

Q.P. CODE:504-A-CBME

DR. NTR UNIVERSITY OF HEALTH SCIENCES:AP:VIJAYAWADA-520 008

M.B.B.S. 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

SECTION – I (MCQs- 20 MARKS)

1x2=20

- 1) Myelinated nerves
 - a) Axons have smaller diameter
 - b) Nerve impulses travels uniformly along axolemma
 - c) Density of voltage gated Na⁺ channels are more
 - d) Na⁺ 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⁺ channel blocker
 - b) Na⁺-K⁺ ATPase blocker
 - c) Membrane toxin
 - d) Na⁺ 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

Contd 2

- 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) 100mm
 - b) 150mm
 - c) 50mm
 - d) 200mm
- 17) Striatonigral projection ; degeneration of this pathway produces
 - a) Parkinsonism
 - b) Huntingtons disease
 - c) Ballism
 - d) Hemiballism
- 18) Slow wave sleep associated with:
 - a) Dreams
 - b) Cardiac arrhythmia
 - c) Penile intumescence
 - d) Delta activity
- 19) The total refractive power of 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

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SECTION – I (MCQs- 20 MARKS)

1x2=20

- 1) In isometric contraction in skeletal muscle, there is
 - a) Increase in muscle tension
 - b) External work is done
 - c) Decrease in muscle length
 - d) Increase in muscle length
- 2) lidocaine
 - a) Na⁺-K⁺ ATPase blocker
 - b) Membrane toxin
 - c) Na⁺ channel blocker
 - d) K⁺ channel blocker
- 3) The following vitamin is essential for oxidation of pyruvic acid and lactic acids in the neurons
 - a) Vitamin B6
 - b) Vitamin B12
 - c) Vitamin B2
 - d) Vitamin B1
- 4) Myelinated nerves
 - a) Nerve impulses travels uniformly along axolemma
 - b) Density of voltage gated Na⁺ channels are more
 - c) Na⁺ channels are less in axons
 - d) Axons have smaller diameter
- 5) Main hormone in luteal phase is:
 - a) Estrogen
 - b) Progesterone
 - c) Prolactin
 - d) Oxytocin
- 6) The primordial follicle becomes primary follicle at
 - a) 21 weeks of gestation
 - b) 14 weeks of gestation
 - c) 7 weeks of gestation
 - d) 28 weeks of gestation

Contd .. 2

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 - c) Increased Troponin level in the thin filaments
 - d) Tetanus
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- 11) Which is the best contraceptive method for a lady before 1st child birth?
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- 12) Progesterone mainly causes development of which component of the breast?
 - a) Lobulo-alveolar system
 - b) Parenchyma of breast
 - c) Myoepithelial cells of breast
 - d) Duct system
- 13) The diameter of golgi tendon organ is
 - a) 100mm
 - b) 150mm
 - c) 50mm
 - d) 200mm

- 14) Which of the following is 'True' about visceral pain?
- a) Resembles 'fast pain' produced by noxious stimulation of the skin
 - b) Mediated by B fibers in the dorsal roots of the spinal nerves
 - c) Causes relaxation of nearby skeletal muscles
 - d) It is poorly localized
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 - c) Cells attached to the nerve ending
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 - b) Parietal lobe
 - c) Frontal lobe
 - d) Temporal lobe
- 18) The total refractive power of eye is 60 D which is contributed by
- a) 30 D by lens and 30 D by cornea
 - b) 23 D by lens and 37 D by cornea
 - c) 17 D by lens and 43 D by cornea
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- 19) Slow wave sleep associated with:
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 - b) Penile intumescence
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 - c) Hemiballism
 - d) Parkinsonism

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M.B.B.S. DEGREE EXAMINATION – JAN/FEB, 2022
FIRST M.B.B.S. EXAMINATION
PHYSIOLOGY – PAPER-II (Set C)
(Multiple Choice Questions)

Time : 20 Minutes

Max. Marks: 20

Note : Answer all questions

SECTION – I (MCQs- 20 MARKS)

1x2=20

- 1) lidocaine
 - a) Membrane toxin
 - b) Na⁺ channel blocker
 - c) K⁺ channel blocker
 - d) Na⁺-K⁺ ATPase blocker
- 2) Myelinated nerves
 - a) Density of voltage gated Na⁺ channels are more
 - b) Na⁺ channels are less in axons
 - c) Axons have smaller diameter
 - d) Nerve impulses travels uniformly along axolemma
- 3) In isometric contraction in skeletal muscle, there is
 - a) Decrease in muscle length
 - b) Increase in muscle length
 - c) Increase in muscle tension
 - d) External work is done
- 4) The following vitamin is essential for oxidation of pyruvic acid and lactic acids in the neurons
 - a) Vitamin B2
 - b) Vitamin B1
 - c) Vitamin B6
 - d) Vitamin B12
- 5) The primordial follicle becomes primary follicle at
 - a) 7 weeks of gestation
 - b) 28 weeks of gestation
 - c) 21 weeks of gestation
 - d) 14 weeks of gestation
- 6) Staircase phenomenon (Treppe) is due to
 - a) Increased Troponin level in the thin filaments
 - b) Tetanus
 - c) Summation of contraction
 - d) Progressively increased calcium available in the sarcoplasm

Contd .. 2

- 7) Main hormone in luteal phase is:
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 - b) Estrogen
 - c) Progesterone
 - d) Prolactin
- 8) Sertoli cells secrete:
 - a) Inhibin
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 - b) Mediated by B fibers in the dorsal roots of the spinal nerves
 - c) Causes relaxation of nearby skeletal muscles
 - d) It is poorly localized

- 14) The action potential from a receptor is generated at:
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- 15) The diameter of golgi tendon organ is
- 100mm
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- 16) Which of the following sensation is not carried in dorsal column pathway?
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 - Parkinsonism
 - Huntingtons disease
- 19) Hemineglect occurs in lesion of:
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- 20) Slow wave sleep associated with:
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 - Delta activity
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PHYSIOLOGY – PAPER-II (Set D)
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- 1) The following vitamin is essential for oxidation of pyruvic acid and lactic acids in the neurons
 - a) Vitamin B2
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 - d) Vitamin B12
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 - b) Increase in muscle length
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