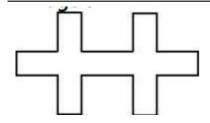
Quiz BPL Gas - Balloon Pilot License - Aircraft General Knowledge



STUDENT NAME:	DATE AND TIME:

01. What is the meaning of this sign at an aerodrome? See figure (ALW-011) Siehe Anlage 1



- a) Landing prohibited for a longer period
- b) Glider flying is in progress
- c) After take-off and before landing all turns have to be made to the right
- d) Caution, manoeuvring area is poor

02. A true altitude is...

- a) A height above ground level corrected for non-standard pressure
- b) An altitude above mean sea level corrected for non-standard temperature.
- c) A height above ground level corrected for non-standard temperature.
- d) A pressure altitude corrected for non-standard temperature.

03. The correct transponder code for emergencies is...

- \	7500	
21	7500	

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

04. What is meant by "isothermal layer"?

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

Quiz BPL Gas - Balloon Pilot License - Aircraft General Knowledge



05. 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

06. What is the purpose of the signal square at an aerodrome?

- a) It is a specially marked area to pick up or drop towing objects
- b) It is an illuminated area on which search and rescue and fire fighting vehicles are placed
- c) It contains special symbols to indicate the conditions at the aerodrome visually to over-flying aircraft
- d) Aircraft taxi to this square to get light signals for taxi and take-off clearance

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

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

08. Which information from a ground station does not require readback?

- a) SSR-Code
- b) Wind
- c) Altitude
- d) Runway in use

09. What conditions are mandatory for the formation of thermal thunderstorms?

- a) Absolutely stable atmosphere, high temperature and high humidity
- b) Absolutely stable atmosphere, high temperature and low humidity
- c) Conditionally unstable atmosphere, high temperature and high humidity
- d) Conditionally unstable atmosphere, low temperature and low humidity

Quiz BPL Gas - Balloon Pilot License - Aircraft General Knowledge



10. What is the correct phrase to begin a blind transmission?

\sim	Ironomitting	hlind
u	Transmitting	DIIIIG

- b) No reception
- c) Listen
- d) Blind

11. Heavy downdrafts and strong wind shear close to the ground can be expected...

- a) During approach to an airfield at the coast with a strong sea breeze.
- b) During cold, clear nights with the formation of radiation fog.
- c) During warm summer days with high, flatted Cu clouds
- d) Near the rainfall areas of heavy showers or thunderstorms.

12. Which transponder code should be set during a radio failure without any request?

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

13. 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.

14. The angle between compass north and magnetic north is called...

- a) Inclination
- b) WCA
- c) Deviation.
- d) Variation.

Quiz BPL Gas - Balloon Pilot License - Aircraft General Knowledge



15. 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.

16. 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

17. What is the call sign of the surface movement control?

- a) Earth
- b) Ground
- c) Tower
- d) Control

18. What is the purpose of the semi-circular rule?

- a) To avoid collisions by suspending turning manoeuvres
- b) To fly without a filed flight plan in prescribed zones published in the AIP
- c) To avoid collisions by reducing the probability of opposing traffic at the same altitude
- d) To allow safe climbing or descending in a holding pattern

19. In case of a water landing, when should the life jackets be inflated?

- a) Before touchdown on water surface.
- b) After leaving the basket.
- c) After landing, still in the basket, if leaving the basket has to be expected.
- d) During cruise over water.

Quiz BPL Gas - Balloon Pilot License - Aircraft General Knowledge



20. What is the difference in tin	e when the sun moves 20° of longitude?	
a) 1:00 h		
b) 1:20 h		
c) 0:20 h		
d) 0:40 h		
21. The average decrease of bl	od 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.		
22. What is the ISA standard pr	essure at FL 180 (5500 m)?	
a) 500 hPa		
b) 1013.25 hPa		

23. What is the call sign of the aerodrome control?

a) Ground

c) 300 hPa d) 250 hPa

- b) Tower
- c) Airfield
- d) Control

24. Which dangerous attitudes are often combined?

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

Quiz BPL Gas - Balloon Pilot License - Aircraft General Knowledge



25. 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.

