

# MY SO PRACTICE TEST

DIVISION C - HIGH SCHOOL, GRADES 9-12

## PRACTICE TEST

### Instructions

- There are 25 questions on this test.
- You have 50 minutes to complete this test.
- You may write your answers directly in the test.
- You may use any notes or resources you have created or collected.
- You may use a calculator and scratch paper if necessary.
- Good Luck!

### Test Questions

1. As altitude increases, the indicated airspeed at which a given airplane stalls in a particular configuration will:
  - a. Decreases as the airspeed increases
  - b. Decreases as the true airspeed decreases
  - c. Increase as the airspeed increases
  - d. Remains the same regardless of altitude
2. An airplane will stall at the same:
  - a. Angle of attack regardless of the altitude with relation to the horizon
  - b. Angle of attack and altitude with relation to the horizon
  - c. Angle of attack and altitude with relation to the tail of the aircraft
  - d. Airspeed regardless of the altitude with relation to the horizon
3. A turn coordinator provides an indicator of the:
  - a. Angle of bank up to but not exceeding 30°.
  - b. Drag component of the aircraft
  - c. Movement of the aircraft about the yaw and roll axes.
  - d. Attitude of the aircraft with reference to the longitudinal axis.
4. The most important rule to remember in the event of a power failure after becoming airborne is to:
  - a. Determine the wind direction to plan for the forced landing
  - b. Determine nearby obstacles and distractions
  - c. Immediately establish the proper gliding altitude and airspeed
  - d. Quickly check the fuel supply for possible fuel exhaustion

5. What force makes an airplane turn?
  - a. Centrifugal force
  - b. The horizontal component of drag
  - c. The horizontal component of lift
  - d. The vertical component of lift
6. When does the P-factor cause the airplane to yaw to the left?
  - a. When at high airspeeds
  - b. When at low airspeeds
  - c. When at high angles of attack
  - d. When at low angles of attack
7. Which basic flight maneuver increases the load factor on an airplane as compared to straight-and-level flight?
  - a. Climbs
  - b. Stalls
  - c. Turns
  - d. Yaws
8. One of the main functions of flaps during approach and landing is to:
  - a. Decrease the angle of descent while increasing the airspeed
  - b. Decrease the angle of descent without increasing the airspeed.
  - c. Increase the angle of descent without increasing the airspeed
  - d. Permit a touchdown at a higher indicated airspeed.
9. The wind condition that requires maximum caution when avoiding wake turbulence or landing is a :
  - a. Light, quartering headwind
  - b. Light, quartering tailwind
  - c. Strong headwind
  - d. Strong tailwind
10. When landing behind a large aircraft, the pilot should avoid wake turbulence by staying?
  - a. Above the large aircraft's final approach path and landing before the large aircraft's touchdown point.
  - b. Above the large aircraft's final approach path and landing beyond the large aircraft's touchdown point.
  - c. Below the large aircraft's final approach path and landing before the aircraft's touchdown point.
  - d. Below the large aircraft's final approach path and landing beyond the aircraft's touchdown point.
11. The stalling speed of an airplane is most affected by:
  - a. Changes in air density
  - b. Changes in angle of the aircraft
  - c. Variations in airplane loading
  - d. Variations in flight altitude
12. During the transition from straight-and-level flight to a climb, the angle of attack is increased and lift:
  - a. is momentarily decreased
  - b. is momentarily increased
  - c. is drastically changed
  - d. remains the same

13. In theory, if the airspeed of an airplane is doubled while in level flight, parasite drag will become:
- eight times greater
  - four times greater
  - half as great
  - twice as great
14. Stall speed is affected by:
- angle of attack, weight, and air density
  - angle of attack and weight
  - load factor, angle of attack, and power
  - weight, load factor, and power
15. Airplane wing load during a level coordinated in smooth air depends upon the:
- angle of aircraft
  - angle of bank
  - rate of turn
  - true airspeed
16. To produce the same lift while in ground effect as when out of ground effect, the airplane requires:
- A greater angle of attack
  - A lower angle of attack
  - The same angle of attack
17. If airspeed is increased during a level turn, what action would be necessary to maintain altitude? The angle of attack:
- and angle of bank must be decreased
  - and angle of bank must be increased
  - must be decreased or angle of bank increased
  - must be increased or angle of bank decreased
18. If standard rate turn is maintained, how long would it take to turn 360 degrees?
- 1 minute
  - 2 minutes
  - 3 minutes
  - 4 minutes
19. The angle of attack of wing directly controls the:
- Amount of airflow above and below the wing
  - Angle of incidence of the airfoil
  - Angle of incidence of the wing
  - Distribution of pressures acting on the wing
20. Stall speed is affected by:
- Angle of attack, weight, and air density
  - Load factor, angle of attack, and power
  - Power, load factor, and air density
  - Weight, load factor, and power

21. An airplane will stall at the same:
- Airspeed regardless of the attitude with relation to the horizon
  - Airspeed with a positive angle of attack
  - Angle of attack and attitude with relation to the horizon
  - Angle of attack regardless of the attitude with relation to the horizon
22. Which is true regarding the forces acting on an aircraft in a steady-state descent? The sum of all:
- Forward forces is equal to the sum of all rearward forces
  - Rearward forces is greater than the sum of all forward forces
  - Relative forces with a sum of all the intentional forces
  - Upward forces is less than the sum of all downward forces
23. In a football game, two players tackle each other so hard that they both fly in opposite directions after they hit each other. What law of motion is this an example of?
- Newton's 1st Law
  - Newton's 2nd Law
  - Newton's 3rd Law
24. If you want to increase the acceleration of a baseball when you throw it, what must you increase to make this happen?
- Acceleration
  - Force
  - Newton's 2nd Law
  - Mass
25. The ailerons are located on the
- fuselage
  - horizontal stabilizer
  - inner wing
  - outer wing

# ANSWER KEY

- |     |          |     |          |
|-----|----------|-----|----------|
| 1.  | <b>D</b> | 15. | <b>B</b> |
| 2.  | <b>A</b> | 16. | <b>B</b> |
| 3.  | <b>C</b> | 17. | <b>C</b> |
| 4.  | <b>C</b> | 18. | <b>B</b> |
| 5.  | <b>C</b> | 19. | <b>D</b> |
| 6.  | <b>C</b> | 20. | <b>D</b> |
| 7.  | <b>C</b> | 21. | <b>D</b> |
| 8.  | <b>C</b> | 22. | <b>A</b> |
| 9.  | <b>B</b> | 23. | <b>C</b> |
| 10. | <b>B</b> | 24. | <b>B</b> |
| 11. | <b>C</b> | 25. | <b>D</b> |
| 12. | <b>B</b> |     |          |
| 13. | <b>B</b> |     |          |
| 14. | <b>D</b> |     |          |