Technical Publication - TP 30

Catalogue of theory exam questions for licensing and authorisations of microlight aircraft pilots

Guidance material
Foreword

This guidance material is designed to be used for educational purposes and is intended for the preparation of candidates who take the theory exam for licensing and authorisations of microlight aircraft (MLA) pilots.

The Civil Aviation Authority of the Republic of Kosovo (CAA) published Regulation No. 3/209 on Common Rules in the Field of Civil Aviation on 30 October 2009. According to Annex II to this Regulation, a microlight aircraft (MLA) is defined as follows:

1. airplanes, helicopters and motor parachutes which do not have more than two seats and with a maximum takeoff mass (MTOM) not exceeding:
   (a) 300 kg for a single-seat airplane or helicopter; or
   (b) 450 kg for a two-seat airplane or helicopter; or
   (c) 330 kg for a single-seat amphibian or floating airplane or helicopter; or
   (d) 495 kg for a two-seat amphibian or airplane or helicopter;
   (e) 472.5 kg for a two-seat airplane fitted with a skid-mounted parachute system;
   (f) 315 kg for a single-seat airplane fitted with a skid-mounted parachute system and stalling speeds or landing speeds not exceeding 35 calibrated speed nodes (CAS);

2. single-seat or two-seat gyroplane with a maximum takeoff mass not exceeding 560 kg;

3. glider with a maximum idle mass of no more than 80 kg if single-seater or 100 kg if two-seater, including those which are foot-launched;

4. unmanned air vehicles with an operating mass of no more than 150 kg;

5. any other air vehicle having a maximum idle mass, including fuel, not exceeding 70 kg.

In order to obtain a pilot license or relevant authorisation for microlight aircraft, the candidate must undergo the theory and practical parts of the exam organized and developed by the CAA.

To take the theory exam, a candidate must present the written recommendation of the approved microlight aircraft pilot training organisation, in which the training was conducted, upon successful completion of all necessary elements of theoretical training. The recommendation issued by the microlight aircraft pilot training organisation is valid for 12 months. If during this period the candidate does not sit the theory exam, he or she must provide evidence of additional training conducted by the approved microlight aircraft pilot training organisation.
The candidate successfully passes the theory part of the exam if he or she scores at least 75% of the number of points determined for each subject. Points are only given for correct answers.

The candidate must repeat the entire theory exam if even after the fourth attempt he or she fails to pass any of the courses or if the period of 18 calendar months from the first application for the exam has expired. Prior to re-applying for the theory part of the exam, the candidate must, in accordance with the CAA's recommendations, complete additional training in the microlight aircraft pilot training organisation.

The success of the theory exam is valid for 24 months from the date of successful completion of the theory exam by the candidate. If during this period the candidate does not take the practical exam (flight), then the candidate must repeat the theory exam in its entirety.

In accordance with the privileges granted to the holder of a microlight aircraft pilot license, the candidate must demonstrate theoretical knowledge of the following subjects:

- Regular procedures, norms and limitations on the use of delta planes
- Construction and materials
- Flight theory for microlight aircraft
- Meteorology
- Air traffic rules for microlight aircraft
- Dangerous situations and emergency procedures of microlight aircraft
- Aviation Medicine and First Aid
- List of correct answers

This manual has been prepared by the CAA as a guidance material for regulating this aviation field.

Ideas expressed in this guidance may be subject to copyright if there is a suspicion of a violation. The preparation of another publication of this nature may be prohibited unless substantially different from this guidance and only if it is not a copy of it.

If you need additional information, please write to us at the following address:

Civil Aviation Authority of Kosovo
Arbëria neighbourhood
Street Ahmet Krasniqi no. 208
10000 Prishtina
Republic of Kosovo
e-mail: infocaa@caa-ks.org
gat@caa-ks.org
Tel: +383 (0)38 248 629
Fax: +383 (0)38 211 009

Eset Berisha
Director General

20 June 2019
### List of effective pages

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
<th>Ver. No.</th>
<th>Effective date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>2 of 68</td>
<td>Original</td>
<td>23 July 2019</td>
</tr>
<tr>
<td>List of effective pages</td>
<td>5 of 68</td>
<td>Original</td>
<td>23 July 2019</td>
</tr>
<tr>
<td>Approval table</td>
<td>5 of 68</td>
<td>Original</td>
<td>23 July 2019</td>
</tr>
<tr>
<td>Distribution list</td>
<td>6 of 68</td>
<td>Original</td>
<td>23 July 2019</td>
</tr>
<tr>
<td>Revision table</td>
<td>6 of 68</td>
<td>Original</td>
<td>23 July 2019</td>
</tr>
<tr>
<td>Table of contents</td>
<td>7 of 68</td>
<td>Original</td>
<td>23 July 2019</td>
</tr>
<tr>
<td>Regular procedures, norms and limitations on use of delta planes</td>
<td>8 of 68</td>
<td>Original</td>
<td>23 July 2019</td>
</tr>
<tr>
<td>Construction and materials</td>
<td>14 of 68</td>
<td>Original</td>
<td>23 July 2019</td>
</tr>
<tr>
<td>Flight theory for microlight aircraft</td>
<td>18 of 68</td>
<td>Original</td>
<td>23 July 2019</td>
</tr>
<tr>
<td>Meteorology</td>
<td>38 of 68</td>
<td>Original</td>
<td>23 July 2019</td>
</tr>
<tr>
<td>Air traffic rules for microlight aircraft</td>
<td>44 of 68</td>
<td>Original</td>
<td>23 July 2019</td>
</tr>
<tr>
<td>Dangerous situations and emergency procedures of microlight aircraft</td>
<td>53 of 68</td>
<td>Original</td>
<td>23 July 2019</td>
</tr>
<tr>
<td>Aviation Medicine and First Aid</td>
<td>57 of 68</td>
<td>Original</td>
<td>23 July 2019</td>
</tr>
<tr>
<td>List of correct answers</td>
<td>62 of 68</td>
<td>Original</td>
<td>23 July 2019</td>
</tr>
</tbody>
</table>

### Approval table

<table>
<thead>
<tr>
<th>Name and position</th>
<th>Date</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared by: Skender Ahmeti Helicopter Operations Officer</td>
<td>25 May 2019</td>
<td></td>
</tr>
<tr>
<td>Authorized by: Kushtrim Musa Director of FSD</td>
<td>03 June 2019</td>
<td></td>
</tr>
<tr>
<td>Quality control: Lendita Kika-Berisha Director of QSD</td>
<td>22 July 2019</td>
<td></td>
</tr>
<tr>
<td>Approved by: Eset Berisha Director General</td>
<td>23 July 2019</td>
<td></td>
</tr>
</tbody>
</table>
### Distribution list

<table>
<thead>
<tr>
<th>Copy</th>
<th>Location</th>
<th>Media</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CAA Library</td>
<td>Printed</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>CAA files server</td>
<td>Electronic</td>
<td>1</td>
</tr>
</tbody>
</table>

### Revision table

<table>
<thead>
<tr>
<th>Rev. No.</th>
<th>Date</th>
<th>Prepared by:</th>
<th>Authorized by:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Table of contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>2</td>
</tr>
<tr>
<td>List of effective pages</td>
<td>5</td>
</tr>
<tr>
<td>Approval table</td>
<td>5</td>
</tr>
<tr>
<td>Distribution list</td>
<td>6</td>
</tr>
<tr>
<td>Revision table</td>
<td>6</td>
</tr>
<tr>
<td>Table of contents</td>
<td>7</td>
</tr>
<tr>
<td>Regular procedures, norms and limitations on use of delta planes</td>
<td>8</td>
</tr>
<tr>
<td>Construction and materials</td>
<td>14</td>
</tr>
<tr>
<td>Flight theory for microlight aircraft</td>
<td>18</td>
</tr>
<tr>
<td>Meteorology</td>
<td>38</td>
</tr>
<tr>
<td>Air traffic rules for microlight aircraft</td>
<td>44</td>
</tr>
<tr>
<td>Dangerous situations and emergency procedures of microlight aircraft</td>
<td>53</td>
</tr>
<tr>
<td>Aviation Medicine and First Aid</td>
<td>57</td>
</tr>
<tr>
<td>List of correct answers</td>
<td>62</td>
</tr>
</tbody>
</table>
Regular procedures, norms and limitations on use of microlight aircraft
1) The amount of lubrication oil is checked:
   
   (a) when the engine is running and is running at low revs,
   (b) immediately after the engine has been switched off before the oil returns to the crust.
   (c) on the ground, when the engine is not in operation (off),

2) The oil flows through the engine with the help of:
   
   (a) electric pump,
   (b) motor-driven pump,
   (c) free fall,
   (d) engine torque inertia.

