The Aviation Medicine Quiz

Dear Friends,

Here is a set of questions related to Acceleration Physiology. Each correct answer carries one point. Go through the questions, select the most appropriate response and rate yourself. The correct answers are provided on page number_.

1. Acceleration atelectasis does not occur in which type of acceleration?
   (a) +Gx    (b) -Gx    (c) -Gy    (d) -Gz.

2. Which of the following decreases the chances of acceleration atelectasis?
   (a) Smoking    (b) Obesity    (c) Anti-G-Suit    (d) PPB/PBG

3. In which type of AGSM, pressure does not fluctuate in the chest cavity with the breathing cycle?
   (a) L1    (b) Hook    (c) Qi gong    (d) M1

4. Which AGSM requires shallow and rapid respiration?
   (a) L1    (b) M1    (c) Hook    (d) Qi-gong.

5. PPG (Pr breathing for G-protection) cuts in at ?
   (a) 1G    (b) 2G    (c) 3G    (d) 4G

6. Anti G Suit cuts in at?
   (a) 1G    (b) 2G    (c) 3G    (d) 4G

7. Bang - Bang Servo controlled Anti G Valve gives initial rapid rise of pressure upto
   (a) 4psi    (b) 5psi    (c) 6psi    (d) 7psi.

8. Which Anti G Suit does not require an Anti G Valve?
   (a) ATAGS    (b) EAGLE    (c) Libelle    (d) FAGT.

9. Long duration acceleration means?
   (a) ≤ 1 sec    (b) > 1 sec    (c) 2 sec    (d) > 2 sec.

10. Best indicator for determination of fatigue level after SACM is:
    (a) Blood Pyruvate    (b) Blood Lactate level
    (c) Blood Acetic acid    (d) Blood Oxygen saturation
11. Best way to practice AGSM is?
(a) in aircraft    (b) on ground    (c) in human centrifuge (d) in squadron.

12. The name ‘dragon fly’ is connected with which of the following?
(a) ATAGS    (b) Comfort Edge    (c) Libelle    (d) FAGT.

13. Normal average +Gz tolerance for black out threshold?
(a) 4.8 ± .8    (b) 4.5 ± .6    (c) 4.7 ± .8    (d) 4.9 ± .9

14. Normal average +G tolerance for G-LOC threshold?
(a) 4.8 ± 0.6    (b) 5.1 ± 0.9    (c) 5.3 ± 0.9    (d) 5.4 ± 0.9

15. Normal average +G tolerance for PLL threshold?
(a) 3.9 ± 0.8    (b) 4.1 ± 0.7    (c) 4.2 ± 0.6    (d) 4.3 ± 0.5.

16. Amount of fluid extravasations at +4.5 Gz sustained 
(a) 100ml/min    (b) 200ml/min    (c) 150ml/min    (d) 250ml/min.

17. Medical reason for termination of centrifuge run at heart rate of?
(a) 175/min    (b) 195/min    (c) 200/min    (d) 215/min

18. 1 cm of water pressure is equal to?
(a) 1 mm of Hg    (b) 0.5 mm of Hg    (c) 0.75 mm of Hg    (d) 0.85 mm of Hg.

19. CSF pressure falls when pulling +Gz.?
(a) at the same rate of fall of BP    (b) at half the rate of fall of BP.
(c) at one third the rate of fall of BP    (d) Does not fall at all.

20. A 50% reduction of the glucose concentration in the blood below the resting value reduces blackout threshold by?
(a) 0.5 G    (b) 0.6 G    (c) 0.7 G    (d) 0.8 G.

Answers to Quiz on Page 114