

SEND UP EXAMINATION

ROLL #: _____ DATED: 07.09.18

INSTRUCTIONS

- All objective questions are to be attempted on the paper and responses to the questions are to be written in blue ink.
- Any cutting and overwriting in objective part will not be accepted.

Q1. Which of the following pressure changes lead to an increased GFR?

- A. Increase glomerular capillary oncotic pressure
- B. Increase glomerular capillary hydrostatic pressure**
- C. Increase hydrostatic pressure in Bowman's capsule
- D. Decrease net filtration pressure
- E. Increase glomerular capillary oncotic pressure

Q2. Which statement about filtration fraction is correct:

- A. Averages about 20
- B. Indicates 80 per cent of the plasma is filtered
- C. Increases with increased colloidal osmotic pressure
- D. Increases with increased colloidal osmotic pressure
- E. Is equal to GFR/Renal plasma flow**

Q3. The transport of Glucose in the renal tubular cells of proximal tubules occurs via:

- A. Facilitated diffusion
- B. Secondary active transport with sodium**
- C. Active transport
- D. Concentration gradient
- E. When plasma glucose level falls

Q4. Micturition Reflex Centre is located in:

- A. Brain stem
- B. Sacral segment of Spinal cord (S2, 3, 4)**
- C. Lumbar segment of spinal cord
- D. Cerebral cortex
- E. Lumbar sympathetic ganglia

Q5. The following data is obtained from an arterial blood sample from hospitalized patient
 $\text{pH} = 7.0$, $[\text{HCO}_3^-] = 11.5 \text{ mEq/L}$. This patient's arterial blood findings are diagnostic of:

- A. Metabolic alkalosis
- B. Respiratory alkalosis
- C. Metabolic acidosis**
- D. Respiratory acidosis
- E. Both metabolic & respiratory acidosis

Q6. Patient who had type I diabetes mellitus is advised by the doctor not to do strenuous exercise as it can lead to?

- A. Hypokalemia
- B. Hypocalcemia
- C. Hypertalemia**
- D. Reabsorption of potassium
- E. potassium remains unaffected

Q7. Which of the following is the cause of chronic renal failure

- A. Hemorrhage
- B. Diarrhea
- C. Burn
- D. Myocardial infarction
- E. Diabetic nephropathy**

Q8. One person had high BP, went to doctor on lab investigation he was found to have Hypokalemia & Hypernatremia, what is most probable diagnosis

- A. Addison's disease
- B. Graves disease
- C. Conn's syndrome**
- D. Myxedema
- E. Hypothyroidism

Q9. Melanin pigmentation is increased in patients with Addison's disease, the most probable reason is?

- A. Secretion of ACTH
- B. Secretion of cortisol
- C. Secretion of ACTH**
- D. Secretion of aldosterone
- E. Hypertremia

Q10. Anti-inflammatory effects of cortisol is due to:

- A. Release of chemical substances from damaged tissues
- B. Increased blood flow in damaged area
- C. Leakage of large quantities of plasma out of capillaries
- D. Decreased movement of leucocytes to inflammation**
- E. Ingrowth of fibrous tissue after some days

Q11. A 35 years old patient of rheumatoid arthritis on corticosteroids for last two years, She developed trucken obesity, moon like face, skin rashes, bone weakness, her B.P is 160/100 mmHg. What is your diagnosis?

- A. Addison's disease
- B. Cushing syndrome**
- C. Pheochromocytoma
- D. Hyperthyroidism
- E. Conn's syndrome

Q12. How Glucose enters in skeletal muscle

- A. Passive diffusion
- B. Facilitated diffusion with GLUT4**
- C. Primary active transport
- D. Secondary active transport
- E. pinocytosis

Q13. Urine examination of diabetic patient was examined, it was found to contain Ketone bodies. What do you think is most likely cause of formation of these ketone bodies?

- A. Increased secretion of insulin
- B. Uncontrolled diabetes mellitus**
- C. Hypoglycemia
- D. Protein synthesis
- E. Decreased fat utilization

Q14. Glucagon follows which of the following signaling pathway for its cellular effects?