3) Which of the standard instruments mentioned, with which light air vehicles are equipped, continue to work in the event of a failure of the power source?
   
   (a) artificial horizon, vertical speed indicator, gyroscopic compass, speedometer,
   (b) height meter, vertical speed indicator and speedometer,
   (c) height meter, vertical speed indicator, return and sliding indicators and speedometer,
   (d) height meter and speedometer.

4) The main force that enables the carrying out of basic parachute functions is:
   
   (a) gravity force,
   (b) lifting force,
   (c) air resistance,
   (d) resultant force.

5) What does the green arc on aircraft instruments show?
   
   (a) the speed range where it is possible to use the landing wheels and flaps,
   (b) maximum permitted value,
   (c) Dangerous area,
   (d) normal use area.

6) What does the yellow arc on aircraft instruments show?
   
   (a) maximum permitted value,
(b) increased vigilance border area,
(c) the speed range where it is possible to use the landing wheels and flaps,
(d) normal use area.

7) Aircraft tires with a narrow profile and higher pressure are best suited for landing:

(a) on grass runways
(b) on hard and bumpy airfields,
(c) on concrete and asphalt runways,
(d) on grass and wet runways.

8) The main source of electricity when the engine is running is:

(a) magnet,
(b) dynamo or alternator,
(c) battery,

9) What is the purpose of the red line on the first wheel and tire of the aircraft nose?

(a) checking that the tire has not moved from the nose wheel,
(b) wheel centering,
(c) identification of tire type,
(d) air pressure control on the tire.

10) What is the safest practical method for checking the amount of fuel in the tank when the aircraft is on the ground:

(a) visual inspection of the amount of fuel in the aircraft,
(b) swinging the aircraft wings while listening to the rustling of the fuel in the tank,
(c) reading the fuel meter,
(d) measuring the aircraft weight.

11) Which harmful impurity is the most difficult to be removed from the fuel through simple filtration?

(a) water,
(b) small particles of rust and other impurities,
(c) ice,
(d) fat or oil.
12) The carburetor's role in piston engines is:
   (a) to bring air to the engine pistons,
   (b) to bring a mixture of fuel and air into engine cylinders,
   (c) to discharge exhaust fumes from the exhaust pipe,
   (d) to bring fuel to the engine cylinders.

13) Engine power decreases with height due to:
   (a) lower air density, in which cylinders are not filled sufficiently,
   (b) low temperature, as the engine does not function in optimal operational temperature,
   (c) high air density, in which the engine receives a poor mixture,
   (d) low air density, in which the engine receives a very rich mixture.

14) Piston aircrafts reach maximum power:
   (a) at high altitudes,
   (b) during takeoff, regardless of rotation,
   (c) during takeoff at full rotation (maximum),
   (d) at low altitude horizontal flight mode.

15) The block of modern aircraft engines is made of:
   (a) steel alloy,
   (b) bronze,
   (c) aluminium alloy,
   (d) titanium alloy.

16) Oil in piston engines serves for:
   (a) lubricating and cooling the engine,
   (b) increasing mixture combustion temperature in the cylinders,
   (c) exclusively for the smooth operation of the engine,
   (d) as addition to the mixture which burns in the cylinders.

17) Where can we find information about the type of oil that is intended for our aircraft engine:
   (a) all piston aircrafts use the same oil marked with SAE40 (80Nj),
   (b) on the label of the oil container,
(c) in the Aircraft Flight Manual,
(d) on the plate near the oil measuring rod.

18) What normal procedure should be followed if, after starting a warm engine, the oil pressure does not appear within the specified time:

(a) stop the engine,
(b) increase engine rotations so that the engine oil pump increases the oil pressure,
(c) do nothing because instruments in modern aircraft are free and unreliable,
(d) weaken the mixing to immediately raise the temperature in the cylinder head.

19) The engine of a piston aircraft can start if you rotate the propeller manually:

(a) yes, if the magnets are locked,
(b) normally not, if it is cold and if the ignition is off,
(c) no, under no circumstances,
(d) yes, always.

20) The strongest cables in the construction of a motor aircraft are:

(a) the lower and the upper side cables,
(b) tensioner (conveyor),
(c) the lower side cables,

21) A propeller with reduction gear has a rotational speed:

(a) greater than the rotational speed of the engine,
(b) lower than the rotational speed of the engine,
(c) same as the engine speed when it comes to constant speed propellers,
(d) a propeller with three or more wings has greater speed,

22) If the altimeter on ground is set to read 0m and the next day the instrument reads 20m, this means that the pressure:

(a) has increased,
(b) remains the same,
(c) has decreased.

23) What determines the choice of the parachute for microlight aircraft?
(a) the weight and the speed of the microlight aircraft,
(b) the maximum speed of the microlight aircraft,
(c) construction features of the microlight aircraft.
Construction and materials
24) **The wing skeleton consists of:**
   
   (a) skeleton rear fabric,
   (b) aluminium alloy pipes, plates and joining screws and cables,
   (c) triangle, rear and metallic tubes.

25) **The engine unit consists of:**
   
   (a) engine, reductor and propeller,
   (b) engine, engine commands and propeller,
   (c) propeller, reductor, engine commands and engine holder,
   (d) engine and propeller.

26) **The most damaging impact on the wing surface is from:**
   
   (a) humidity,
   (b) temperature,
   (c) sun,
   (d) pressure.

27) **The design of a motor aircraft can withstand a flight load of:**
   
   (a) $+4/-2 \text{ g}$
   (b) $+6/-3 \text{ g}$
   (c) $+4/-4 \text{ g}$
   (d) $+5/-2 \text{ g}$.

28) **The self-insurer bolt can be removed and placed in its place:**
   
   (a) 2 times,
   (b) 3 times,
   (c) only once,
   (d) 5 times.

29) **The main source of electricity in flight is:**
   
   (a) alternator - magnet,
30) How many damaged wires can a cable (sled) have:

(a) one,
(b) none,
(c) up to ¼,
(d) two.

31) Brake control in light aircraft is done during:

(a) increasing the speed on ground,
(b) flight,
(c) driving,
(d) stopping.

32) Tires will be more durable if takeoff is carried out from:

(a) asphalt,
(b) concrete,
(c) grass,
(d) land surface.

33) Engine work on battery the capacity of which has been reduced is:

(a) safe,
(b) impossible,
(c) possible but short,
(d) not safe.

34) Microlight aircraft should preferably use batteries with:

(a) gel,
(b) acid,
(c) foam.

35) The main parts of a parachute are:

(a) canopy and chords, free ends, carabiner,
(b) canopy and chords, link system, activation device,
(c) canopy and chords, carabiner chords, pilot chute,
(d) stabilizer parachute, canopy and chords, device for slowing the opening process of the link system.
36) The main purpose of the parachute is to:

(a) slow down the landing speed,
(b) stabilize the landing of humans and materials on the ground,
(c) safely land people and materials on the ground.

37) The pilot chute serves for:

(a) stabilizing the parachute,
(b) initiating the process of opening the main canopy,
(c) slowing down the opening process,
(d) controlling the opening process of the main canopy.

38) To which part of the microlight aircraft is the rescue parachute connected:

(a) body holder,
(b) wing,
(c) pilot,
(d) engine holder.

39) The central part of the main canopy contains a “valve”, the purpose of which is to:

(a) prevent canopy load in the opening process,
(b) reduce dynamic shocks during the opening of the parachute,
(c) enable the release of air from the canopy to ensure stable opening of the canopy,
(d) enable canopy manipulation.
Flight theory for microlight aircraft
40) What are the four forces affecting the aircraft during flight:

(a) propulsion, lifting, weight and resistance,
(b) force, speed, weight and friction,
(c) force, speed, weight and resistance,
(d) propulsion, take-off, gravitational acceleration and weight;

41) Resistance resulting from the equalization of pressure at the ends of the wings is called:

(a) inductive resistance,
(b) interfering resistance,
(c) constant resistance,
(d) total resistance;

42) How does inductive resistance change in relation to the aircraft speed:

(a) it does not depend on speed,
(b) it increases with speed reduction,
(c) it increases with the increase in speed only at speeds greater than 180 kt,
(d) it decreases with the reduction of speed;

43) Which wing shape has greater inductive resistance:

(a) double trapezoidal,
(b) trapezoidal,
(c) rectangular,
(d) elliptical;

44) In which direction do the rotors on wing edges rotate?

(a) anti-clockwise on the right side looking from the cabin toward the flight,
(b) clockwise movement on the left side and anti-clockwise on the right hand side looking from the cabin toward the flight,
(c) so that the axis of rotation of the current is parallel to the wing holders.

