

## SEND-UP EXAM

ROLL #: \_\_\_\_\_ Name: \_\_\_\_\_

DATED: \_\_\_\_\_

## INSTRUCTIONS

- 1-All objective questions are to be marked on the paper and handed to the invigilator within 50 mins  
 2-Any cutting and overwriting in the answer sheet is not accepted

Q1. The substance that does not show transport maximum in proximal tubule is

- A. Glucose  
 B. Sodium  
 C. Creatinin  
 D. Amino acids  
 E. Phosphate

E

Q2. A 45 years old patient visits his family physician because of uncontrolled blood glucose. His laboratory test reveals the presence of glucose in urine. The mechanism responsible for this is

- A. Reduced Glucose carrier affinity  
 B. Decreased renal functions  
 C. Decreased glucose reabsorption  
 D. Increased glucose secretion into the tubules  
 E. Full Saturation of glucose transporters

Q3. Najma is suffering from diarrhea & vomiting which led to electrolytes disorder. what will be change in composition of body fluid

- A. Hyponatremia dehydration  
 B. Hyponatremia overhydration  
 C. Hypernatremia dehydration  
 D. Hypernatremia overhydration  
 E. Overhydration

Q4. Which of the following substance is suitable for measuring total body water?

- A. Radioactive water (tritium  $^3\text{H}_2\text{O}$ )  
 B. Radioactive  $^{22}\text{Na}$   
 C.  $^{51}\text{Cr}$  labeled RBCs  
 D. Evans' blue dye  
 E.  $^{125}\text{I}$  - iothalamate

Q5. The person who has metabolic acidosis (Hyperchloremic) & Anion Gap is Normal, the cause of metabolic acidosis will be

- A. Methanol poisoning  
 B. Diabetes mellitus (Ketoacidosis)  
 C. Renal tubular acidosis  
 D. Lactic acidosis  
 E. Aspirin poisoning

Q6. Hydrogen ions are secreted into tubular lumen by intercalated cells of late distal & collecting tubules by:

- A. Primary active transport  
 B. Secondary active transport  
 C. Simple diffusion  
 D. Facilitated diffusion  
 E. Secondary active counter transport

Q7. Which factor shift the  $\text{K}^+$  through the principle cells in lumen of late distal & collecting tubule.

- A. Insulin deficiency  
 B. Decreased Aldosterone secretion  
 C. Increased Aldosterone secretion  
 D. Acidosis  
 E. Cell lysis

Q8. In Hypokalemia what is the most probable mechanism of reabsorption of  $\text{K}^+$  from intercalated cells?

- A. Passive diffusion  
 B.  $\text{Na-K}^+$  ATPase pump  
 C. By concentration gradient  
 D. Hydrogen Potassium ATPase  
 E. Increased  $\text{K}^+$  secretion

Q9. The receptors for thyroid hormone are located?

- A. Cell membrane  
 B. Cytoplasm  
 C. Ribosomes  
 D. Nucleus  
 E. Mitochondria

Q10. Growth Hormone

- A. Exerts its effect on growth by stimulating production of somatomedins  
 B. Inhibits protein synthesis  
 C. Decreases Lipolysis  
 D. Increases glycolysis  
 E. Enhances glucose transport in cells

Q11. Anti-inflammatory effect 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 inflamed area  
 E. Ingrowth of fibrous tissue after some days

Q12. Exercise induced uptake of Glucose occurs in following site in the absence of insulin:

- A. Adipose tissues
- B. Cardiac muscles
- C. Skeletal muscles
- D. Uterine muscles
- E. Smooth muscle

Q13. Which statement about Cushing syndrome is correct:

- A. Hyposecretion of adrenal cortex
- B. Androgens are decreased.
- C. ACTH level is decreased
- D. Cortisol level is increased
- E. Cortisol level is decreased

Q14. Increased Insulin secretion level occurs due to?

- A. Increased blood glucose level
- B. Decreased blood glucose
- C. Fasting
- D. Somatostatin
- E. Sympathetic stimulation ( $\alpha$  adrenergic activity)

Q15. Thyroid hormone deficiency in early infancy leads to:

- A. Gigantism
- B. Diabetes insipidus
- C. Osteoporosis
- D. Marfan's syndrome
- E. Cretinism

Q16. The prostatic fluid enhances the motility & ability of sperm as prostatic fluid is

- A. Thin
- B. Contain Phosphate ions
- C. Contains  $Ca^{++}$  ions
- D. Acidic
- E. Alkaline

Q17. Testosterone in target tissues is converted to more active form?

