Flight Planing and Performance

Question overview:

1 - Slope sailing uses:

1. the rise of air currents that are the result of the wind rising from it
2. thermal rise of flow

2 - What does the vertical component of the wind on the slope depend on:

1. from the shape of the slope and wind speed
2. from the direction of the wind

3 - At what speed should you sail on the slope:

1. the best finesse
2. of the least deterioration

4 - Which bank should you sail on a ridge:

1. 30 degrees
2. 45 degrees
3. 60 degrees

5 - Due to which waves are created:

1. as a consequence of orographic flow
2. as a consequence of thermal flow

6 - In order for the flight to be safe, what is needed for sailing in front of the front?

1. parachute and oxygen equipment
2. Rigid sailplane, electrical instruments
3. Rigid sailplane, electrical instruments all of the above

7 - Centering the thermal columns is:

1. looking for the best lift
2. glider flight

8 - Centering using tilt is:

1. when lifting in a column, reduce the slope
2. in the case of a smaller lift, also reduce the slope

9 - What does the flight speed depend on?

1. from the speed of the glider and the movement of air masses
2. from the speed of the sailplane

10 - What does the speed of jumping the pillars depend on?

1. from vertical lifting
2. from the wind speed

11 - The classic altimeter in sailplanes works by measuring

1. density
2. temperature
3. flow
4. pressure

12 - With increasing air temperature, density

1. remains the same
2. indefinite
3. decreases
4. growing

13 – Airspeed indicator on a sailplane works by registering the difference between total and static air pressure and it recalculates.

1. indefinite
2. incorrect
3. partially true
4. correct

14 - The ratio of lift and drag coefficient changes as a function of wind speed

1. incorrect
2. correct
3. will be in decline
4. will be on the rise

15 - A glider flying into a wind of 20 km/h with an actual speed of 60 km/h will have a speed of

relative to the earth

1. 20 km/h
2. 60 km/h

3. 40 km/h

4. 80 km/h

16 - Mass x arm = _____

1. lever

2. stability

3. moment

4. center of gravity

17 - The position of the center of gravity on the sailplane is measured in centimeters from

1. specially marked points

2. the tip (nose) of the sailplane

3. the axis of the wheel of the sailplane

4. leading edges of the wings

18 - Based on the table in picture no. 1, we conclude that the moment of the empty sailplane is

1. 76,060 kg cm

2. 20,400 kg cm

3. 86,400 kg cm

4. 52.120 kg cm

19 - Based on the table in picture no. 1, we conclude that the pilot's moment on the front seat amounts to

1. 5,280 kg cm

2. 6,400 kg cm

3. 7,840 kg cm

4. 9,900 kg cm

20 - Based on the table in figure no. 1, we conclude that the moment of the pilot in the rear seat is

1. 12,200 kg cm

2. 14,900 kg cm

3. 16,800 kg cm

4. 18,700 kg cm

21 - At what distance is the center of gravity for this two-pilot glider

1. 244 cm

2. 182 cm

3. 213 cm

4. 54 cm

22 - Rate of descent/climb is expressed in

1. m/s

2. km

3 m

4. km/h

23 - For the greatest range, from a certain height (without wind), you should fly at speed

1. the best finesse

2. which is safe

3. minimum controlled speed

4. of the least deterioration

24 - The glider falls into the spin always at the same indicated airspeed.

1. correct

2. depends on the height

3. incorrect

4. depends on the wind speed

25 - The ratio of the load carried by the wing in relation to the actual mass of the glider is called

1. relief factor

2. wing moment

3. load factor

4. total weight factor

26 - If a glider flies at a constant speed according to the instrument and climbs two thousand in a short time

meters, its actual speed will be

1. depends on the weight of the sailplane

2. realistically smaller

3. the same

4. realistically higher

27 - If the glider flies at minimum speed and increases the angle of attack, there will be consequences

1. stalling
2. roller
3. skating
4. lifting the nose

28 - The highest air speed, at which a sudden and complete deviation of the commands can be given without the danger that is exceeded the load limit is called

1. maneuver speed
2. the speed of the best finesse
3. minimum speed
4. maximum speed

29 – Stalling condition leaving:

1. by reducing the angle of attack
2. by reducing the speed
3. by pulling out the brakes
4. pulling the stick back

30 - Due to the longitudinal maneuverability of sailplanes, they are prescribed

1. permitted weight of the pilot and the position of the pilot's seat
2. the size of the flap surface
3. the size of the trunk section
4. the size of the wing area