Exam simulation

BPL Hot Air - Balloon Pilot License - Flight Performance and Planning

QuizVds.it

STUDENT NAME:	DATE AND TIME:

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

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

02. What is the distance between the two parallels of longitude 150°E and 151°E along the equator?

a) 60 NM
b) 60 km
c) 1 NM
d) 111 NM

03. What is the correct abbreviation of the call sign D-EAZF?

a) DEA
b) DZF
c) DEF
d) AZF

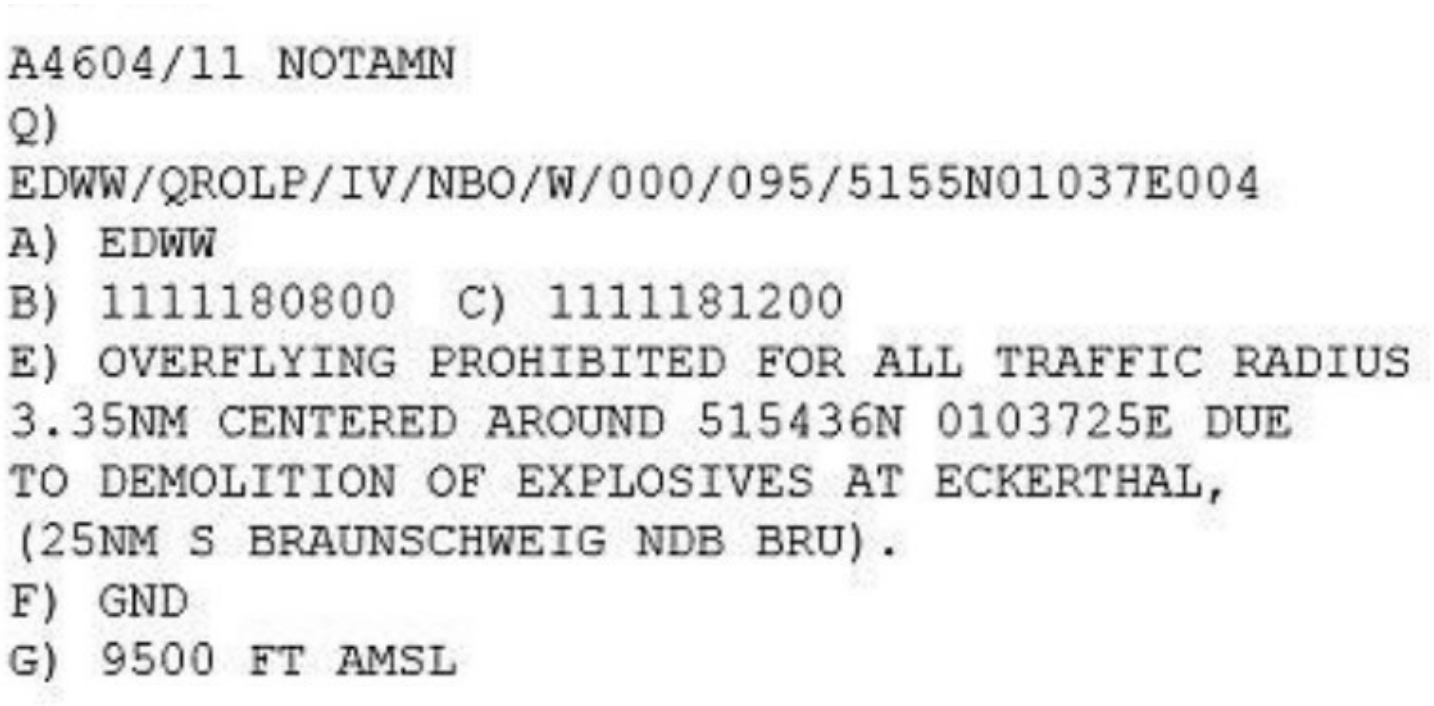
04. Above the friction layer, with a prevailing pressure gradient, the wind direction is...

a) At an angle of 30° to the isobars towards low pressure
b) Perpendicular to the isobars
c) Parallel to the isobars
d) Perpendicular to the isohypses

