

**M.B.B.S. DEGREE EXAMINATION  
FIRST YEAR  
PAPER II – PHYSIOLOGY**

**MULTIPLE CHOICE QUESTIONS**

*Q.P. Code: 526054*

**Time: 30 Minutes**

**Maximum : 20 Marks**

**Answer All Questions**

**Write one correct answer in the box provided in the Answer Script. No overwriting should be done.**

**III. Multiple Choice Questions:**

**(20 x 1 = 20)**

1. The neurological cell that has specific function of forming myelin is
  - A) Microglia.
  - B) Astrocytes.
  - C) Ependymal cells.
  - D) Oligodendrocyte.
  
2. The most potent stimulus for central chemoreceptors in regulating respiration is
  - A) Increased  $\text{CO}_2$  Concentration.
  - B) Decreased  $\text{O}_2$  Concentration.
  - C) Decreased  $\text{Na}^+$  and  $\text{K}^+$  Concentration.
  - D) Increased  $\text{HCO}_3^-$  Concentration.
  
3. The respiratory centre which acts as a off switch point is
  - A) Apneustic Center
  - B) Pneumotaxic Center
  - C) Dorsal group of Nervous.
  - D) Ventral group of Nervous.
  
4. Spirometry measures all EXCEPT
  - A) Vital capacity.
  - B) Inspiratory Reserve Volume.
  - C) Functional Residual Capacity.
  - D) Expiratory Reserve Volume.
  
5. The 'a' wave in jugular venous pulse tracing is due to
  - A) Atrial Systole.
  - B) Atrial Diastole.
  - C) Ventricular Diastole.
  - D) Ventricular Systole.

6. Preload of the heart is determined by
- A) End Diastolic Volume.
  - B) End Systolic Volume.
  - C) Ejection Systolic Volume.
  - D) Systolic Vascular Resistance.
7. Golgi tendon organ determines
- A) Static Length.
  - B) Muscle Action.
  - C) Muscle Tension.
  - D) Dynamic Length.
8. Athetosis is characterized by
- A) Continuous, slow writing movements.
  - B) Rapid voluntary dancing movement.
  - C) Involuntary flailing movements.
  - D) Slowness of movements.
9. The language comprehension area in posterior part of the superior gyrus of temporal lobe is
- A) Broca's Area.
  - B) Wernicke's Area.
  - C) Gnostic Area.
  - D) Angular Gyrus.
10. The nucleus responsible for maintaining circadian rhythm is
- A) Subthalamic Nucleus.
  - B) Suprachiasmatic Nucleus.
  - C) Raphe Nucleus.
  - D) Lateral reticular Nucleus.
11. Brown-Sequard Syndrome is characterized by all the following EXCEPT
- A) Loss of vibration sense on the opposite side below level of the lesion.
  - B) Loss of voluntary movements on the same side below the level of the lesion.
  - C) Loss of reflex movements on the same side at the level of the lesion.
  - D) Loss of pain sensation on the opposite side below the level of the lesion.
12. The lateral motor system of the cord is formed by following tracts
- A) Vestibulospinal and Olivospinal.
  - B) Reticulo spinal and Rubrospinal.
  - C) Cortico spinal and Rubrospinal.
  - D) Vestibulospinal and Reticulospinal
13. The afferent climbing fibers to the cerebellum originate from
- A) Superior Olivary Nucleus.
  - B) Inferior Olivary Nucleus.
  - C) Superior Vestibular Nucleus.
  - D) Inferior Vestibular Nucleus.

14. Which of the following part of the eye has the greatest concentration of rods
- A) Iris.
  - B) Optic disc.
  - C) Fovea.
  - D) Parafoveal Region.
15. Taste buds are absent in
- A) Fungiform Papillae.
  - B) Filiform Papillae.
  - C) Foliate Papillae.
  - D) Circumvallate Papillae.
16. Sympathetic stimulation of the bronchus causes
- A) Bronchial Constriction.
  - B) Increased secretion from glands.
  - C) No effect.
  - D) Bronchial dilatation.
17. Which of the following changes would tend to cause accumulation of fluid (oedema) in the tissues?
- A) Increased pre capillary vascular resistance.
  - B) Decreased post capillary vascular resistance.
  - C) Increased plasma colloid osmotic pressure.
  - D) Increased venous pressure.
18. The most powerful stimulus to initiate CNS ischemic response is
- A)  $\text{CO}_2$  accumulation in the medulla.
  - B) Fall in arterial  $\text{PO}_2$ .
  - C) Rise in arterial  $\text{PCO}_2$ .
  - D) Fall in the blood pH.
19. True about pain pathway is
- A) These are myelinated  $\text{A}\beta$  afferent neurons.
  - B) Glutamic acid and substance P are the transmitters released at synapse.
  - C) Nociceptors are rapidly adapting.
  - D) Pain sensation is carried by anterior spinothalamic tract.
20. Muscle spindle is
- A) Receptor for a variety of multi synaptic reflex.
  - B) Receptor for stretch reflex.
  - C) Occurs only in antigravity muscles.
  - D) Excited by both stretch and contraction of the muscles in which it is located.

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