45) Takeoff stall speed according to the speedometer when the aircraft is flying against the wind compared with flying in the wind direction is:

(a) increased for the value of the extended wind component,
(b) unchanged, as the wind does not affect stall velocity,
(c) reduced by the value of the wind component,
(d) reduced by half the value of the wind component;

46) The four forces affecting the aircraft are in equilibrium when the aircraft:

(a) is on the ground,
(b) is accelerating in flight,
(c) reduces speed during flight,
(d) flies at a constant progressive speed,

47) The aircraft manoeuvring speed (Va) is the speed at which the pilot cannot exceed with the steering wheel in a sudden deviation at:

(a) the speed which cannot be exceeded (Vne),
(b) overload + 1g,
(c) allowed positive overload values + g,
(d) allowed negative overload values - g;

48) When landing in gust wind conditions, do we fly at normal speed of landing approach?

(a) no, the approach speed should be increased by half the value of the gust wind,
(b) yes, (see pilot instruction for airplane exploration),
(c) no, speed of 1.2 Vs is needed.

49) When landing at a high altitude airport, the actual air speed (TAS) of the airplane is greater than normal. What instrumental speed (IAS) do we maintain in such cases:

(a) normal,
(b) less than normal,
(c) greater than normal,
(d) increases by 5 kt for every 1,000 ft of altitude;

50) At what speed do we fly an aircraft, respectively a motor delta plan to the obstacles in takeoffs from short terrain with obstacles:

(a) at manoeuvring speed (Va),
(b) at minimum speed (Vs),
(c) at the best angle of climb speed (Vx),
(d) at the best takeoff speed (Vy);

51) How does the wind affect the vertical speed of climb:
(a) tail wind tail increases vertical speed of climb,
(b) tail wind decreases vertical speed of climb,
(c) head wind increases vertical speed of climb.
(d) the wind has no effect on the vertical speed of climb.

52) How the wind influence the best angle of climb:

(a) tail wind increases the angle of climb,
(b) head wind increases the best angle of climb,
(c) the wind has no influence on the best angle of climb,
(d) head wind decreases the best angle of climb.

53) What are the reciprocal ratios of elevation, resistance, propulsion, and weight on the horizontal flight and the fixed direction of an aircraft at constant speed?

lift, thrust, drag, and weight
(a) lift is equal to weight and thrust is equal to drag,
(b) lift is equal to drag and thrust is equal to weight,
(c) the sum of the lift and the weight is the sum of the thrust and drag of the aircraft,
(d) the sum of the lift, drag and weight is equal to the thrust of the aircraft;

54) When flying an aircraft with a piston engine and at the speed of longest stay in the air, we:

(a) pass the largest distance to the amount of fuel (we fly at the lowest drag),
(b) move the largest distance between the two fuel fillings;
(c) the engine consumes the least amount of fuel per unit of time (we fly at the smallest power)

55) Lifting force on the wing of the aircraft:

(a) is the result of the pressure change in the upper and lower parts of the wing,
(b) operates vertically,
(c) always has the same value as the gravitational force, otherwise the airplane could not fly,
(d) has the centre in the centre of the aircraft's gravity force.

56) When flaps are opened, lifting force increases due to:

(a) reduction of inductive resistance,
(b) increase of the impact of the angle of attack and the cambered wing profile,
(c) reduction of drag creation,
(d) reduction of the angle of attack.

57) During landing with open flaps, the speed of breaking the climbing force compared with flights without flaps is:

(a) smaller,
(b) unchanged, because it does not depend on the position of flaps,
(c) greater;

58) What is the unsafe position of the centre of gravity in terms of longitudinal stability:

(a) backward balance,
(b) excessive balance,
(c) forward balance,
(d) very low centre of gravity position of the aircraft.

59) The longitudinal axis of the aircraft is the axis which extends from:

(a) from side to side of the wing and through the centre of gravity of the aircraft,
(b) from the aircraft nose to the aircraft tail through the centre of gravity of the aircraft,
(c) from side to side of the wing and through the centre of gravity of the aircraft.

60) How do we define aircraft stability around the longitudinal axis:

(a) side stability,
(b) stability of direction,
(c) longitudinal stability,
(d) indirect stability.

61) Aircraft stability around the longitudinal axis (indirect stability) is ensured through:

(a) dihedral angle of the wings, respectively the low position of the centre of gravity of the aircraft,
(b) aerodynamic wing balance,
(c) wingspan,
(d) aerodynamic flexibility of the wings.

62) Which parts of the aircraft are intended to create stability around the vertical axis:

(a) dihedral angle of the wings,
(b) all vertical areas of the tail
(c) only the vertical stabilizer,
63) In propellers with variable pitch, the small pitch is used in:
   (a) takeoff, landing and climbing,
   (b) cruising,
   (c) takeoff and climbing.

64) Aircraft gliding depends on:
   (a) overall weight,
   (b) lift-to-drag ratio,
   (c) drag-to-thrust ratio.

65) Which conditions normally increase the lift force:
   (a) decreasing the constructive angle of attack of the wing and increasing the speed,
   (b) reducing the angle of attack of the wing and increasing the difference of angles
       of attack of the wings and horizontal stabilizer,
   (c) increasing the angle of attack of the wing and increasing the speed,
   (d) increasing the angle of attack between the longitudinal axis of the aircraft and
       the horizon and decreasing the speed;

66) The maximum vertical climb speed will be:
   (a) at the upper boundary of the flight,
   (b) at the time of take-off,
   (c) halfway to the upper boundary of the flight;

67) When opening the flaps, the curvature of the wing profile increases. How does this affect
    the aircraft's lift and drag forces:
   (a) both increase,
   (b) both decrease,
   (c) lift force decreases and drag force increases,
   (d) lift force increases and drag force decreases.

68) When two persons are flying in an aircraft with two or more seats, due attention
    should be paid because:
   (a) critical angle of attack is greater,
   (b) failure of the gliding motor is greater,
   (c) speed of breaking the lift force is slower,
(d) speed of breaking the lift force is faster.

69) Aircraft in stationary flies with:

(a) angle of attack of wings greater than that in horizontal flight,
(b) sliding in wing,
(c) angle of attack same as in horizontal flight,
(d) angle of attack of wings smaller than that in horizontal flight.

70) In circle, the lift force should be:

(a) always twice as great as that in the horizontal flight,
(b) greater than that in horizontal flight,
(c) less than in horizontal flight, because the centrifugal force fills a part of the lift force,
(d) equal to that in horizontal flight.

71) What is the consequence of disconnecting flows from the upper part of wings during circulation in circle?

(a) loss of lift force,
(b) external side sliding,
(c) inner side sliding,
(d) great power required for moving the rudder.

72) The highest permissible inclination in circle, with an overload of + 2,5 g, is: (see picture)

(a) 66°
(b) 52°
(c) 60°
(d) 74°

73) Overload of the aircraft in circle with an inclination of 60° is: (see picture)

(a) 2,0 g,
(b) 0,5 g,
(c) 1,0 g,
(d) 1,5 g.

74) Instrumental breaking speed (minimum instrumental speed) of the lift force with height increase:
75) The aircraft which after three oscillations returns to the position of steady flight as the pilot has shortly pulled the command stick in his direction, is:

(a) stable in dynamic terms,
(b) labile - not stable in dynamic terms,
(c) indifferent in dynamic terms,
(d) stable in static terms.

76) Why the pilot should bear in mind that the position of aircraft's gravity centre remains within the defined boundaries:

(a) to achieve the low value of the minimum speed,
(b) to prevents aircraft's overload,
(c) to achieve the proper airs stability of the aircraft,
(d) to achieve the required minimum speed value.

77) What is the required force on the command stick before touchdown if the aircraft is loaded incorrectly and therefore the centre of gravity is shifted forward from the normal position:

(a) normal,
(b) less than normal;
(c) greater than normal.

78) Area with subsonic speed of airflow in relation to Mach number is:

(a) 0.2<M<0.8,
(b) 0.8<M<1.4,
(c) 0<M<0.2.

79) Area with transonic speed of airflow in relation to Mach number is:

(a) 0.8<M<1.4,
(b) 0<M<0.2,
(c) 0.2<M<0.8.

80) The accurate ratio between 1m and 1ft is:

(a) 0.305m=1.5ft,
(b) 1m=4.28 ft,
(c) 1m=3.2 ft.

81) In which units of measurement is Mach number expressed?

(a) there is no unit,
(b) m/s,
(c) km/h.

82) Which letter represents the chord line of the air profile in the illustration: (see picture)

(a) C,
(b) B,
(c) A.

83) Which letter represents the upper part of the air profile in the illustration: (see picture)

(a) B,
(b) C,
(c) A.