- A. cAMP pathway (second messenger system)**
- B. GMP pathway (second messenger system)
- C. inositol triphosphate pathway (second messenger system)
- D. Tyrosin kinase pathway (enzyme linked)
- E. Primary active transport

Q15. A male fetus born in a maternity hospital. During examination, his scrotum was empty and shrunken. He had bilateral inguinal swelling which is most probably undescended testes. This condition is called:

- A. Cryptorchidism**
- B. Klinefelter syndrome
- C. Ectopic Testes
- D. Hermaphroditism
- E. Testicular agenesis

Q16. The person is likely to be infertile if sperm count in each milliliter falls below

- A. 2 million
- B. 10 million
- C. 20 million**
- D. 30 million
- E. 1 million

Q17. The prostatic fluid enhances the motility & fertility of sperm as prostatic fluid is

- A. Thin
- B. Contain Phosphate ions
- C. Contains Ca ions
- D. Acidic
- E. Alkaline**

Q18. LH surge is necessary for ovulation, because it causes

- A. Increased estrogen secretion
- B. Increased secretion of prolactin
- C. Increased secretion of progesterone**
- D. Decreased secretion of progesterone
- E. Decreased secretion of prolactin

Q19. A woman who had repeated abortions is pregnant again, the doctor gave her therapy because it

- A. Increases uterine contractions
- B. Decreases the frequency & intensity of contractions**
- C. Decrease the endometrial secretions
- D. Causes expulsion of implanted ovum
- E. Causes proliferation of endometrium

Q20. Salma was married 3 years back but still has no baby, the doctor asked her to maintain the body temperature chart throughout the cycle. ovulation will be indicated if body temperature is

- A. Decreased
- B. Increased just after menstruation
- C. Increased during later half of the cycle**
- D. No change in temperature
- E. Decreased in follicular phase

Q21. Inhibitory post synaptic potential is produced due to opening up of

- A. Na⁺ channel
- B. K⁺ channel
- C. Chloride channel
- D. Both K & Chloride channel**
- E. Sodium channels

Q22. Which statement is Correct?

- A. Alkalosis decreases the neuronal excitability
- B. Alkalosis increases the neuronal excitability**
- C. Acidosis increases the neuronal excitability
- D. Hypoxia increases the neuronal excitability
- E. Caffeine decreases the neuronal excitability

Q23. In tertiary stage of syphilis degeneration of dorsal (sensory) nerve root and dorsal column tracts occurs, this leads to disease called:

- A. Tic douloureux
- B. Multiple sclerosis
- C. Hyperalgesia
- D. Tabes Dorsalis**
- E. Syringomyelia

Q24. A person working in factory got a cut with knife, which neurotransmitter will be secreted for causing sharp pain?

- A. Glutamate**
- B. Substance-P
- C. Dopamine
- D. Serotonin
- E. Acetylcholine

Q25. During spinal shock

- A. All motor reflexes disappear
- B. All motor & autonomic reflexes disappear below the level of lesion**
- C. Flexors are enhanced
- D. Extensor reflexes disappear
- E. Only BP falls

Q26. Which one is not tactile receptor.

- A. Free nerve endings
- B. Meissner Corpuscle
- C. Pacinian corpuscle
- D. Merkel's disc
- E. Ruffini's ending

Q27. Extensor muscle fibers are innervated by

- A. δ motor neurons in anterior horn of spinal cord.
- B. α motor neurons in anterior horn of spinal cord.
- C. By primary nerve endings
- D. By secondary nerve endings
- E. By group II fibers

Q28. Naila got stroke due to damage of cerebral vessels, ON opposite side of body muscles are paralyzed, during recovery period what will happen to Tone:

- A. Hypotonia
- B. Cogwheel Rigidity
- C. Claspknife rigidity
- D. Flaccidity (less tone)
- E. Lead pipe rigidity

Q29. The excessive muscle tone produced in decerebrate rigidity is due to:

- A. Overactivity of Medullary reticular nuclei.
- B. Overactivity of Pontine reticular Nuclei
- C. Increased input from cerebral cortex to Medullary nuclei
- D. Increased input from thalamus
- E. Increased input from red nuclei

Q30. Planning & Timing of Sequential movement is controlled by which part of Cerebellum

- A. PaleoCerebellum
- B. Spinocerebellum
- C. Cerebrocerebellum
- D. Vestibulocerebellum
- E. Archicerebellum

Q31. The Purkinji cells of cerebellum

- A. Excite the stellate & basket cells
- B. Send inhibitory impulses to deep cerebellar nuclei
- C. Give rise to parallel fibers
- D. Discharge complex spike in response to mossy fibers
- E. Discharge at the rate of 5 to 10 action potential per second

Q32. The rigidity seen in Parkinsonism is due to excessive stimulation of alpha motor neurons of all the muscles results due to

- A. Inhibitory effect of Basal ganglia
- B. Absence of inhibitory effect of Basal ganglia on motor cortex
- C. Hypo function of motor cortex
- D. Absence of cerebellar inhibition
- E. Increased sensitivity of stretch reflex

Q33. Regarding aphasia, which statement is true?