05. Given: TC: 183°; WCA: +011°; MH: 198°; CH: 200° What are TH and VAR?

a) TH: 172°. VAR: 004° E
b) TH: 194°. VAR: 004° E
c) TH: 172°. VAR: 004° W
d) TH: 194°. VAR: 004° W

06. Up to which altitude is an overflight prohibited according to the NOTAM? See figure (PFP-024)



a) Flight Level 95
b) Altitude 9500 m MSL
c) Height 9500 ft
d) Altitude 9500 ft MSL

07. 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

08. 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

09. 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

10. A transponder with the ability to send the current pressure level is a...

a) Mode C or S transponder
b) Mode A transponder
c) Transponder approved for airspace "B"
d) Pressure-decoder

11. What is the correct way to transmit the call sign OE-JVK?

a) Omega Echo Juliett Victor Kilogramm
b) Omega Echo Jankee Victor Kilo
c) Oscar Echo Juliett Victor Kilo
d) Oscar Echo Jankee Victor Kilogramm

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

a) Traffic information
b) Taxi instructions
c) Heading
d) Altimeter setting

13. The term "runway" is defined as a...

a) Rectangular area on a land or water aerodrome prepared for the landing and take-off of aircraft
b) Rectangular area on a land aerodrome prepared for the landing and take-off of helicopters
c) Round area on an aerodrome prepared for the landing and take-off of aircraft
d) Rectangular area on a land aerodrome prepared for the landing and take-off of aircraft

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

a) Lower than the true altitude

b) Higher than the true altitude

c) Equal to the standard altitude

d) Equal to the true altitude

15. 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

16. Which of the following statements is correct?

a) At higher altitude, sink rate in case of cooling is increased due to less drag by less density

b) At higher altitude, sink rate by cooling is not increased because due to low density the mass inside the hull is also less

c) Higher drag at higher altitude prevents increased sink rate in case of cooling

d) Maximum sink rate must be equal at all altitudes as prescribed by design regulations

17. The term "static pressure" is defined as pressure...

a) Of undisturbed airflow

b) Sensed by the pitot tube

c) Inside the airplane cabin

d) Resulting from orderly flow of air particles

18. What is the purpose of the vaporizer coils of the burner system?

a) To induce a rotation movement in the liquid gas to get a better mixture

b) For cooling of the liquid gas after exiting the burner nozzles

c) To heat the liquid gas, so it will vaporize immediately after exiting the burner nozzle

d) To vaporize the liquid gas, so it will be emitted from the burner nozzle in gaseous form

19. When do you expect wind shear?

a) When passing a warm front

b) During a summer day with calm winds

c) During an inversion

d) In calm wind in cold weather

20. Which of the following qualities are influenced by stress? 1. Attention 2. Concentration 3. Responsiveness 4. Memory

a) 2, 4

b) 1

c) 1, 2, 3, 4

d) 1, 2, 3

21. At temperature below 0 °C the pressure at the burner is at 0.2 MPa (2 bar). Is take-off permissible with the hot air balloon?

a) No, pressure at burner is too low

b) Only with double-burner system installed

c) Yes, at low temperatures a low hull temperature is sufficient

d) Yes, not a problem

22. 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

23. At what rate does the temperature change with increasing height according to ISA (ICAO Standard Atmosphere) within the troposphere?

a) Increases by 2° C / 1000 ft

b) Decreases by 2° C / 100 m

c) Decreases by 2° C / 1000 ft

d) Increases by 2° C / 100 m

24. After take-off with a balloon, obstacles at a distance of 600 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) 1 m/s

