The Aviation Medicine Quiz

Dear Friends,

Here is a set of questions related to Human Engineering. 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 33.

1. Which is the flexor of spine?
   (a) Erector Spinae   (b) Quadratus Lumborum   (c) Splenius   (d) Psoas

2. Which part of human spine is most prone to hyperextension injury?
   (a) Cervical spine   (b) Lumbar spine   (c) Sacral spine   (d) Thoracic spine

3. Which of the following ejection seats is fitted in Jaguar aircraft?
   (a) MB-MK 10   (b) MB-MK 9   (c) MB-MK 11   (d) K-36L

4. What is resonance frequency of human body?
   (a) 2-8 Hertz   (b) 8-40 Hertz   (c) 4-15 Hertz   (d) 10-40 Hertz

5. What is the maximum protection given by 3 point harness system?
   (a) 20 Gx   (b) 30 Gx   (c) 25 Gx   (d) 22.5 Gx

6. What is included angle?
   (a) Angle between long axis of spine and back rest
   (b) Angle between long axis of spine and line of thrust
   (c) Angle between long axis of seat and line of thrust
   (d) Angle between horizontal axis of seat and line of thrust

7. What is the maximum acceptable concentration of Ozone inside the cabin of a supersonic aircraft?
   (a) 0.1 ppm   (b) 1 ppm   (c) 0.2 ppm   (d) 0.5 ppm

8. What is the maximum visual acuity with NVG?
   (a) 6/6   (b) 6/60   (c) 6/12   (d) 6/9

9. Which material is used for transparent helmet visor?
   (a) Polycrylic   (b) acrylic   (c) Polycarbonate   (d) Bakelite
10. Which airlines was the first to introduce CRM programme?
   (a) Lufthansa    (b) US airlines  (c) British airways
   (d) Aeroflot

11. 0 dB sound pressure represents?
   (a) 0.002 dyne/cm²    (b) 0.02 dyne/cm²  (c) 0.0002 dyne/cm² (d) 0.2 dyne/cm²

12. Which of the following is not related to Vibration Stress?
   (a) Raynaud's disease (b) Berger's disease  (c) Backache
       (d) Impairment to vision

13. What is the maximum velocity attained by rocket assisted ejection seat?
   (a) 25 ft/ sec    (b) 19.5 ft/ sec    (c) 22.5 ft/ sec (d) 20 ft/ sec

14. What is human tolerance of spine to acceleration force in its long axis?
   (a) 15 G for 1 Sec    (b) 20 G for 1.5 Sec    (c) 25 G for 0.1 Sec
       (d) 20 G for 1 Sec

15. What will be the safe ejection altitude of a '0 - 0' seat while the aircraft is on
descent @ 1200 ft/sec over a hillock of 200 ft height?
   (a) 200 ft    (b) 400 ft    (c) 500 ft (d) 300 ft

16. What is the average force required to operate ejection handle of a fighter aircraft?
   (a) 30 - 40 Kg    (b) 15 - 18 Kg    (c) 18 - 24 Kg (d) 30 - 35 Kg

17. When did first ejection take place?
   (a) 1938    (b) 1948    (c) 1946 (d) 1950

18. What is the maximum allowable occupational exposure to ionizing radiations per annum?
   (a) 20 mSv    (b) 10 mSv    (c) 25 mSv (d) 15 mSv

19. What is a Schmorl's node?
   (a) Extrusion of nucleus pulposus into the body of vertebra
       (b) Calcification of body of vertebra
       (c) Osteophyte formation around big joints
       (d) Calcification of phalanges

20. Which of the following statement is false?
   (a) POS increases with altitude
       (b) Blurr zone increases with speed
       (c) Reaction time increases with speed
       (d) POS increases with speed

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**Contributed by**

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