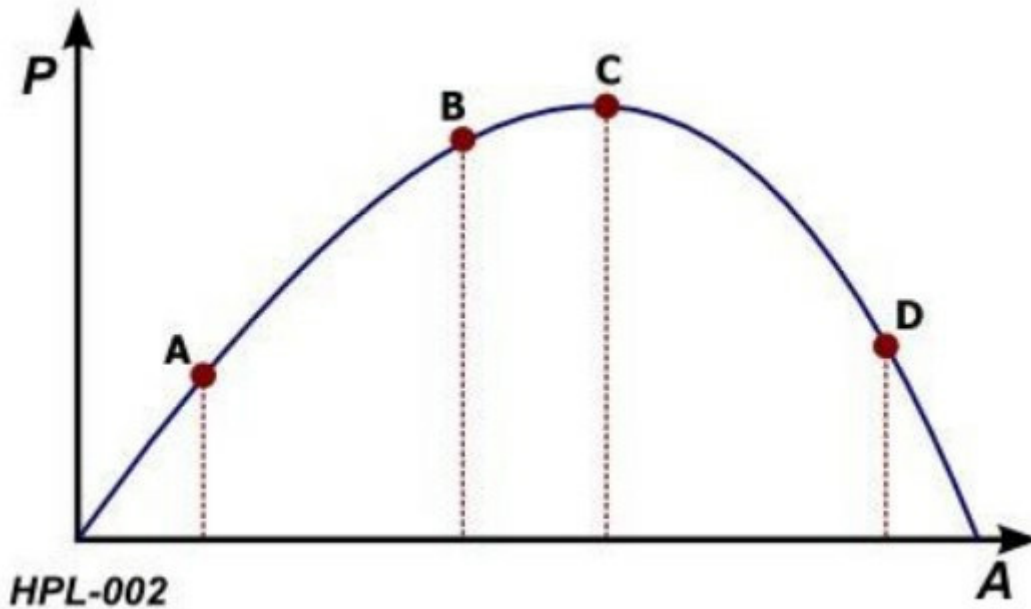
Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

55. At which point in the diagram will a pilot find himself to be overstrained? See figure (HPL-002) P = Performance
A = Arousal / Stress



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

56. While overflying a waypoint, it is stated that a distance of 3 NM has been taken 10 min. What will be the expected time of endurance for the remaining distance of 18 NM?

- a) 60 min
- b) 12 min
- c) 90 min
- d) 180 min

57. The average decrease of blood alcohol level for an adult in one hour is approximately...

- a) 0.3 percent
- b) 0.03 percent
- c) 0.01 percent
- d) 0.1 percent

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

58. Lower-than-standard temperature may lead to...

- a) An altitude indication which is too high
- b) A correct altitude indication as long as the altimeter subscale is set to correct for non-standard temperature
- c) An altitude indication which is too low
- d) A blockage of the Pitot tube by ice, freezing the altimeter indication to its present value

59. What are primary criteria for selecting a landing site? 1. Obstacle situation 2. Elevation of the site 3. Strength of surface wind

- a) 1, 2 and 3
- b) 2 and 3
- c) 1 and 3
- d) 1 and 2

60. Which of the stated surfaces will reduce the wind speed most due to ground friction?

- a) Flat land, lots of vegetation cover
- b) Oceanic areas
- c) Mountainous areas, vegetation cover
- d) Flat land, deserted land, no vegetation

61. What is the relationship between pressure and volume of a dry gas at constant temperature?

- a) The volume increases by a factor of 4 with double pressure
- b) The volume is inversely proportional to pressure
- c) The ratio between pressure and volume is constant
- d) The volume increases proportional with pressure

62. What is the great circle distance between two points A and B on the equator when the difference between the two associated meridians is exactly one degree of longitude?

