

**Q.P. CODE:504-A-CBME****DR.NTR UNIVERSITY OF HEALTH SCIENCES: AP: VIJAYAWADA-520 008****MBBS DEGREE EXAMINATION – JAN/FEB , 2022****FIRST M.B.B.S. EXAMINATION****PHYSIOLOGY – PAPER-II (SET-A)****(Multiple Choice Questions)****Time: 20 Minutes****Max Marks: 20****Note: Answer all questions**

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**SECTION – I (MCQs- 20 MARKS)****1x20=20**

1) Myelinated nerves

- a. Axons have smaller diameter
- b. Nerve impulses travel uniformly along axolemma
- c. Density of voltage-gated Na<sup>+</sup> channels are more
- d. Na<sup>+</sup> channels are less in axons

2) The following vitamin is essential for oxidation of pyruvic acid and lactic acids in the neurons

- a. Vitamin B1
- b. Vitamin B6
- c. Vitamin B12
- d. Vitamin B2

3) Lidocaine

- a. K<sup>+</sup> channel blocker
- b. Na<sup>+</sup>K<sup>+</sup> ATPase blocker

- c. Membrane toxin
  - d. Na<sup>+</sup> channel blocker
- 4) In isometric contraction in skeletal muscle, there is
- a. Increase in muscle length
  - b. Increase in muscle tension
  - c. External work is done
  - d. Decrease in muscle length
- 5) Staircase phenomenon (Treppe) is due to
- a. Tetanus
  - b. Summation of contraction
  - c. Progressively increased calcium available in the sarcoplasm
  - d. Increased Troponin level in the thin filaments
- 6) Sertoli cells secrete:
- a. Testosterone
  - b. Estrogen
  - c. Androstenedione
  - d. Inhibin
- 7) The primordial follicle becomes primary follicle at
- a. 28 weeks of gestation
  - b. 21 weeks of gestation
  - c. 14 weeks of gestation
  - d. 7 weeks of gestation

8) Main hormone in luteal phase is:

- a. Estrogen
- b. Progesterone
- c. Prolactin
- d. Oxytocin

9) Progesterone mainly causes development of which component of the breast?

- a. Duct system
- b. Lobulo-alveolar system
- c. Parenchyma of breast
- d. Myoepithelial cells of breast

10) Which is the best contraceptive method for a lady before 1st child birth?

- a. OCP
- b. IUD
- c. Tubectomy
- d. Diaphragms

11) Scavenger cells in brain?

- a. Astrocyte
- b. Oligodendrocyte
- c. Golgi cells
- d. Microglia

12) The inhibitory neurotransmitter in CNS neurons is:

- a. Glutamate
- b. Aspartate
- c. Gamma-amino butyric acid
- d. Taurine

13) The action potential from a receptor is generated at:

- a. Lamella at nerve ending
- b. Nerve ending
- c. First node of Ranvier
- d. Cells attached to the nerve ending

14) Which of the following sensation is not carried in dorsal column pathway?

- a. Vibration
- b. Stereognosis
- c. Crude touch
- d. Proprioception

15) Which of the following is 'True' about visceral pain?

- a. It is poorly localized
- b. Resembles 'fast pain' produced by noxious stimulation of the skin
- c. Mediated by B fibers in the dorsal roots of the spinal nerves
- d. Causes relaxation of nearby skeletal muscles

16) The diameter of Golgi tendon organ is

- a. 100 mm
- b. 150 mm

- c. 50 mm
- d. 200 mm

17) Striatonigral projection; degeneration of this pathway produces

- a. Parkinsonism
- b. Huntington's disease
- c. Ballism
- d. Hemiballism

18) Slow wave sleep is associated with:

- a. Dreams
- b. Cardiac arrhythmia
- c. Penile intumescence
- d. Delta activity

19) The total refractive power of the eye is 60 D, which is contributed by

- a. 43 D by lens and 17 D by cornea
- b. 30 D by lens and 30 D by cornea
- c. 23 D by lens and 37 D by cornea
- d. 17 D by lens and 43 D by cornea

20) Hemineglect occurs in lesion of:

- a. Temporal lobe
- b. Prefrontal lobe
- c. Parietal lobe
- d. Frontal lobe