26. How may passengers assist the balloon pilot during landing preparation	26. How ma	y passengers	s assist the balloon	pilot during	landing	preparation?
----------------------------------------------------------------------------	------------	--------------	----------------------	--------------	---------	--------------

a) Dv	activating the emergen	ov oponina	
a) by	activating the emergen	cy opening	

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

27. 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

28. In case of damage of the hull of a gas ballon, repairs have to be done by a certified Approved Aeronautical Workshop when exceeding a length of:

- a) 1.0 m
- b) 2.0 m
- c) 0.5 m
- d) 5.0 m

29. A balloon pilot decides to use one or more separate gas containers for initial heating during buildup. To ensure a safe buildup ...

- a) To expedite take-off, the gas containers have to be stored ouside.
- b) No separate gas containers are allowed during buildup.
- c) The gas containers have to be fixed safely inside the basket.
- d) Two gas containers (one inside, one outside) are to be used.

Quiz BPL Gas - Balloon Pilot License - Aircraft General Knowledge



30. 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 detailled routing has to be filed.
- d) Continuous radio communication has to be established with air traffice control

31. What is the correct way of acknowledging the instruction "Next report PAH"?

- a) Wilco
- b) Positive
- c) Roger
- d) Report PAH

32. Which are the official basic units for horizontal distances used in aeronautical navigation and their abbreviations?

- a) Feet (ft), inches (in)
- b) Yards (yd), meters (m)
- c) Nautical miles (NM), kilometers (km)
- d) Land miles (SM), sea miles (NM)

33. 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%

34. Regarding the type of cloud, precipitation is classified as...

- a) Light and heavy precipitation
- b) Rain and showers of rain.
- c) Showers of snow and rain.
- d) Prolonged rain and continuous rain.

Quiz BPL Gas - Balloon Pilot License - Aircraft General Knowledge



35. What is the call sign of the flight information service?

- a) Advice
- b) Flight information
- c) Info
- d) Information

36. The rotational axis of the Earth runs through the...

- a) Geographic North Pole and on the geographic South Pole.
- b) Magnetic north pole and on the magnetic south pole.
- c) Geographic North Pole and on the magnetic south pole.
- d) Magnetic north pole and on the geographic South Pole

37. What is the minimum flight visibility in airspace "E" for an aircraft operating under VFR at FL75?

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

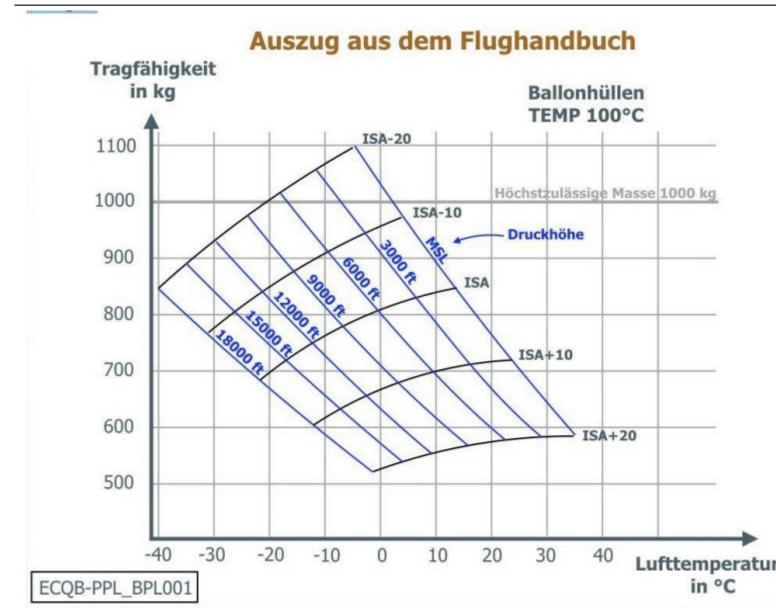
38. With respect to aircraft accident and incident investigation, what are the three categories regarding aircraft occurrences?