84) With the increase of angle of attack of the wing, inductive resistance has the tendency to:

(a) remain constant,
(b) increase,
(c) decrease.

85) For approximately how long does the turbulence remain in the air after the passing of a large aircraft:

(a) five minutes or more. The ATC recommends for light aircraft, between two to three minutes between climbs,
(b) two minutes,
(c) three minutes.

86) In piston aircraft, the maximum flight range is at:

(a) high heights,
(b) small heights,
(c) medium heights.

87) The practical limit of vertical climb speed for piston aircraft during flight is:

(a) 0.5 m/s
(b) 1 m/s
(c) 0 m/s

88) In a coordinated horizontal circle, the normal load coefficient depends on:

(a) inclination angle of the wing during the circle,
(b) turn radius,
(c) speed of entry into the circle.

89) The command of the aircraft in inclination (turn) is made through:

(a) flaps,
(b) ailerons,
(c) rudder.

90) Angle of attack is the angle between:

(a) chord line of the wing profile and incoming airflow,
(b) longitudinal axis of the aeroplane body and chord line of the wing,
(c) longitudinal axis of the aircraft body and the incoming airflow,
(d) chord of the horizontal stabilizer profile and chord of the wing profile.

91) The angle between the incoming airflow and chord line of the wing profile is:

(a) constructive angle,
(b) dive angle,
(c) incidence angle,
(d) takeoff angle.

92) What is the angle of attack of the wing near which breakage of the lift force is expected:

(a) 3° - 5°
(b) 5° - 10°
(c) 10° - 18°
(d) greater than 25°.
93) The critical angle of attack of the aircraft's wing:

(a) changes if the weight of the aircraft changes,
(b) does not depend on the weight and centre of gravity of the aircraft,
(c) decreases if the centre of gravity of the aircraft moves backwards,
(d) increases if the centre of gravity of the aircraft moves forward.

94) The constructive angle is:

(a) the angle between the chord of the wing profile and the longitudinal axis of the aircraft,
(b) the angle between the airflow direction and the chord of the wing profile,
(c) the angle between the height control wheel and the chord of the horizontal stabilizer,
(d) distance from the frontal wing rib and the longitudinal axis of the aeroplane.

95) What happens with the lifting and resistance of the wings if the wing passes the critical angle of attack:

(a) lifting and resistance remain the same in the critical angle of attack,
(b) lifting decreases, while resistance increases,
(c) lifting continues to increase, while resistance decreases,
(d) both lifting and resistance decrease.

96) When does the lift force in the aircraft break:

(a) only when the aircraft nose is high above the low-speed horizon,
(b) only when the aircraft nose is above the horizon,
(c) only when the speed falls below the values given in the guide,
(d) at any speed and under the critical angle of attack.

97) What are the two forces that create the resulting aerodynamic force:

(a) thrust and speed,
(b) lift and thrust,
(c) speed and frontal thrust,
(d) lift and speed.

98) The angle of attack is:

(a) the angle between the direction of the earth's gravitational force and the relative wind,
(b) the angle between the thrust force and relative wind,
(c) the angle between the relative wind direction and the air profile chord,
(d) the angle between the relative wind and the angle of attack of the air profile.

99) **Air profile is:**

(a) the surface that produces the lift,
(b) the surface that compensates the drag force,
(c) the surface obtained by the longitudinal cut of the carrying surface,
(d) the side cut of the body around which airflow takes place,

100) **With the increase of the wing’s angle of attack:**

(a) lift and thrust forces increase,
(b) gliding decreases,
(c) gliding increases,
(d) inductive drag increases.

101) **Gliding is the ratio between:**

(a) weight and distance of the flight,
(b) distance of gliding and loss of height,
(c) vertical and horizontal speed,
(d) horizontal speed and flight distance.

102) **Air profile is achieved through:**

(a) cross cut of the wing,
(b) longitudinal cut of the wing,
(c) inclined cut of the wing,
(d) indirect ratio of the lift force and the drag force.

103) **Chord line of the profile is:**

(a) the high curved line that connects the final profile points,
(b) the high curved line that connects the final air profile points,
(c) the straight line that connects the final profile points,
(d) the line passing through the thrust point with the lower curved line.

104) **Lift force is:**

(a) the aerodynamic force with the impact of the airflow on the wing that contradicts the gravitational force,
(b) the aerodynamic force generated by the impact of the aerodynamic stream on the wing that opposes inductive drag,
(c) the aerodynamic force generated by the airflow action on the wing that opposes the parasitic drag.
(d) the aerodynamic force generated by the impact of the airflow on the wing that contradicts the gravitational force.

105) Center of thrust:
(a) upon increase of the angle of attack, moves towards the wing's angle of attack,
(b) upon increase of the angle of attack, moves towards the wing's leading angle,
(c) is a fixed point and does not change with the change of the angle of attack,
(d) moves towards the angle of attack when the air density increases.

106) The lift force appears on the upper surface of the air profile upon:
(a) reduction of pressure due to greater fluid speed,
(b) increase of pressure due to greater fluid speed,
(c) increase of pressure due to lower fluid speed,
(d) reduction of pressure due to lower fluid speed.

107) Frontal wind decreases the takeoff run:
(a) wrong,
(b) correct,
(c) with the increase of frontal wind, the lift/drag ratio increases,
(d) with the increase of frontal wind, due to the increased thrust, the lift/drag ratio decreases.

108) What does the drag of the body found in airflow depend on:
(a) body surface, body shape and airflow speed,
(b) rigidity of the body,
(c) body weight,
(d) gravity position of the body;

109) Real speed is:
(a) the flight speed in relation to the air in environment,
(b) the flight speed in relation to the static pressure,
(c) the flight speed in relation to the prevalent wind,
(d) the flight speed in relation to the earth.

110) What will happen if we increase the angle of attack when flying at minimum speed:
(a) we increase the altitude at the same speed as the flight,
(b) airflow around the wing is split because of a large angle of attack and leads to breaking the lift force,
(c) the lift force decreases,
(d) the drag force increases.

111) The cause of the separating/diving the airflow from the wings is always:

(a) the very high airflow speed,
(b) air gaps in the airflow,
(c) the very large angle of attack,
(d) the low speed of flow.

112) For angles of attack greater than critical, we have:

(a) breakage of the lift force,
(b) increased lift force,
(c) a slight decrease of lift force,
(d) lift force remains constant;

113) The backward wind during climbing in flight:

(a) prolongs run,
(b) climbing the flight with backward wind does not affect flight safety but is not recommended for not very experienced pilots,
(c) climbing the flight with backward wind requires lowering the wing's angle of attack,
(d) climbing the flight with backward wind does not require any special pilot measures and can be applied by all pilots;

114) How is the speed in relation to air called:

(a) real,
(b) stopping,
(c) relative,
(d) sliding;

115) During slower landing speed, microlight aircraft achieves the highest distance of lift/drag ratio):

(a) no,
(b) yes,
(c) depends on the air density,
(d) depends on the air temperature;

116) What should we expect when landing with strong wind immediately after the obstacle:

(a) strong turbulences,
(b) strong wind in the opposite direction,
(c) nothing in particular,
(d) undisturbed conditions for landing on the side with no wind.

117) Lift/drag ratio of the light micro aircraft:

(a) depends on the position of the gravity centre,
(b) is notably better when the weight is greater,
(c) does not depend on the weight of the microlight aircraft,
(d) is greater when the pilot weight is lighter;

118) Stalling:

(a) occurs when the critical angle is exceeded at low speeds,
(b) occurs when the critical angle is exceeded at high speeds,
(c) occurs when the critical angle is exceeded at certain speeds,
(d) always occurs when the critical angle of attack is exceeded.

119) When the aircraft weight is greater:

(a) the speed at which climbing breakage occurs is greater,
(b) the speed at which climbing breakage occurs is lower,
(c) the weight does not affect the speed at which climbing breakage occurs,
(d) the speed at which climbing breakage occurs is greater at a lighter weight.

120) Turbulence:

(a) does not affect the creation of the stalling situation,
(b) may lead to sudden stalling of the delta plan,
(c) the impact of turbulence is not such that it can lead to stalling,
(d) the gradual increase in speed prevents the occurrence of stalling in the air with turbulence.

121) The wings' angle of attack in which delta plane stalling is expected is:

(a) 10-20°
(b) 8-10°
122) With the increase of the angle of attack to the critical one, the climbing and resistance:
   (a) climbing increases, resistance decreases,
   (b) decrease;
   (c) increase,

123) When passing the critical angle of attack, the climbing and resistance:
   (a) climbing decreases while resistance increases,
   (b) increase,
   (c) decrease;

124) The resistance that occurs due to equalization of pressures to wing edges is called:
   (a) indifferent,
   (b) inductive,
   (c) interference;

125) The longitudinal axis extends in the direction:
   (a) wing, left – right,
   (b) the diagonal along the wings,
   (c) along the body (from nose to tail).