b) 3 m/s

c) 5 m/s

d) 10 m/s

25. What does a cloud coverage of "SCT" mean in a METAR weather report?

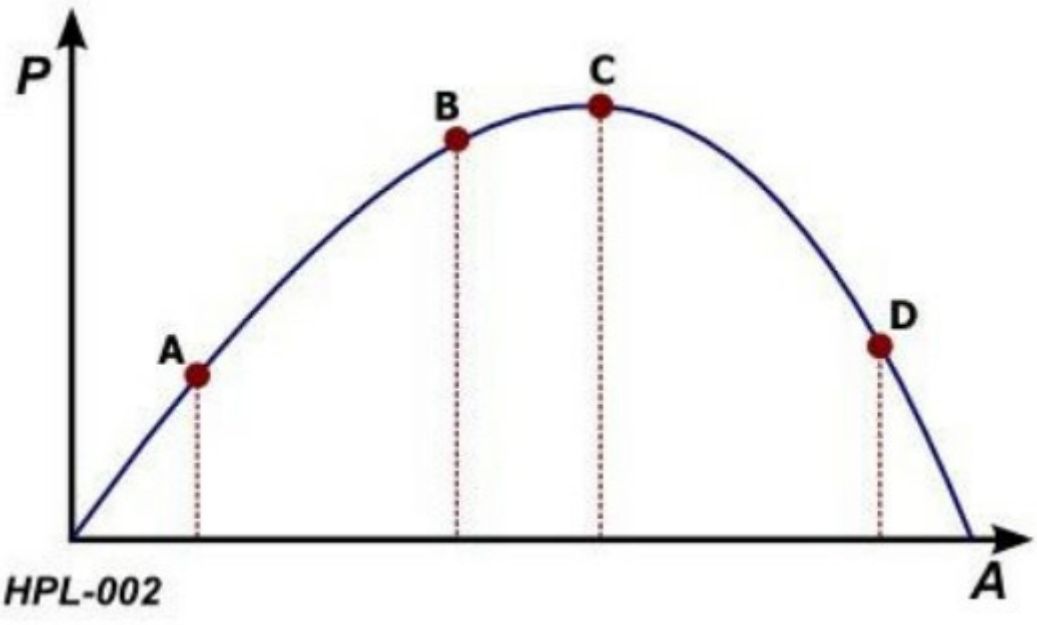
a) 5 to 7 eighths

b) 3 to 4 eighths

c) 1 to 2 eighths

d) 8 eighths

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



a) Point A

b) Point C

c) Point D

d) Point B

27. Which of the following statements is correct?

a) The density of hull air is lower with decreasing environmental pressure

b) The density of hull air is higher with increasing environmental pressure

c) The density of hull air is lower than environmental air only if the hull temperature is lower than environmental temperature

d) The density of hull air is lower than environmental air only if the hull temperature is higher than environmental temperature

28. The term "aerodrome elevation" is defined as...

a) The highest point of the landing area

b) The average value of the height of the manoeuvring area

c) The highest point of the apron

d) The lowest point of the landing area

29. The minimum flight visibility at 5000 ft MSL in airspace B for VFR flights is...

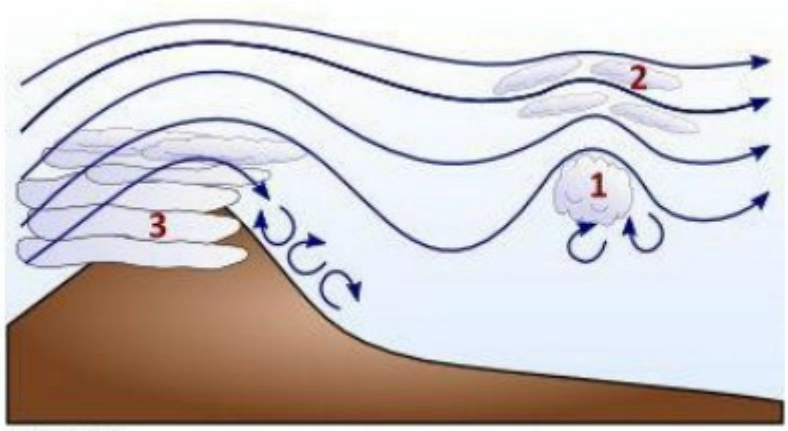
a) 5000 m

b) 3000 m

c) 1500 m

d) 8000 m

30. What weather phenomenon designated by "2" has to be expected on the lee side during "Foehn" conditions? See figure (MET-001).



a) Cumulonimbus
b) Altocumulus Castellanus
c) Nimbostratus
d) Altocumulus lenticularis

31. 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

32. What does a readability of 2 indicate?

a) The transmission is readable but with difficulty
b) The transmission is perfectly readable
c) The transmission is unreadable
d) The transmission is readable now and then

33. What effect has air temperature on the carrying force and on maximum take-off mass of a balloon?

a) Maximum take-off mass is higher at low temperatures
b) Maximum take-off mass is lower at low temperatures
c) Carrying force is higher at low temperatures
d) Carrying force is lower at low temperatures

