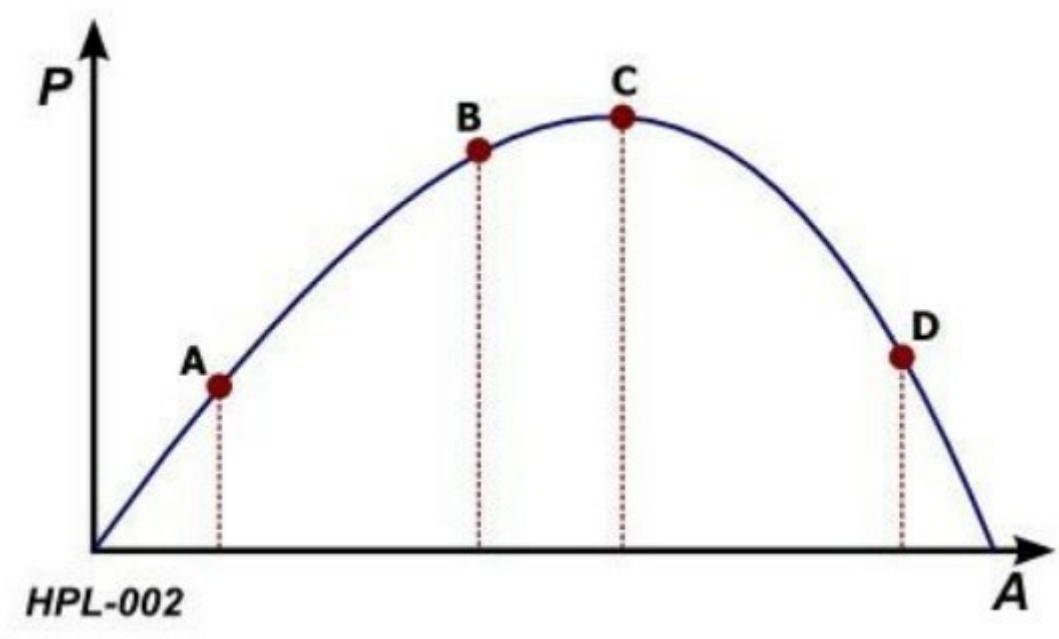
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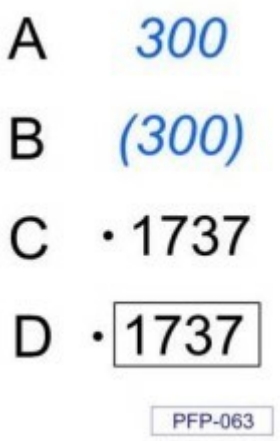
STUDENT NAME:	DATE AND TIME:

01. 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

02. (For this question, please use annex PFP-063) According ICAO, what symbol indicates a general spot elevation?



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

03. 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

04. Which of the human senses is most influenced by hypoxia?

a) The tactile perception (sense of touch)
b) The olfactory perception (smell)
c) The visual perception (vision)
d) The auditory perception (hearing)

05. The minimum length of the towing rope is:

a) 20 m

b) 50 m

c) 100 m

d) 30 m

06. 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)

07. 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

08. 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

09. Information about operational limits, loading and performance about an aircraft can be taken from which document?

a) Airworthiness certificate

b) Operating handbook

c) Certificate of registration

d) Flight Log book

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

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

11. During a flight at FL 80, the altimeter setting has to be...

a) Local QFE
b) 1013.25 hPa
c) 1030.25 hPa
d) Local QNH

12. 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

13. 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

14. What weather development will result from convergence at ground level?

a) Ascending air and cloud formation
b) Ascending air and cloud dissipation
c) Descending air and cloud formation
d) Descending air and cloud dissipation