126) The indirect axis extends in the direction:
   (a) wing, left – right,
   (b) along the body (from nose to tail).
   (c) yard arm - aircraft body.

127) The vertical axis extends in the direction:
   (a) along the body (from nose to tail).
   (b) yard arm - aircraft body,
   (c) wing, left – right.

128) Indirect stability is the stability around:
(a) the indirect axis,
(b) the longitudinal axis,
(c) the vertical axis.

129) Longitudinal stability is around:

(a) the indirect axis,
(b) the longitudinal axis,
(c) the vertical axis.

130) Stability by direction is around:

(a) the longitudinal axis,
(b) the indirect axis,
(c) the vertical axis.

131) The propeller pitch is the way:

(a) propeller passes during a rotation,
(b) propeller shaft passes during a rotation,
(c) the light micro aircraft passes during a rotation of the propeller.

132) The moving unit of the microlight aircraft is comprised of:

(a) motor and propeller,
(b) motor and reductor,
(c) motor and its command.

133) The stages of climbing are:

(a) run, lift-off, and climbing,
(b) run, lift-off, and climbing,
(c) run, lift-off, and flight.

134) The stages of landing are:

(a) approach, slow down, levelling, touchdown and landing roll),
(b) levelling and touchdown,
(c) approach, levelling, and touchdown.

135) If the triangular plane (delta plane) flies very slowly, we should:
(a) push the triangle holder forward,
(b) pull the triangle holder backwards,
(c) the movement of the triangle holder does not affect the reduced speed.

136) If the triangular plane (delta plane) flies very fast, we should:

(a) pull the triangle holder backwards,
(b) the movement of the triangular holder does not affect the defined speed,
(c) push the triangle holder forward,

Annexes:

Picture 1

Picture 2
Picture 4
Meteorology
137) What does the abbreviation VFR stand for?

138) What does the abbreviation VMC stand for?

139) In general, what happens in case of increased height:

(a) temperature, air pressure and density decrease.
(b) temperature decreases while air pressure and density increase.
(c) temperature and air pressure increase while the density decreases.

140) If the earth's surface temperature is 15 °C, how much will the temperature be up to 3000 feet?

(a) 11 °C  
(b) 5 °C  
(c) 9 °C  
(d) 7 °C

141) At what layer of the atmosphere are atmospheric activities greater?

142) What is the main cause of weather change?

(a) change of the humidity percentage?
(b) uneven heating of the earth's surface?
(c) earth rotation and its effect on the movement of high and low pressure air masses.

143) What might happen when flying through the front?
(a) change of air pressure
(b) change of temperature
(c) change of wind direction
(d) all the above

144) What are the basic ingredients needed to make a thunderstorm?

(a) unstable air
(b) vertical updraft
(c) relatively high moisture
(d) all the above

145) If the air mass warms from below, does it become more stable?

(a) Yes
(b) No

146) Which of the following phenomena is always associated with a thunderstorm?

(a) high-intensity rain
(b) lightning
(c) severe frost

147) Can you encounter hail at a distance of several kilometres from the thunderstorm location?

(a) Yes
(b) No

148) Which meteorological parameters should the pilot be informed of prior to the flight?

(a) 
(b) 
(c) 
(d) 

149) What does it mean when the meteorological information service provides information about wind 270/5?
150) When can a dangerous wind be expected to occur?

(a) if there is lowered temperature, frontal area, and strong air turbulence.
(b) when steady air passes over the mountain obstacle and which form clouds.
(c) after the front passes.

151) Atmosphere stability is determined through?

(a) surface temperature
(b) current weather conditions
(c) atmospheric pressure

152) Morning weather observations usually provide for the possibility of good atmospheric conditions throughout the day, if there is:

(a) clear sky and 10-knot or less surface wind
(b) formation of Stratus clouds and 5-knot or less surface wind
(c) movement of the front with low atmospheric pressure and 5-knot or less surface wind.

153) What is the most reliable indicator that you have flown through the front?

(a) change of pressure
(b) change of temperature
(c) change of wind direction

154) What are the clouds nearest to earth's surface called?

(a) Cirrus
(b) Altostratus
(c) Stratus

155) Can you encounter hail at a distance of several kilometres away from the thunderstorm?

(a) Yes
(b) No

156) If there is no wind indicator, what can you use to determine the wind direction?

(a) 
(b) 


157) Describe what the expression *cold front* means?

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

158) Describe what the expression *warm front* means?

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

159) What is fog?

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

160) What is wind?

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

161) What is meteorology?

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

162) What is METAR?

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________
163) What are the lines in meteorological maps that connect points that have the same temperature called:

(a) Isotherms
(b) Isoneph
(c) Isohyet
(d) Isobars
Air traffic rules for microlight aircraft
164) What is the validation term of the Light Airplane Pilot License (LAPL):

(a) The license is valid with a valid medical certificate and personal identification document,
(b) 36 months,
(c) 12 months,
(d) 6 months.

165) After what period of flight interruption should the holder of the microlight aircraft pilot license conduct a practical flight verification:

(a) after 30 days,
(b) after 45 days,
(c) after 60 days.
(d) after 90 days,

166) Under what rules do Kosovo's aircraft fly abroad:

(a) under the rules of Kosovo,
(b) under the rules of the State in which they fly,
(c) under international rules of the ICAO,
(d) under the rules of the State where the aircraft was manufactured.

167) The microlight aircraft technical maintenance program is approved by:

(a) The owner of the microlight aircraft,
(b) The authorized service,
(c) The Civil Aviation Authority of the Republic of Kosovo,
(d) The manufacturer of the microlight aircraft.

168) The airspace over a certain area where the flight is not allowed is:

(a) conditionally prohibited area,
(b) terminal area,
(c) controlled area,
(d) prohibited area,

169) In the conditionally prohibited area, the aircraft flight is:

(a) always prohibited,
(b) allowed in a specified period of time and under certain conditions,
(c) prohibited in principle, but possible upon air traffic agreements,
(d) allowed in principle, but at your own risk.

170) Who is competent to make the safe compartment of the aircraft in VFR flight:

(a) air traffic control and pilots,
(b) exclusively aircraft pilot in flight,
(c) air traffic control and secondary radar,
(d) only air traffic control (ATC).

171) What is the minimum permissible height to fly over populated cities and larger groups of people:

(a) 150 m (500 ft) above the highest obstacle at a diameter of 300 m from the aircraft,
(b) 150 m (500 ft) above the ground and no closer than 150 m from any person, vehicle or object,
(c) 300 m (1,000 ft) above the highest obstacle at a diameter of 600 m from the aircraft,
(d) The height which, in the event of engine failure, ensures a landing without significant risk to humans or property on the ground.

172) Can the pilot move on the runway with an aircraft if there is no permit from the flight control:

(a) yes, if he/she has previously been convinced that by this action he/she will not interfere with other aircrafts,
(b) yes, provided there is time to take off from the runway,
(c) no.

173) The applicant for microlight aircraft pilot must meet at least the medical criteria of class:

(a) 2
(b) 1
(c) 3
(d) C

174) For the candidate who has not passed the practical part of the exam, the theory part of the exam will still be valid on the occasion of retaking the practical part?

(a) yes, if the request for re-examination is made within 30 days,
(b) yes, if the average grade on the theory part was above 8,
(c) yes,
(d) no.
175) Can the microlight aircraft pilot carry passengers?
   (a) no,
   (b) yes, if the aircraft owner is registered for such activity,
   (c) yes.

176) How is the frontal passage of aircrafts on the ground performed if they face each other:
   (a) the heavier aircraft turns to the left and the lighter aircraft turns to the right
   (b) both aircraft turn to their left side,
   (c) both aircraft turn to their right side,
   (d) the heavier aircraft turns to the right and the lighter aircraft turns to the left.

177) The sign located in a horizontal position in the form of the letter T in white or orange, represents:
   (a) sport airport,
   (b) take-off and landing are permitted only in VMC,
   (c) unsuitable surface for manoeuvring with an aircraft on the ground,
   (d) compulsory takeoff and landing direction.

178) A pilot who flies under VFR meteorological conditions is obliged that during the flight to:
   (a) avoid obstacles, securely make separation from other aircraft and fly the aircraft according to the Aircraft Flight Manual (AFM),
   (b) securely make separation from other aircraft and fly the aircraft according to the Aircraft Flight Manual (AFM),
   (c) avoid obstacles and securely divide other aircraft,
   (d) keep radio contacts with the competent air traffic control service, and make separation from other aircraft.