- a) 60 NM
- b) 216 NM
- c) 400 NM
- d) 120 NM

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

63. 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

64. Below maximum differential pressure of a gas balloon, temperature increase of the carrying gas by 1K results in:

- a) Volume decrease by 0.4%
- b) Volume increase by 0.4%
- c) Volume increase by 4%
- d) Volume decrease by 4%

65. After take-off with a balloon, obstacles at a distance of 300 m erect in expected flight path up to 40 m height. Rate of climb is expected with 1.5 m/s. What maximum actual wind speed can be accepted to maintain a clearance of 50 m above obstacles, assuming double the actual wind speed for calculation?

- a) 8 m/s
- b) 2.5 m/s
- c) 10 m/s
- d) 1 m/s

66. At which height the load carrying capability of a gas balloon is reduced by approximately 50% compared to MSL?

- a) At 6500 m
- b) At 11000 m
- c) At 18000 m
- d) At 1500 m

67. The maximum number of passengers can be found ...

- a) In the certificate of registration
- b) In the operating handbook
- c) In the Flight Log book
- d) In the airworthiness certificate

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology

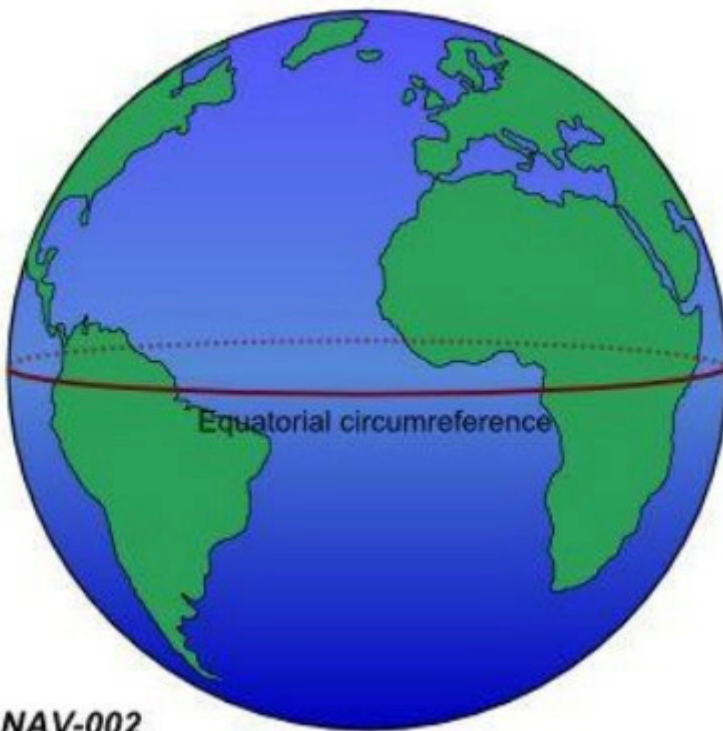


QuizVds.it

68. Which statement is correct with regard to the short-term memory?

- a) It can store 5 (± 2) items for 1 to 2 minutes
- b) It can store 3 (± 1) items for 5 to 10 seconds
- c) It can store 7 (± 2) items for 10 to 20 seconds
- d) It can store 10 (± 5) items for 30 to 60 seconds

69. The circumference of the Earth at the equator is approximately... See figure (NAV-002)



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

70. The emergency opening of a gas balloon is located where?

- a) To the side of the appendix
- b) At the upper pole
- c) At the equator
- d) To the side of the valve

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Meteorology



QuizVds.it

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: C	02: C	03: A	04: D
05: A	06: D	07: B	08: C
09: C	10: B	11: B	12: C
13: B	14: B	15: B	16: B
17: A	18: B	19: D	20: C
21: B	22: D	23: A	24: C
25: C	26: D	27: C	28: C
29: A	30: B	31: D	32: B
33: B	34: C	35: A	36: A
37: A	38: A	39: D	40: D
41: D	42: D	43: A	44: D
45: B	46: A	47: D	48: D
49: C	50: B	51: C	52: C
53: D	54: C	55: B	56: B
57: C	58: A	59: C	60: C
61: B	62: A	63: D	64: B
65: B	66: A	67: B	68: C
69: D	70: A		

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: _____		