- a) Incident Serious incident Accident
- b) Event Serious event Accident
- c) Happening Event Serious event
- d) Event Crash Disaster

Quiz BPL Gas - Balloon Pilot License - Aircraft General Knowledge



39. Given the following masses: Empty mass 260 kg Instruments 20 kg per gas container (full): 30 kg per person: 80 kg Assuming temperature ISA+10, 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 12.000 ft? (use attachment ECQB-PPL_BPL001) Siehe Anlage 1





b) 5

c) 4

d) 2





40. 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

41. 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.

42. What weather conditions in Central Europe are typically found in high pressure areas during summer?

- a) Small isobar spacing with strong prevailing northerly winds
- b) Large isobar spacing with calm winds, formation of local wind systems
- c) Large isobar spacing with strong prevailing westerly winds
- d) Small isobar spacing with calm winds, formation of local wind systems

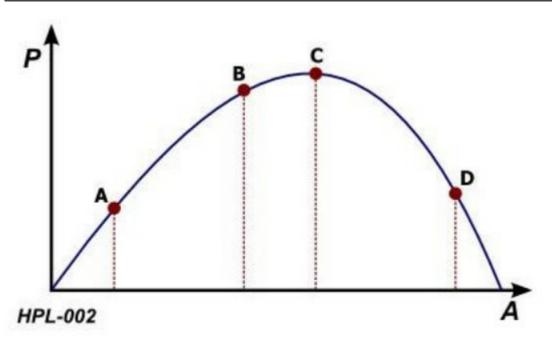
43. Which of the following documents have to be on board for an international flight? a) Certificate of aircraft registration b) Certificate of airworthiness c) Airworthiness review certificate d) EASA Form-1 e) Airplane logbook f) Appropriate papers for every crew member g) Technical logbook

- a) A, b, c, e, f
- b) D, f, g
- c) B, c, d, e, f, g
- d) A, b, e, g





44. 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

45. The directional information "12 o'clock" is correctly transmitted as...

- a) Twelve o'clock.
- b) One two
- c) One two hundred.
- d) One two o'clock.

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

- a) At 6.500 m
- b) At 11.000 m
- c) At 18.000 m
- d) At 1.500 m

Quiz BPL Gas - Balloon Pilot License - Aircraft General Knowledge



47. During a flight, a flight plan can be filed at the...

- a) Search and Rescue Service (SAR).
- b) Next airport operator en-route.
- c) Flight Information Service (FIS).
- d) Flight Information Service (FIS).

48. 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.

49. A cross-country flight is made using the ICAO 1 : 500.000 aeronautical chart. An overflight crosscheck shows that a distance of 4 cm in the chart has been passed within 12 minutes. After how many more minutes, the overflight of another waypoint at a chart distance of additional 6 cm can be expected?

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

50. What statement is correct with regard to change in temperature?

- a) During climb, the carrying gas warms due to thermal exchange with envorinmental air.
- b) During descent, the carrying gas warms adiabatically.
- c) During descent, the carrying gas warms due to thermal exchange with envorinmental air.
- d) During climb, the carrying gas warms adiabatically

51. What difference will be experienced during take-off in presence of a strong surface inversion, compared to a take-off with decreasing temperature with height?

- a) During climb through an inversion, less ballast must be released and/or less heating is required.
- b) During climb through an inversion, less ballast must be released and/or more heating is required.
- c) During climb through an inversion, more ballast must be released and/or more heating is required.
- d) During climb through an inversion, more ballast must be released and/or less heating is required.