179) The meteorological minimum for flying in the free flight space is:
   (a) horizontal visibility of at least 8 km; minimum altitude on residential centres and large groups of gathered people, 300 m; horizontally cloudless, vertically with a view of the earth,
   (b) horizontal visibility of at least 8 km; minimum altitude on residential centres and large groups of gathered people, 300 m; horizontal distance of at least 1,500m from clouds and vertically at least 300 ms,
   (c) horizontal visibility of at least 8 km; minimum altitude of 300m from the ground; horizontally cloudless, vertically with a view of the earth,
(d) horizontal view of at least 3000m; minimum altitude of 300m from the ground; vertically with a view of the earth.

180) VFR flight can be performed at the airport area:

(a) if visibility is at least 8 km and cloud base at least 450 m
(b) if visibility is at least 5 km and cloud base at least 450 m
(c) if visibility is at least 8 km and cloud base at least 300 m
(d) if visibility is at least 3000 m and cloud base at least 250 m

181) In school settings, the altimeter must be set at:

(a) QNE
(b) QNH
(c) QFF
(d) QFE

182) The white cross-shaped sign placed horizontally at the beginning of the taxiway, means:

(a) a dedicated area for helicopter landing,
(b) the taxiway is not in use,
(c) be careful, approaching the runway crossing,
(d) you are approaching the intersection with other driving lanes.

183) Thresholds and ends of grass runways are marked with:

(a) full-solid thresholds, with interrupted-line ends,
(b) solid lines,
(c) interrupted lines,
(d) yellow and white flags.

184) The manoeuvring surfaces at the airport are:

(a) runway track and taxiways
(b) taxiways and apron,
(c) runway track, taxiway and aprons,
(d) apron.

185) Which of the aircraft (air) has priority over other aircrafts in the Kosovo airspace?

(a) the flight aircraft that attracts another flight aircraft,
(B) paragliding,
(C) the helicopter,
(d) airship
186) Who issues the license for working in the radio station of the aircraft:

(a) The Regulatory Authority of Electronic and Postal Communications of the Republic of Kosovo (RAEPC),  
(b) The Air Navigation Service Agency (ANSA),  
(c) Federation of Radio Amateurs,  
(d) Civil Aviation Authority of the Republic of Kosovo.

187) For night flights in Kosovo, the flight time is calculated:

(a) half an hour before the sunset and half an hour after the sunrise,
(b) an hour after the sunset and an hour before the dawn of the sun,
(c) after sunset and sunrise,
(d) half an hour after the sunset and half an hour before the sunrise.

188) The free flight space at the airport zone:

(a) does not exist,
(b) exists,
(c) exists if it is not active,
(d) exists over the aerodrome area.

189) The sign with the letter (R) on aeronautical maps relates to:

(a) a prohibited area,
(b) a conditionally prohibited zone,
(c) dangerous area,
(d) free flight zone.

190) The sign with the letter (P) on aeronautical maps relates to:

(a) a prohibited area,
(b) a conditionally prohibited area,
(c) dangerous area,
(d) parachuting area.

191) The sign with the letter (D) on aeronautical maps relates to:

(a) a prohibited area,
(b) a conditionally prohibited area,
(c) dangerous area,
(d) flying area for paragliding.

192) The registration mark of airplanes or helicopters registered in Kosovo is:

(a) Z6 - certain combinations of three letters,
(b) a special combination of three letters,
(c) four characters generated by the combination of letters and numbers,
(d) six characters, consisting of a combination of letters and numbers.

193) The signs of grass runways grass are:

a) red,
(b) white,
(c) red and white,
(d) orange and black.

194) The letter "T" is placed in:

(a) at the runway edge on the left side 150 m from the runway threshold,
(b) at the runway edge on the left side 100 m from the runway threshold,
(c) at the runway edge on the right side 150 m from the runway threshold.

195) Electrical cables that may pose a risk to aircraft during flight are marked:

(a) in series with red balls,
(b) in series with red and white balls,
(c) in series with orange and white balls,
(d) in series with red and white balls on the highest wire of the electric line.

196) The minimum limit of weight and minimum speed limits of the micro light aircrafts are:

(a) 450kg / 65km / h
(b) 475kg / 62km / h
(c) 495kg / 67km / h
(d) 520kg / 70 km / h

197) How many authorisations can be indicated on the microlight aircraft pilot’s license:

(a) 3 authorisations,
(b) 4 authorisations,
(c) 2 authorisations.

198) The electronic devices of microlight aircraft can be maintained:

(a) a person who is authorized by the manufacturer,
(b) an experienced pilot,
(c) experienced mechanic.
199) The list of minimum microlight aircraft equipment also includes:

(a) transponder,
(b) fuel meter,
(c) oil pressure gauge,
(d) altimeter.

200) The list of minimum microlight aircraft equipment also includes:

(a) transponder,
(b) engine temperature gauge,
(c) speedometer.

201) To fly in a controlled airspace, the microlight aircraft shall be equipped with:

(a) radio station,
(b) GPS,
(c) transponder.

202) Available on the microlight aircraft during flight should also be:

(a) maps,
(b) preparation of the flight,
(c) Airworthiness Certificate,
(d) travel book.

203) Available on the microlight aircraft during flight should also be:

(a) GPS,
(b) maintenance manual,
(c) journey log,
(d) pilot license.

204) To begin training for microlight aircraft pilot a person should reach the age of:

(a) 16,
(b) 18,
(c) 21,
(d) 17.

205) In addition to the license, the pilot should carry on each flight:

(a) map,
(b) medical certificate and the personal ID document,
(c) journey log.

206) The verification flight with an instructor for license extension purposes may be made prior to the expiration of the authorisation up to:

(a) 90 days,
(b) 60 days,
(c) 30 days,
(d) 15 days.

207) If the term of the authorisation has expired, the verification flight for extension will be made by:

(a) any instructor,
(b) an instructor authorized from the AAC list,
(c) an instructor from a training center,
(d) with a person who has a valid permit and authorisation for IFR.

208) The maximum weight of the microlight aircraft (delta plane with engine) equipped with a parachute for rescue is:

(a) 472.5 kg,
(b) 450 kg,
(c) 500 kg,
(d) 480 kg.

209) The critical stalling speed of the microlight aircraft should not exceed:

(a) 65 km/h or 35 knots,
(b) 69 km/h or 37 knots,
(c) 60 km/h or 32 knots,
Dangerous situations and emergency procedures of microlight aircraft (MLA)
210) Very high temperature of oil and head of pistons can cause:

(a) loss of power, increased oil consumption and damage to the engine,
(b) increase fuel consumption and increase engine power due to high operating temperatures,
(c) does not have a particular effect on engine performance,
(d) increase of the amount of oil required for lubrication and cooling of the engine.

211) If within 30 seconds after the start of the engine there is no oil pressure indicated, the pilot must:

(a) wait another 30 seconds,
(b) stop the engine immediately,
(c) increase the number of engine rotations,
(d) reduce the number of engine rotations.

212) If during takeoff the engine raises the temperature the pilot must:

(a) reduce rotation (RPM) and increase the vertical travel speed,
(b) weaken the mixture,
(c) reduce the vertical climb rate and increase the speed of the aircraft.

213) In engine aircraft, which sign (color) on the speedometer marks the speed which must never be exceeded:

(a) red line,
(b) at the beginning of the green arch,
(c) at the end of the green arch,
(d) at the beginning of the white arch.

214) In general, what does the red line in the aircraft instruments indicate?

(a) the speed zone where wheels can be used for landing,
(b) maximum or minimum allowed values,
(c) normal use area,
(d) dangerous zone.

215) After the start of the engine, the pilot must immediately pay attention to:

(a) oil pressure,
(b) fuel pressure,
(c) engine rotations,
(d) oil temperature.

216) The probable cause for oil pressure fluctuation in the engine of piston aircraft is:

(a) malfunction of the oil pressure indicator,
(b) low engine oil level,
(c) the engine crankshaft is worn or cracked,
(d) leakage from the engine propeller enclosure.

217) Prior to flight, it is a must to check:

(a) holding bolt of the wing attached to the body,
(b) screws on the tensionmeter/voltage,
(c) screws in the nose tube,
(d) the engine holder.

218) If the battery voltage is too low, starting the engine is:

(a) impossible,
(b) as the pilot wishes,
(c) possible by manual force.

219) What is the manner to activate the parachute:

(a) the pilot activates it,
(b) is automatically activated at a certain height if the vertical velocity exceeds the specified rate,
(c) is activated automatically if the vertical velocity reaches the specified value,
(d) is activated automatically if the horizontal speed falls below the specified value.