34. Vienna (LOWW) is located at 016° 34'E, Salzburg (LOWS) at 013° 00'E. The latitude of both positions can be considered as equal. What is the difference of sunrise and sunset times, expressed in UTC, between Wien and Salzburg?

a) In Vienna the sunrise and sunset are about 4 minutes later than in Salzburg

b) In Vienna the sunrise and sunset are about 14 minutes earlier than in Salzburg

c) In Vienna the sunrise is 4 minutes later and sunset is 4 minutes earlier than in Salzburg

d) In Vienna the sunrise is 14 minutes earlier and sunset is 14 minutes later than in Salzburg

35. The force resulting from the (positive) difference from load-bearing capacity and weight force, is referred to as:

a) Upper force

b) Lift force

c) Load force

d) Climb force

36. What effect has an increase in air temperature inside the hull of a hot air balloon by a given difference in temperature?

a) The increase in load carrying capacity increases with height

b) The increase in load carrying capacity decreases with height

c) The increase in rate of climb increases with height

d) The reduction in sink rate increases with height

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

a) Lower lift

b) Upper lift

c) False lift

d) Anti-ballast

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

a) Pressure number

b) Height value

c) Height ratio

d) Height number

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

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

40. What has to be done in case the balloon shows a strong tendency to climb while crossing thermals?

a) It must be heated continuously to maintain hull temperature
b) It must be heated stronger than usual
c) The burner has to be cut off immediately
d) The pull-rope has to be actuated immediately

41. Which area could be crossed with certain restrictions?

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

42. 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

43. Clouds in high layers are referred to as...

a) Strato-
b) Alto-
c) Cirro-
d) Nimbo-

44. The shown NOTAM is valid until... A1024/26 A) LOWW B) 2605211200 C) 2605211400 E) STOCKERAU VOR STO 113.00 UNSERVICEABLE.