15. In what different ways can a risk be handled appropriately?

a) Avoid, reduce, delay, accept

b) Detect, report, monitor, ignore

c) Accept, continue, improvise, review

d) Avoid, reduce, transfer, accept

16. 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

17. 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

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

a) During climb, the carrying gas warms due to thermal exchange with environmental air

b) During descent, the carrying gas warms adiabatically

c) During descent, the carrying gas warms due to thermal exchange with environmental air

d) During climb, the carrying gas warms adiabatically

19. Which is the purpose of the altimeter subscale?

a) To reference the altimeter reading to a predetermined level such as mean sea level, aerodrome level or pressure level 1013.25 hPa

b) To adjust the altimeter reading for non-standard temperature

c) To set the reference level for the altitude decoder of the transponder

d) To correct the altimeter reading for system errors

20. Cold air inflow in high tropospheric layers may result in...

a) Stabilisation and calm weather
b) Showers and thunderstorms
c) Calm weather and cloud dissipation
d) Frontal weather

21. 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

22. Temperatures will be given by meteorological aviation services in Europe in which unit?

a) Degrees Centigrade (° C)
b) Degrees Fahrenheit
c) Gpdam
d) Kelvin

23. UTC is...

a) A local time in Central Europe
b) A zonal time
c) Local mean time at a specific point on Earth
d) An obligatory time used in aviation

24. 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

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

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

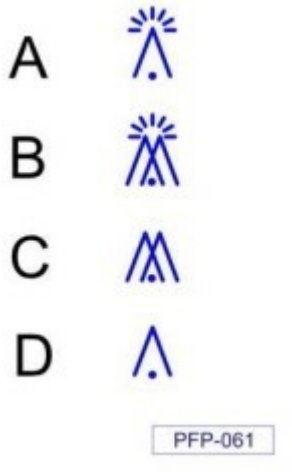
26. What is the correct phrase to begin a blind transmission?

a) Transmitting blind
b) No reception
c) Listen
d) Blind

27. Under what conditions may class D airspace be entered with a radio failure?

a) It is the destination aerodrome
b) Approval has been granted before
c) It is the aerodrome of departure
d) There are other aircraft in the aerodrome circuit

28. (For this question, please use annex PFP-061) According ICAO, what symbol indicates a group of unlighted obstacles?



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

29. 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

30. Under BOP.BAS.050(b), which of these balloon documents may be carried on the flight or stowed in the retrieve vehicle, as originals or copies, subject to any additional requirements of the States concerned?

a) The certificate of registration, certificate of airworthiness, AFM or equivalent, third-party liability insurance certificate and balloon logbook or equivalent
b) Only an EASA Form 1 and the crew members' passports
c) Only an aeroplane technical log, even when the aircraft is a balloon
d) Only a passenger list; no aircraft documentation is required

31. What has to be expected during descent above a heated water surface?

a) The rate of descent decreases
b) The horizontal speed decreases
c) The horizontal speed increases
d) The rate of descent increases

32. The altimeter can be checked on the ground by setting...

a) QNE and checking that the indication shows zero on the ground
b) QFF and comparing the indication with the airfield elevation
c) QNH and comparing the indication with the airfield elevation
d) QFE and comparing the indication with the airfield elevation

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. Which of the following options states the working principle of a vertical speed indicator?

a) Measuring the present static air pressure and comparing it to the static air pressure inside a reservoir
b) Static air pressure is measured and compared against a vacuum
c) Measuring the vertical acceleration through the displacement of a gimbal-mounted mass
d) Total air pressure is measured and compared to static pressure

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

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

36. What factors may indicate a tendency to fog formation?

a) Low pressure, increasing temperature
b) Strong winds, decreasing temperature
c) Low spread, increasing temperature
d) Low spread, decreasing temperature

37. What has to be expected by the balloon pilot during descent in deeply cooled layers close to the ground?

a) Floating on top of the cold air layer
b) Sudden change in airspeed
c) Balloon starts to climb
d) Increasing descent while entering to ground layers

38. What does a readability of 3 indicate?

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

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

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

40. 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

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

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

42. The term ‚magnetic course' (MC) is defined as...

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

43. 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

44. On what frequency shall a blind transmission be made?

a) On a tower frequency
b) On a radar frequency of the lower airspace
c) On the appropriate FIS frequency
d) On the current frequency