220) In case of accidental (unintentionall) opening of the parachute for landing:

(a) the parachute is unfastened and landing is carried out at the first appropriate place,
(b) the engine is switched off and landing with the open parachute is done,
(c) reduce engine power to a minimum and land with a parachute,
(d) increase engine power to reduce vertical speed before touch down.

221) What speed should be maintained in case of engine failure during flight:

(a) the best gliding speed;
(b) the minimum speed,
(c) the longest running speed in the air,
(d) the lowest deceleration rate;
222) Horizontal turning at a slope of 90 degrees:

(a) can be made;
(b) cannot be made,

223) After engine failure, keep the speed at:

(a) best gliding speed
(b) minimum,
(c) maximum;

224) In case of loss of radio communications contact, the pilot will act as follows:

(a) report in as if having radio connection, stop the flight and return to the airport,
(b) control the radio communication at all times, report as if having radio connection and return to the airport,
(c) continue flight in accordance with the flight plan.

225) In case of engine failure or shutdown, the pilot will act as follows:

(a) report in to the flight control and act according to the Aircraft Flight Manual (AFM) of the type of aircraft,
(b) report in to the flight control and continue the flight to the nearest airport,
(c) report in to the flight control and return to the airport of departure.

226 In case of engine shutdown as a result of a fire, which has been successfully extinguished by the pilot, should the engine be restarted:

(a) yes,
(b) no,
(c) yes, if located on the appropriate terrain for emergency landing,
(d) yes, if it has verified that the fire did not endanger the fuel and electricity installation.
Aviation medicine and first aid
227) The most important gases in the process of gas exchange in the body are:

(a) Nitrogen (N₂) and Oxygen (O₂),
(b) Oxygen (O₂) and Carbon Dioxide (CO₂),
(c) Helium (He) and Ozone (O₃).

228) What are the main groups of human blood?

229) How is the reduction of oxygen in atmospheric air called?

230) Reduction of the content of oxygen in atmospheric air is expressed:

(a) during increase of altitude,
(b) during reduction of altitude,
(c) when not changing of altitude,
(d) None of the above.

231) The amount of blood in circulation in adults is:

(a) 2-3 L,
(b) 5-6 L,
(c) 3-4 L.

232) What is the fastest way to temporarily stop bleeding from a wound?

(a) bandaging and/or wrapping a wound,
(b) compression/squeezing at the bleeding spot,
(c) surgical wound suture,
(d) none of the above.

233) Fractures can be:

(a) medium and intermediate,
(b) open and closed,
(c) small and large,
(d) none of the above,

234) What are the vital signs that should be examined at the accident site?

235) Lightning strikes cause more dangerous consequences if:

(a) electrical discharge passes through the skeletal muscles,
(b) electrical discharge passes through the heart muscle,
(c) electrical discharge passes through the bones,
(d) None of the above

236) What is pulse?

237) Describe some of the anatomical points in the body in which the arterial pulse can be easily touched.

238) What do you mean by immobilization?

239) Vomiting and diarrhoea most commonly lead to the loss of:

(a) water and fluids,
(b) electrolytes,
(c) blood and its products,
(d) none of the above.
240) According to the extent and depth of combustion, the burns are classified as:

(a) two degrees,
(b) four degrees,
(c) three degrees,
(d) none of the above.

241) Severe middle and inner ear infections may result in:

(a) hearing impairment,
(b) balance disorder,
(c) dizziness and loss of space orientation,
(d) all of the above.

242) The permissible limit of the level of acoustic pollution (noise) is:

(a) 58 dB,
(b) 85 dB,
(c) 120 dB,
(d) over 120 dB.

243) Defect in distinguishing/recognition of colours of aviation personnel:

(a) exclude the candidate from the flight,
(b) does not exclude the candidate from the flight,
(c) allows to operate the flight with some restrictions,
(d) none of the above.

244) During flight, blood circulation is concentrated:

(a) in the lower part of the body, due to the effect of gravity,
(b) in the upper part of the body, because blood circulates more in the brain,
(c) in the limbs of the body,
(d) none of the above.

245) In hypoxic conditions, frequency of breathing:

(a) does not change,
(b) is reduced,
(c) is increased,
(d) none of the above,
246) If the injured person has lost a large amount of blood, his/her vital parameters would look like the following:

(a) blood pressure drops, breathing does not change, pulse is more affected,
(b) blood pressure increases, breathing is increased, pulse does not change,
(c) blood pressure drops, the pulse is touched with difficulty, consciousness becomes turbulent, breathing is increased,
(d) none of the above.

247) If you are 41 years old, for how long is your Class 2 Medical Certificate valid?

(a) 12 months,
(b) 36 months,
(c) 24 months.

248) What is the physiological value of blood pressure?

(a) 90/60 mmHg,
(b) 130/90 mmHg,
(c) 120/80 mmHg.
List of correct answers
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>c)</td>
</tr>
<tr>
<td>2.</td>
<td>b)</td>
</tr>
<tr>
<td>3.</td>
<td>b)</td>
</tr>
<tr>
<td>4.</td>
<td>c)</td>
</tr>
<tr>
<td>5.</td>
<td>d)</td>
</tr>
<tr>
<td>6.</td>
<td>b)</td>
</tr>
<tr>
<td>7.</td>
<td>c)</td>
</tr>
<tr>
<td>8.</td>
<td>b)</td>
</tr>
<tr>
<td>9.</td>
<td>a)</td>
</tr>
<tr>
<td>10.</td>
<td>a)</td>
</tr>
<tr>
<td>11.</td>
<td>a)</td>
</tr>
<tr>
<td>12.</td>
<td>b)</td>
</tr>
<tr>
<td>13.</td>
<td>a)</td>
</tr>
<tr>
<td>14.</td>
<td>c)</td>
</tr>
<tr>
<td>15.</td>
<td>c)</td>
</tr>
<tr>
<td>16.</td>
<td>a)</td>
</tr>
<tr>
<td>17.</td>
<td>c)</td>
</tr>
<tr>
<td>18.</td>
<td>a)</td>
</tr>
<tr>
<td>19.</td>
<td>a)</td>
</tr>
<tr>
<td>20.</td>
<td>c)</td>
</tr>
<tr>
<td>21.</td>
<td>b)</td>
</tr>
<tr>
<td>22.</td>
<td>c)</td>
</tr>
<tr>
<td>23.</td>
<td>a)</td>
</tr>
<tr>
<td>24.</td>
<td>b)</td>
</tr>
<tr>
<td>25.</td>
<td>d)</td>
</tr>
<tr>
<td>26.</td>
<td>c)</td>
</tr>
<tr>
<td>27.</td>
<td>a)</td>
</tr>
<tr>
<td>28.</td>
<td>c)</td>
</tr>
<tr>
<td>29.</td>
<td>a)</td>
</tr>
<tr>
<td>30.</td>
<td>b)</td>
</tr>
<tr>
<td>31.</td>
<td>c)</td>
</tr>
<tr>
<td>32.</td>
<td>c)</td>
</tr>
<tr>
<td>33.</td>
<td>a)</td>
</tr>
<tr>
<td>34.</td>
<td>a)</td>
</tr>
<tr>
<td>35.</td>
<td>b)</td>
</tr>
<tr>
<td>36.</td>
<td>c)</td>
</tr>
<tr>
<td>37.</td>
<td>b)</td>
</tr>
<tr>
<td>38.</td>
<td>a)</td>
</tr>
<tr>
<td>39.</td>
<td>c)</td>
</tr>
<tr>
<td>40.</td>
<td>a)</td>
</tr>
<tr>
<td>41.</td>
<td>a)</td>
</tr>
<tr>
<td>42.</td>
<td>b)</td>
</tr>
<tr>
<td>43.</td>
<td>c)</td>
</tr>
<tr>
<td>44.</td>
<td>a)</td>
</tr>
<tr>
<td>45.</td>
<td>b)</td>
</tr>
<tr>
<td>46.</td>
<td>d)</td>
</tr>
</tbody>
</table>
47. c)
48. a)
49. a)
50. c)
51. d)
52. b)
53. a)
54. c)
55. a)
56. b)
57. a)
58. a)
59. b)
60. d)
61. a)
62. b)
63. a)
64. b)
65. c)
66. b)
67. a)
68. d)
69. a)
70. b)
71. a)
72. a)
73. a)
74. c)
75. a)
76. c)
77. c)
78. a)
79. a)
80. c)
81. a)
82. b)
83. c)
84. b)
85. a)
86. b)
87. a)
88. a)
89. b)
90. a)
91. c)
92. c)
93. b)
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>94</td>
<td>a</td>
</tr>
<tr>
<td>95</td>
<td>b</td>
</tr>
<tr>
<td>96</td>
<td>d</td>
</tr>
<tr>
<td>97</td>
<td>b</td>
</tr>
<tr>
<td>98</td>
<td>c</td>
</tr>
<tr>
<td>99</td>
<td>a</td>
</tr>
<tr>
<td>100</td>
<td>a</td>
</tr>
<tr>
<td>101</td>
<td>b</td>
</tr>
<tr>
<td>102</td>
<td>a</td>
</tr>
<tr>
<td>103</td>
<td>c</td>
</tr>
<tr>
<td>104</td>
<td>d</td>
</tr>
<tr>
<td>105</td>
<td>a</td>
</tr>
<tr>
<td>106</td>
<td>a</td>
</tr>
<tr>
<td>107</td>
<td>b</td>
</tr>
<tr>
<td>108</td>
<td>a</td>
</tr>
<tr>
<td>109</td>
<td>d</td>
</tr>
<tr>
<td>110</td>
<td>b</td>
</tr>
<tr>
<td>111</td>
<td>c</td>
</tr>
<tr>
<td>112</td>
<td>a</td>
</tr>
<tr>
<td>113</td>
<td>a</td>
</tr>
<tr>
<td>114</td>
<td>c</td>
</tr>
<tr>
<td>115</td>
<td>a</td>
</tr>
<tr>
<td>116</td>
<td>a</td>
</tr>
<tr>
<td>117</td>
<td>c</td>
</tr>
<tr>
<td>118</td>
<td>d</td>
</tr>
<tr>
<td>119</td>
<td>a</td>
</tr>
<tr>
<td>120</td>
<td>b</td>
</tr>
<tr>
<td>121</td>
<td>a</td>
</tr>
<tr>
<td>122</td>
<td>c</td>
</tr>
<tr>
<td>123</td>
<td>a</td>
</tr>
<tr>
<td>124</td>
<td>b</td>
</tr>
<tr>
<td>125</td>
<td>c</td>
</tr>
<tr>
<td>126</td>
<td>a</td>
</tr>
<tr>
<td>127</td>
<td>b</td>
</tr>
<tr>
<td>128</td>
<td>b</td>
</tr>
<tr>
<td>129</td>
<td>a</td>
</tr>
<tr>
<td>130</td>
<td>c</td>
</tr>
<tr>
<td>131</td>
<td>a</td>
</tr>
<tr>
<td>132</td>
<td>a</td>
</tr>
<tr>
<td>133</td>
<td>c</td>
</tr>
<tr>
<td>134</td>
<td>a</td>
</tr>
<tr>
<td>135</td>
<td>b</td>
</tr>
<tr>
<td>136</td>
<td>c</td>
</tr>
<tr>
<td>137</td>
<td>Visual Flight Rules</td>
</tr>
<tr>
<td>138</td>
<td>Visual meteorological condition</td>
</tr>
<tr>
<td>139</td>
<td>a</td>
</tr>
<tr>
<td>140</td>
<td>c</td>
</tr>
</tbody>
</table>
141. Troposphere or low level of atmospheres

