## Aerospace Medicine Quiz

- 1. Space equivalent zone is:
  - (a) 10000 15000 feet
  - (b) >50000 feet
  - (c) 15000 25000 feet
  - (d) 400 km above earth
- 2. In short-duration (4-5 days) space flight body water reduces by:
  - (a) 3-4% of the body weight
  - (b) 10-15% of the body weight
  - (c) No significant reduction
  - (d) 0.5 Litres
- 3. What happens to heart rate in spaceflight?
  - (a) Increases
  - (b) Reduces
  - (c) Does not change
  - (d) Becomes irregular
- 4. Mulder's constant is
  - (a) Acceleration time product
  - (b) Distance time product
  - (c) Both the above
  - (d) None of the above
- 5. Human beings have maximum tolerance to acceleration in which axis?
  - (a) +Gz
  - (b) -Gz
  - (c) +Gx
  - (d) +Gy
- 6. Convulsions are a feature of GLOC that occur during which phase?
  - (a) Absolute incapacitation period
  - (b) Relative incapacitation period
  - (c) G onset period
  - (d) Not a feature of G-LOC
- 7. The MK 16 MOD 1 Closed-Circuit Mixed-Gas Underwater Breathing Apparatus (UBA) used by US Navy Divers can have a maximum ascent rate of:
  - (a) 30 feet per minute
  - (b) 10 feet per minute
  - (c) 15 feet per minute
  - (d) 25 feet per minute
  - (e) 20 feet per minute
- 8. During the rescue of Salyut 7 space station, Russian cosmonauts working in unpowered platform developed symptoms of:
  - (a) Hyperbaria
  - (b) Heat strain
  - (c) Hypercarbia
  - (d) Toxic fumes inhalation
  - (e) Phthisis bulba

- 9. Which of the following is / are true about HBOT?
  - (a) Vasoconstriction occurs in non-ischemic tissues
  - (b) The effects of catecholamines are potentiated
  - (c) Endogenous antioxidants are stimulated
  - (d) Venous saturation becomes close to 100%
  - (e) HBO induces steep oxygen gradient in radiation damaged tissues
- 10. Post-flight symptoms may be induced and/or exacerbated by head movements during re-entry and immediately after landing due to:
  - (a) Hyposensitivity to angular head motions in all planes initially
  - (b) Hypersensitivity to angular head motions specially in the pitch plane being more provocative initially
  - (c) Hyposensitivity to angular head motions specially in the pitch plane being more provocative initially
  - (d) None of the above
- 11. The syndrome, which includes lack of motivation to work or interact with others, drowsiness, fatigue, and the inability to concentrate as a result of Space Motion Sickness is often referred as:
  - (a) Sopite Syndrome
  - (b) Mal de debarquement Syndrome (MdDs)
  - (c) Chronic Fatigue Syndrome (CFS)
  - (d) Barratt Syndrome
- 12. The following are considered as hardware in SHELL model except
  - (a) Anti-G Valve
  - (b) Multifunctional Display
  - (c) Checklist
  - (d) Helmet Mounted Display
- 13. As per MIL Std 1333 B, the minimum clearance from knee/shin from Main Instrument Panel is:
  - (a) 1.5 cm
  - (b) 1.5 inch
  - (c) 1.0 cm
  - (d) 1.0 inch
- 14. The important visual requirement for cockpit design depicted by the term VON is:
  - (a) Vision on Numbers
  - (b) View over Nautical
  - (c) Vision over Nose
  - (d) View over Nature
- 15. The automatic system which helps deploy parachute at a predetermined time and height are as follows; except:
  - (a) BTRU
  - (b) K II A3
  - (c) F-I B
  - (d) KM-36



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## Answers for Aerospace Medicine Quiz

Ans.: 1. (b), 2. (a), 3. (b), 4. (a), 5. (c), 6. (a), 7. (a), 8. (c), 9. (c) & (e), 10. (b), 11. (a), 12. (c), 13. (b), 14. (c), 15. (d)