Quiz BPL Gas - Balloon Pilot License - Aircraft General Knowledge



52. What information is provided in the general part (GEN) of the AIP?

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

53. In which situation is it NOT possible to achieve a pressure compensation between the middle ear and the environment?

- a) During a light and slow climb
- b) Breathing takes place using the mouth only
- c) The eustachien tube is blocked
- d) All windows are completely closed

54. Which altitude marks the lower limit where the body is unable to completely compensate the effects of the low atmospheric pressure?

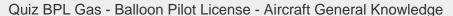
- a) 12000 feet
- b) 7000 feet
- c) 22000 feet
- d) 5000 feet

55. 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.

56. What information can be obtained from satallite 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





57. What is the meaning of the abbreviation "TRA"?

- a) Temporary Radar Routing Area
- b) Temporary Reserved Airspace
- c) Terminal Area
- d) Transponder Area

58. While overflying a waypoint, it is stat	ed that a distance of 3 NM ha	as been taken 10 min.	What will be the
expected time of endurance for the com	plete distance of 18 NM?		

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

59. Which instrument can be affected by the hysteresis error?

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

60. The assembly of the panels to the hull of a web-less gas balloon is done ...

- a) By vulcanisation.
- b) By stitching.
- c) By welding
- d) By glueing.

61. What is the meaning of the abbreviation "SERA"?

- a) Selective Radar Altimeter
- b) Standard European Routes of the Air
- c) Specialized Radar Approach
- d) Standardized European Rules of the Air

Quiz BPL Gas - Balloon Pilot License - Aircraft General Knowledge



62. The dynamic lift created by airflow across the top of the envelope of a balloon on the ground is referred to as?

- a) Upper lift
- b) Anti-ballast
- c) Lower lift
- d) False lift

63. During a balloon ride, visibility continiously becomes poorer, also cloud base decreases in direction of the current track. How should the balloon pilot react to this situation?

- a) Continue ride in ramaining altitude
- b) Use next best chance for landing
- c) Use GPS or radio navigation to continue ride in clouds
- d) Break through the clouds and continue above clouds

64. How do spread and relative humidity change with increasing temperature?

- a) Spread increases, relative humidity increases
- b) Spread remains constant, relative humidity increases
- c) Spread remains constant, relative humidity decreases
- d) Spread increases, relative humidity decreases

65. At which altitude is the atmospheric pressure approximately half the MSL value (1013 hPa)?

- a) 5000 ft
- b) 18000 ft
- c) 22000 ft
- d) 10000 ft

66. Mountain side updrafts can be intensified by ...

- a) Solar irradiation on the lee side
- b) Thermal radiation of the windward side during the night
- c) Solar irradiation on the windward side
- d) By warming of upper atmospheric layers

Quiz BPL Gas - Balloon Pilot License - Aircraft General Knowledge



67. What is a direct consequence of increase of the carrying gas temperature at a gas balloon with maximum differential pressure?

- a) Climb force decreases.
- b) Weight force increases.
- c) Lift force decreases.
- d) Load-bearing capability increases.

68. 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

69. When using a GPS for tracking to the next waypoint, a deviation indication is shown by a vertical bar and dots to the left and to the right of the bar. What statement describes the correct interpretation of the display?

- a) The deviation of the bar from the center indicates the track error as absolute distance in NM; the scale for full deflection is +-10 NM.
- b) The deviation of the bar from the center indicates the track error as angular distance in degrees; the scale for full deflection depends on the operating mode of the GPS.
- c) The deviation of the bar from the center indicates the track error as angular distance in degrees; the scale for full deflection is +-10°.
- d) The deviation of the bar from the center indicates the track error as absolute distance in NM; the scale for full deflection depends on the operating mode of the GPS.

70. Which wind system may be dangerous for balloon rides in the Alps?

- a) Bora
- b) Mistral
- c) Foehn
- d) Scirocco

Quiz BPL Gas - Balloon Pilot License - Aircraft General Knowledge



QuizVds.it

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

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

Quiz BPL Gas - Balloon Pilot License - Aircraft General Knowledge



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:		