142. b)

143. d)

144. d)

145. b)

146. b)

147. a)

148. (a) Direction and wind speed  
     (b) Horizontal and visual appearance  
     (c) Air temperature  
     (d) Weather Forecast

149. Wind direction with 270 degrees speed 5 knots

150. a)

151. b)

152. b)

153. c)

154. c)

155. a)

156. a) Movement of direction of leaves, trees  
     b) Direction of smoke from chimneys

157. The expression cold front means a mass of cold air passing and replacing a mass of warm air. Generally, cold fronts move northwest to southeast. When crossing the cold front, the temperatures can be lowered by more than 15 °C within one hour.

158. The expression hot front means a mass of warm air passing and replacing a mass of cold air. Generally, the warm fronts move from the southwest to the northeast. When a warm front passes, the air becomes warmer and more damp than before.

159. Fog is the condensed water vapour in the low layers of the air. Fog is the pile of hanging small water droplets where horizontal visibility falls below 1km.

160. Wind is a natural phenomenon that consists of a regular, almost flat plane movement of air mass caused by pressure between the two atmospheres spots. Wind is a mix of a warm air stream and a cold air stream.

161. Meteorology is a science that studies all physical phenomena in the air wrapping around the earth, respectively the atmosphere. In addition, meteorology also studies some physical phenomena, which occur on the surface of the earth and in the upper layers of the earth.

162. METAR is a tool for reporting weather information. The weather report (METAR) is mainly used by pilots before a flight. METAR also helps in weather forecasting. METAR usually contains data on temperature, dew spots, wind speed and direction, rain, cloud cover and their height, visibility, and air pressure.

163. a)

164. a)

165. d)

166. b)
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>167</td>
<td>c</td>
</tr>
<tr>
<td>168</td>
<td>d</td>
</tr>
<tr>
<td>169</td>
<td>b</td>
</tr>
<tr>
<td>170</td>
<td>b</td>
</tr>
<tr>
<td>171</td>
<td>c</td>
</tr>
<tr>
<td>172</td>
<td>c</td>
</tr>
<tr>
<td>173</td>
<td>a</td>
</tr>
<tr>
<td>174</td>
<td>c</td>
</tr>
<tr>
<td>175</td>
<td>a</td>
</tr>
<tr>
<td>176</td>
<td>c</td>
</tr>
<tr>
<td>177</td>
<td>d</td>
</tr>
<tr>
<td>178</td>
<td>a</td>
</tr>
<tr>
<td>179</td>
<td>a</td>
</tr>
<tr>
<td>180</td>
<td>a</td>
</tr>
<tr>
<td>181</td>
<td>d</td>
</tr>
<tr>
<td>182</td>
<td>b</td>
</tr>
<tr>
<td>183</td>
<td>c</td>
</tr>
<tr>
<td>184</td>
<td>a</td>
</tr>
<tr>
<td>185</td>
<td>a</td>
</tr>
<tr>
<td>186</td>
<td>a</td>
</tr>
<tr>
<td>187</td>
<td>d</td>
</tr>
<tr>
<td>188</td>
<td>a</td>
</tr>
<tr>
<td>189</td>
<td>b</td>
</tr>
<tr>
<td>190</td>
<td>a</td>
</tr>
<tr>
<td>191</td>
<td>c</td>
</tr>
<tr>
<td>192</td>
<td>a</td>
</tr>
<tr>
<td>193</td>
<td>b</td>
</tr>
<tr>
<td>194</td>
<td>a</td>
</tr>
<tr>
<td>195</td>
<td>d</td>
</tr>
<tr>
<td>196</td>
<td>a</td>
</tr>
<tr>
<td>197</td>
<td>b</td>
</tr>
<tr>
<td>198</td>
<td>a</td>
</tr>
<tr>
<td>199</td>
<td>b</td>
</tr>
<tr>
<td>200</td>
<td>c</td>
</tr>
<tr>
<td>201</td>
<td>a</td>
</tr>
<tr>
<td>202</td>
<td>c</td>
</tr>
<tr>
<td>203</td>
<td>d</td>
</tr>
<tr>
<td>204</td>
<td>a</td>
</tr>
<tr>
<td>205</td>
<td>b</td>
</tr>
<tr>
<td>206</td>
<td>a</td>
</tr>
<tr>
<td>207</td>
<td>b</td>
</tr>
<tr>
<td>208</td>
<td>a</td>
</tr>
<tr>
<td>209</td>
<td>a</td>
</tr>
<tr>
<td>210</td>
<td>a</td>
</tr>
<tr>
<td>211</td>
<td>b</td>
</tr>
<tr>
<td>212</td>
<td>c</td>
</tr>
<tr>
<td>213</td>
<td>a</td>
</tr>
</tbody>
</table>
214. b)  
215. a)  
216. b)  
217. a)  
218. c)  
219. a)  
220. b)  
221. a)  
222. b)  
223. a)  
224. b)  
225. a)  
226. b)  
227. b)  
228. Main human blood groups are O, A, B, and AB  
229. Reduction of oxygen content in atmospheric air is called hypobaric hypoxia  
230. a)  
231. b)  
232. b)  
233. b)  
234. Condition / degree of consciousness, breathing / passage of air and heart beats,  
235. b)  
236. The pulse is the spread of striking waves of heartbeats, through the walls of blood vessels, from heart to centre, to blood vessels in the periphery,  
237. At the palm joint, at the side of the neck, in the prospectus, under the armpit  
238. Immobilization is a method of limiting the movements of a limb or other part of the body, which helps to prevent further injuries during the transportation of the injured, from the scene to the more specialized treatment.  
239. Answer is a) and b)  
240. Answer is b) and c)  
241. d)  
242. b)  
243. Answer b) and c)  
244. None of the above  
245. c)  
246. c)  
247. c)  
248. c)