a) 21/05/2027 13:00 UTC

b) 13/05/2026 12:00 UTC

c) 13/10/2026 00:00 UTC

d) 21/05/2026 14:00 UTC

45. The basket ropes of a hot-air balloon are usually fixed to ...

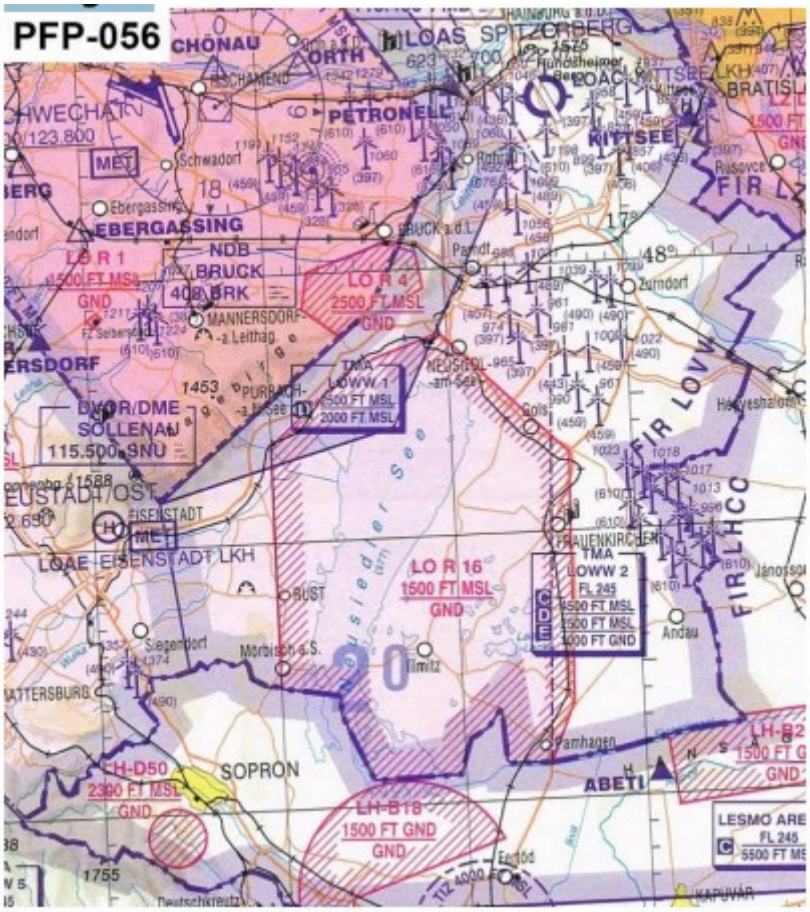
a) The burner

b) The burner cage

c) To the scoop

d) The Nomex apron

46. The upper limit of LO R 16 equals... See annex (PFP-056)



a) FL150
b) 1500 ft GND
c) 1500 ft MSL
d) 1500 m MSL

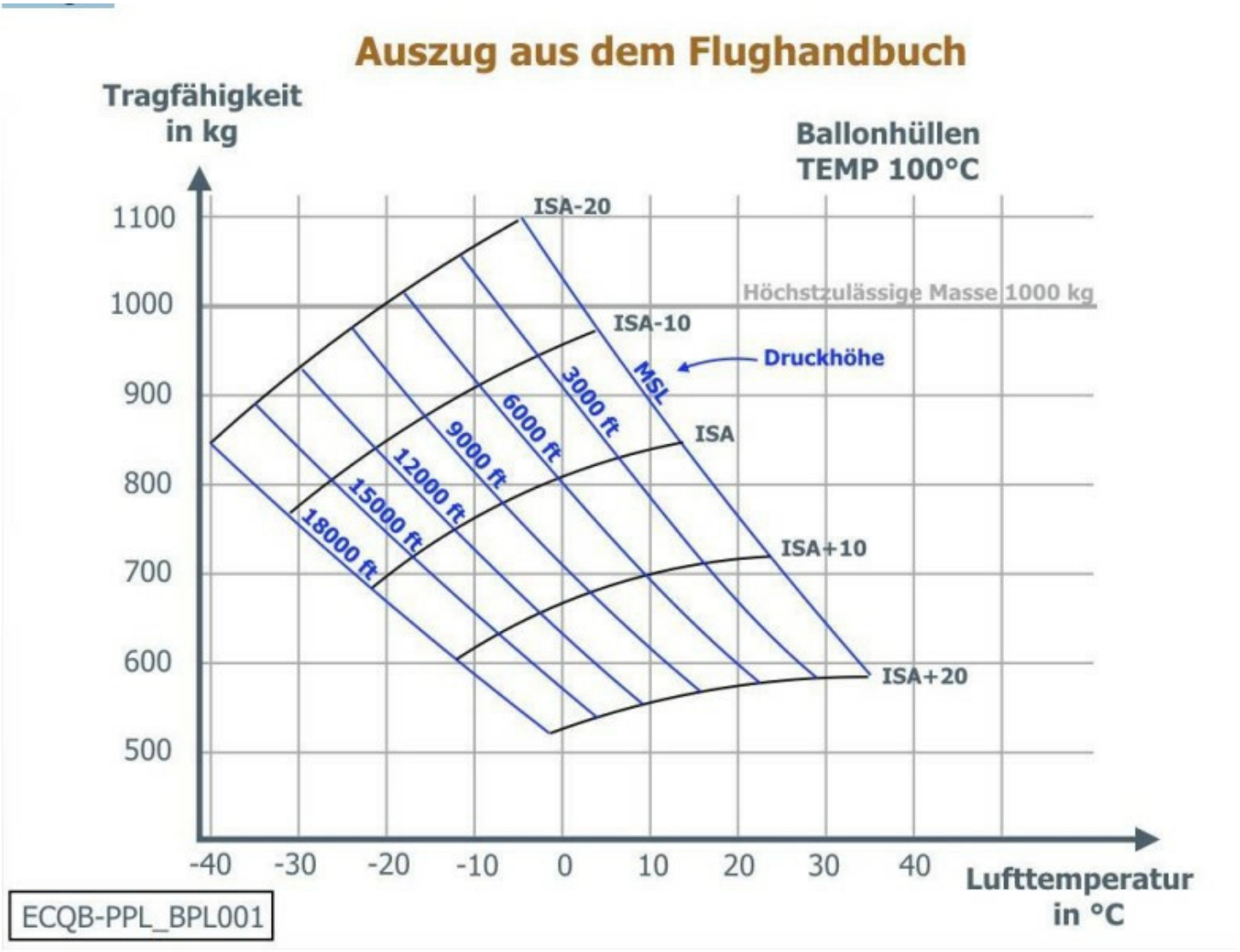
47. Which weather chart shows the actual air pressure as in MSL along with pressure centers and fronts?

