Aviation Medicine Quiz

1. Amount of water carried in LCA PSP is:
   a) 1.5 L  b) 3.0 L  c) 0.5 L  d) 1.10 L

2. Capsular Ejection System was employed in:
   a) F-15  b) F-22 Raptor  c) Canberra  d) F-111

3. In a fighter aircraft, “Over the Side Vision” recommended by the MIL Std is:
   a) 25°  b) 35°  c) 45°  d) 21°

4. Aircraft Incident / Accident Reporting in the IAF is carried out in accordance to:
   a) AFO 935/76  b) AFO 03/86  c) AFO 07/93  d) none of the above

5. Survival handbook in a PSP is the:
   a) IAP 4308  b) IAP 4331  c) IAP 3321  d) IAP 3338

6. Waiver given to a NDA Cadet (less than 18 yrs) in respect of leg length is:
   a) 2.0 cm  b) 2.5 cm  c) 3.0 cm  d) 5.0 cm

7. The refractive error for Class-2 medicals in civil aircrew should be within the range of
   a) +/- 5D  b) +/- 3D  c) +/- 8D  d) none

8. The duration period of currency of a Medical Assessment in India for the commercial pilot-aeroplane / helicoptor license is
   a) 24 months till 30 years of age  b) 12 months till 60 years of age
   c) 6 months after 30 years of age  d) 12 months till 40 years of age

9. The test for detecting the malingeringer claiming deafness is
   a) Free field hearing  b) The Lombart test  c) PTA  d) None

10. Which of the following investigations is not mandatory for Class 1 Medical Assessment
    a) ECG  b) EEG  c) 2D-Echocardiography  d) X-ray chest

11. Which of the following aircraft disinsecting agents is biologically effective and safe for passengers:
    a) DDT - 10 %  b) BHC - 5 %  c) Resmethrin - 2 %  d) Baygon - 20 %

12. The therapeutic drugs allowed for civil aircrew in India include the following except
    a) ACE inhibitors  b) Eltroxin  c) Glibenclamide  d) Atenolol

13. An individual breathing 100% oxygen at 42,000’ would be at an alveolar equivalent of breathing air at:
    a) 12,000’  b) 14,000’  c) 16,000’  d) 18,000’

14. Normal subjects breathing air are cyanotic at altitudes above:
    a) 11,000-13,000’  b) 13,000-15,000’  c) 15,000-17,000’  d) 17,000-19,000’

15. Alveolar equivalence and tracheal equivalence breathing air and 100 % oxygen are the same at an altitude of __________breathing air.
    a) 5,000’  b) 10,000’  c) 15,000’  d) 20,000’

16. Intra pulmonary pressure above _________ can cause tearing of lung parenchyma, when the respiratory muscles are relaxed
    a) 30-40 mm Hg  b) 40-50 mm Hg  c) 50-70 mm Hg  d) 80-100 mm Hg

17. The amount of oxygen dissolved in plasma when breathing 100 % oxygen at 3 ATA is:
    a) 0.32 ml  b) 2.09 ml  c) 4.44 ml  d) 6.8 ml
18. A UPTD (Unit of Pulmonary Toxicity Dosage) of ________ is required to cause a 10% reduction in vital capacity:
   a) 985   b) 1045   c) 1100   d) 1425
19. The first woman naval aviator who gained her wings in 1974 was
   a) Amelia Earhart   b) Barbara Rainey
   c) Elizabeth Thible   d) Elise Laroche
20. The first physician to go to space was
   a) Valentin Bondarenko   b) Aleksey Leonov
   c) Hubertus Strughold   d) Boris Yegorov
21. Dr Raymond Cattell developed the 16 PF using a statistical technique of factor analysis called
   a) Multiple Abstract Variance Analysis   b) Probability Sampling Method
   c) Lottery Method   d) Tetrachoric Correlation Coefficient Analysis
22. Response to bronchodilator therapy to assess reversibility of airway obstruction requires the following change in FVC or FEV1
   a) 8% improvement & absolute increase of 250 ml
   b) 10% improvement & absolute increase of 400 ml
   c) 12% improvement & absolute increase of 200 ml
   d) 14% improvement & absolute increase of 100 ml
23. As per the Billingham & Jones criteria of heat tolerance for aircrew, the respective values of oral temperature and heart rate are
   a) 39°C; 170/min   b) 37.5°C; 120/min
   c) 38.5°C; 160/min   d) 38°C; 130/min
24. The EEG waves characteristically seen in Stage IV of NREM sleep are
   a) Alpha waves   b) Beta waves
   c) Delta waves   d) Gamma waves
25. The most common vestibular illusion in flight is
   a) Oculogravic illusion   b) Leans
   c) Coriolis illusion   d) Inversion illusion
26. A feeling of separation from the earth experienced by pilots at high altitude is
   a) Fascination   b) Break-off phenomenon
   c) Coning of attention   d) LSA
27. One of the features of space motion sickness is that different from terrestrial motion sickness is:
   a) Marked pallor   b) No emesis
   c) Absence of sweating   d) Nausea
28. The limiting physiological factor for G-duration tolerance is
   a) Cerebral perfusion   b) Arrhythmia
   c) Muscular fatigue   d) Respiratory difficulty
29. Advanced technology anti-G suit (ATAGS) increases G-level tolerance by
   a) 1-1.5 G   b) 4-4.5 G
   c) 1.5-2.5 G   d) 2-3 G
30. Excessive aerobic conditioning in pilots may cause
   a) Serious cardiac dysrhythmias during HSG   b) Increased susceptibility to motion sickness
   c) Increased incapacitation period during G-LOC   d) All of the above

- Compiled by

26th MD (Av Med) Course Residents

Answers on the next page