- A. It is disorder of speech due to defect speech area in brain, without the paralysis of muscle required for speech
- B. It is said to be sensory if the patient can understand spoken words but unable to construct the sentences
- C. It is motor if damage is to Wernicke area.
- D. It is said to be sensory if the damage is in Broca area.
- E. It is disturbance of speech due to defects of vision or hearing

Q34. Lesion of which part of brain will lead to loss of recent memory (anterograde amnesia):

- A. Amygdale
- B. Frontal lobe
- C. Hippocampus
- D. Limbic cortex
- E. Hypothalamus

Q35. The long term memory results due to?

- A. Closing of Ca^{++} channels
- B. Increase in vesicle release site for secretion of transmitter substance.
- C. Increasing the k^{++} conductance
- D. Decreasing the action potential
- E. Inhibiting the synaptic transmission

Q36. Major reward center is present in:

- A. Ant. Nucleus of Hypothalamus
- B. pons
- C. Lateral & Ventromedial nucleus of Hypothalamus
- D. Periaqueductal gray area
- E. Brain stem

Q37. Which part of brain is believed to make the person's behavior in response to appropriate for each occasion

- A. Prefrontal Cortex
- B. Occipital Lobe
- C. Amygdala
- D. Basal ganglia
- E. Hippocampus

Q38. Temperature regulating center is present in

- A. Cerebellum
- B. Thalamus
- C. Anterior Hypothalamus esp. Pre-optic area
- D. Basal ganglia
- E. Anterior pituitary

Q39. Javaria got epileptic fit which lasted for 3 to 4 minute, during that urination occurred & she also had bitten her tongue. what type of epileptic fit she was having? ?

- A. Petit Mal
- B. Grand Mal
- C. Focal
- D. Jacksonian
- E. Psychomotor

Q40. Stimulation of which area of brain produce sleep

- A. Raphe nuclei in lower half of pons & medulla
- B. amygdala
- C. Hippocampus
- D. Limbic cortex
- E. Primary sensory area

Q41. Which cranial nerve does not carry parasympathetic fibers?

- A. III
- B. X
- C. VI
- D. VII
- E. IX

Q42. All preganglionic neurons in sympathetic & parasympathetic system secrete.

- A. Adrenaline
- B. Nor-adrenaline
- C. Acetylcholine
- D. Epinephrine
- E. Norepinephrine

Q43. Epinephrine mainly exerts

- A. β_1 receptors to increase B.P.
- B. β_2 receptors to increase cardiac output
- C. α_1 receptors
- D. Nicotinic receptors
- E. Acetylcholine receptors

What is the name of the condition in which the lens of eye becomes almost non accommodating in person over than 70 years?

- A. Amblyopia
- B. Emmetropia
- C. Hyperopia
- D. Myopia
- E. Presbyopia
- F.

Q45. What is true regarding Horner's Syndrome.

- A. Persistent dilatation of pupil on affected side.
- B. Occur due to parasympathetic ganglia damage.
- C. Persistent constriction of pupil on affected side.
- D. No Loss of sweating
- E. Decreased body temperature

Q46. The receptor protein for appreciation of bitter taste act by which mechanism

- A. By Opening Na^+ channel
- B. By opening Cl^- channel
- C. By opening H^+ channels
- D. Hyperpolarizing taste cells
- E. Activating second messenger system

Q47. Destruction of right Optic tract will lead to

- A. Binasal Hemianopia
- B. Heteronymous Hemianopia
- C. Left Homonymous Hemianopia
- D. Bitemporal hemianopia
- E. Right nasal hemianopia

Q48. Aslam is unable to hear the high frequency sounds the damage to basilar membrane is at?

- A. Base of basilar membrane.
- B. Apex of basilar membrane.
- C. Striavascularis
- D. Spiral ganglion
- E. Reticular lamina

Q49. A person is doing labour work in hot summer days (the environment temperature of 95°F), He developed high grade fever of 106°F, the most likely diagnosis is

- A. Fever
- B. Frost bite
- C. Acclimatization to heat
- D. Heat stroke
- E. Crisis or flush

Q50. What is true regarding Interleukin-1, (secreted by macrophages):

- A. It stimulates the phagocytosis by leukocytes
- B. It stimulates the erythrocytes
- C. It is not pyrogen.
- D. It acts on the Hypothalamus to produce fever
- E. It activates the lymphocytes