a) Wind chart
b) Hypsometric chart
c) Prognostic chart
d) Surface weather chart

48. The standard state of gases refers to which temperature?

a) 15° C
b) 25° C
c) 0° C
d) 5° C

49. 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 9000 ft ? (use attachment ECQB-PPL_BPL001)



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

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

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

51. The aerostatic lift corresponds to which force?

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

52. 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 outside
b) The gas containers have to be fixed safely inside the basket
c) No separate gas containers are allowed during buildup
d) Two gas containers (one inside, one outside) are to be used

53. Why has a secondary ignition source be available during a ride with a hot-air balloon?

a) As an emergency lighting during night
b) To check seals of hose connections during darkness
c) To provide light signals by a camping fire after an emergency landing
d) To re-ignite the burner or pilot flames after flameout

54. Which are the properties of a Lambert conformal chart?

a) The chart is conformal and nearly true to scale
b) Great circles are depicted as straight lines and the chart is an equal-area projection
c) Rhumb lines are depicted as straight lines and the chart is conformal
d) The chart is conformal and an equal-area projection

55. 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

56. During a flight in an air mass with a temperature equal to ISA and the QNH set correctly, the indicated altitude is...

a) Equal to the standard atmosphere

b) Lower than the true altitude

c) Equal to the true altitude

d) Higher than the true altitude

57. 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

58. 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 Eustachian tube is blocked

d) All windows are completely closed

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

a) Continuous radio communication has to be established with air traffic control

b) A transponder has to be installed and carried aboard

c) A flight plan with detailed routing has to be filed

d) For all people inside the basket life jackets have to be carried aboard

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

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

61. At which conditions does the arm blower have the highest efficiency?

a) With as small distance to the balloon opening as possible
b) By evenly swiveling for better air spreading
c) By completely filling the balloon opening with the air beam
d) By placing the blower inside the hull

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

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

63. Given: TC: 179°; WCA: -12°; VAR: 004° E; DEV: +002° What are MH and MC?

a) MH: 167°. MC: 175°
b) MH: 167°. MC: 161°
c) MH: 163°. MC: 175°
d) MH: 163°. MC: 161°

64. Assume two arbitrary points A and B on the same parallel of latitude, but not on the equator. Point A is located on 010°E and point B on 020°E. The rhumb line distance between A and B is always...

a) More than 300 NM
b) Less than 300 NM
c) Less than 600 NM
d) More than 600 NM

65. The hull of a hot-air balloon is made up by which material?

a) Synthetic fabric
b) Silk fabric
c) Linen fabric
d) Cotton fabric

66. A wind shear is...

a) A meteorological downslope wind phenomenon in the Alps
b) A wind speed change of more than 15 kt
c) A vertical or horizontal change of wind speed and wind direction
d) A slow increase of the wind speed in altitudes above 13000 ft

67. What is the function of the red blood cells (erythrocytes)?

a) Oxygen transport
b) Immune defense
c) Blood sugar regulation
d) Blood coagulation

68. With other factors remaining constant, decreasing temperature results in...

a) Decreasing spread and decreasing relative humidity
b) Decreasing spread and increasing relative humidity
c) Increasing spread and decreasing relative humidity
d) Increasing spread and increasing relative humidity

69. Which are the properties of a Mercator chart?

a) The scale increases with latitude, great circles are depicted as curved lines, rhumb lines are depicted as straight lines
b) The scale is constant, great circles are depicted as curved lines, rhumb lines are depicted as straight lines
c) The scale increases with latitude, great circles are depicted as straight lines, rhumb lines are depicted as curved lines
d) The scale is constant, great circles are depicted as straight lines, rhumb lines are depicted as curved lines

70. Regarding the communication model, how can the use of the same code during radio communication be ensured?

a) By the use of proper headsets

b) By a particular frequency allocation

c) By the use of radio phraseology

d) By using radios certified for aviation use only

Exam simulation

BPL Hot Air - Balloon Pilot License - Flight Performance and Planning

QuizVds.it

Response Scheme

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

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

Exam simulation

BPL Hot Air - Balloon Pilot License - Flight Performance and Planning

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:		