45. Which approximate, geometrical form describes the shape of the Earth best for navigation systems?

a) Sphere of ecliptical shape
b) Ellipsoid
c) Flat plate
d) Perfect sphere

46. What is the best combination of traits with respect to the individual attitude and behaviour for a pilot?

a) Extroverted - stable
b) Introverted - unstable
c) Introverted - stable
d) Extroverted - unstable

47. What is the minimum flight visibility in airspace "C" for an aircraft operating under VFR at FL125?

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

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

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

49. 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

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

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

51. The character of an air mass is given by what properties?

a) Wind speed and tropopause height

b) Environmental lapse rate at origin

c) Temperatures at origin and present region

d) Region of origin and track during movement

52. 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

53. 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

54. 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

55. In a simplified gas-balloon model, how does ascent below the pressure ceiling differ from ascent above it?

a) Below the pressure ceiling the balloon can climb indefinitely without becoming fully inflated

b) Above the pressure ceiling the envelope expands indefinitely without releasing gas

c) Below the pressure ceiling the lifting gas can expand; above it gas is released from the full envelope and lifting capacity decreases

d) Reaching the pressure ceiling has no effect on gas volume or lifting capacity

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

a) Higher than the true altitude

b) Lower than the true altitude

c) Equal to the standard atmosphere

d) Equal to the true altitude

57. 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°

58. What is the purpose of "interception lines" in visual navigation?

a) They are used as easily recognizable guidance upon a possible loss of orientation

b) To visualize the range limitation from the departure aerodrome

c) They help to continue the flight when flight visibility drops below VFR minima

d) To mark the next available en-route airport during the flight

59. Which altitude is displayed on the altimeter when set to a specific QFE?

a) Altitude in relation to mean sea level

b) Altitude in relation to the highest elevation within 10 km

c) Altitude in relation to the 1013.25 hPa datum

d) Altitude in relation to the air pressure at the reference airfield

60. A fully inflated gas balloon is in level equilibrium. Its mass is reduced by 1% and it rises to a new equilibrium while releasing gas. In a simplified model where a 1% pressure decrease corresponds to 80 m of height, what is the approximate change in equilibrium altitude?

a) Equilibrium altitude increases by 800 m
b) Equilibrium altitude decreases by 800 m
c) Equilibrium altitude decreases by 80 m
d) Equilibrium altitude increases by 80 m

61. 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

62. 5500 m equal...

a) 7500 ft
b) 18000 ft
c) 10000 ft
d) 30000 ft

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

a) Ground
b) Tower
c) Airfield
d) Control

64. Where can the type of restriction for a restricted airspace be found?

a) ICAO chart 1:500000
b) NOTAM
c) AIC
d) AIP

65. 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

66. A wind shear is...

a) A slow increase of the wind speed in altitudes above 13000 ft

b) A meteorological downslope wind phenomenon in the alps

c) A vertical or horizontal change of wind speed and wind direction

d) A wind speed change of more than 15 kt

67. What is the correct way of using the aircraft call sign at first contact?

a) Using the last two characters only

b) Using all characters

c) Using the first two characters only

d) Using the first three characters only

68. For a gas balloon below its pressure ceiling, assume ideal-gas behaviour, constant pressure and a fixed amount of lifting gas initially at 250 K. What is the approximate volume change when the gas temperature increases by 1 K?

a) Volume decrease by 0.4%

b) Volume increase by 0.4%

c) Volume increase by 4%

d) Volume decrease by 4%

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

a) Earth

b) Ground

c) Tower

d) Control

70. Measured pressure distribution in MSL and corresponding frontal systems are displayed by the...

a) Significant Weather Chart (SWC)

b) Prognostic chart

c) Surface weather chart

d) Hypsometric chart

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Response Scheme

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

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

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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:
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45:	46:	47:	48:
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65:	66:	67:	68:
69:	70:		

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