- A. Dihydrotestosterone
- B. Androsterone
- C. Estradiole
- D. Estrogen
- E. Progesteron

Q18. SRY protein in Y chromosome, initiate the cascade of reaction that causes the genital cells to differentiate into cells that secrete:

- A. Prolactin
- B. Inhibin
- C. Estrogen
- D. Progesterone
- E. Testosterone

Q19. Menstrual bleeding results because of:

- A. Prostaglandins secretions
- B. Withdrawl of estrogen & progesterone.
- C. Thickening of endometrium
- D. Proliferative phase of endometrium
- E. Secretory phase of endometrium

Q20. Regarding Respiratory functions of placenta during pregnancy the double Bohr effect means:

- A. More affinity of maternal Hb for  $O_2$
- B. Lower  $PCO_2$  in maternal Sinuses
- C. More affinity of fetal blood for  $O_2$
- D. More release of  $CO_2$  from fetal blood & its diffusion to maternal blood
- E. Both C & D

Q21. In lactating mothers Oxytocin causes?

- A. Production of milk
- B. Contraction of myoepithelial cells
- C. Development of ductal system
- D. Development of alveolar system
- E. Inhibition of milk secretion

Q22. In most nursing mothers failure of ovulation occurs because

- A. Prolactin levels are decreased
- B. FSH secretion by anterior pituitary is increased
- C. LH secretion by anterior pituitary is increased
- D. Nervous signals from breast to Hypothalamus during suckling inhibits secretion of GnRH.
- E. Nervous signal from Hypothalamus to breast inhibit secretion of LH

Q23. The membrane of presynaptic terminal at synapse contain large No of

- A. Voltage gated sodium channels
- B. Voltage Gated Calcium channels
- C. Potassium channels
- D. Chloride channels
- E. Not any kind of channels

Q24. Inhibitory post synaptic potential is produced due to opening up of voltage gated?

- A.  $Na^+$  channel
- B.  $K^+$  channel
- C. Chloride channel
- D. Both Na & K
- E. Both K & CL

Q25. A 75 years old woman noted that she is ignoring the stimuli on left side of body. The lesion is most likely present in:

- A. Left Parietal lobe
- B. Posterior part of Right parietal lobe
- C. Right frontal lobe
- D. Left frontal lobe
- E. Occipital lobe

Q26. Naila is severely sick by getting infection with treponema pallidum, She was left untreated so ultimately degeneration of dorsal (sensory) nerve root occurred, this disease is

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

of placenta  
test means

Brodman No. for Somatosensory area  
(sensory cortex) in cerebral cortex is?

- A. 3,1,2
- B. 5,7
- C. 41
- D. 43
- E. 51

A

Q28. Amorphosynthesis or Neglect syndrome occurs due to damage of?

- A. Somatosensory area I
- B. Somatosensory area II
- C. Somatosensory association area
- D. Primary motor cortex
- E. Motor area

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. Which reflex has involvement of an interneuron in its pathway?

- A. Cremestic
- B. Inverse stretch
- C. Biceps Jerk
- D. Triceps jerk
- E. Ankle jerk

Q31. Afferent impulses from Golgi tendon organ pass to inhibitory interneuron in the spinal cord via?

- A. Ia
- B. Ib
- C. IIa
- D. C fibers
- E. Delta fibers

Q32. Dynamic stretch response results due to stimulation of which type of sensory nerve fibers of muscle spindle?

- A. Type II fibers
- B. Primary nerve endings
- C. Secondary nerve endings
- D. Both primary & secondary ending
- E. Type c fibers

Q33. 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

Q34. Poliomyelitis is viral disease, which leads to paraplegia, it results due to?

- A. Damage to posterior horn of spinal cord
- B. Damage to anterior horn of spinal cord
- C. Lesion in motor cortex
- D. Lesion in motor association area
- E. Lesion in sensory area

Q35. Jerky purpose less movements in limbs of 40 years old man indicate?

- A. Parkinsons disease
- B. Huntings disease
- C. Hemiballismus
- D. Thalamic syndrome
- E. Cerebellar disease

Q36. Salma complains to her physician about Jet lag whenever she flies long distance. The circadian rhythm is controlled by which of the following nuclei?

- A. Arcuate
- B. Lateral
- C. Paraventricular
- D. Suprachiasmatic
- E. Ventromedial

Q37. 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

Q38. The long term memory results due to?

- A. Closing of Ca<sup>++</sup> channels
- B. Increase in vesicle release sites for secretion of transmitter substance.
- C. Increasing the k<sup>++</sup> conductance
- D. Decreasing the action potential
- E. Inhibiting the synaptic transmission

Q39. 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

Q40. Which part of brain is believed to be responsible for appropriate behavior for any occasion?

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

NK

Q41. Temperature regulating center is present in?

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

Q42. Aslam is suffering from Myasthenia Gravis he has disorder of speech which is due to paralysis of muscle required for speech it is called?

- A. Sensory aphasia
- B. Motor aphasia
- C. Global aphasia
- D. Dysarthria
- E. Dyslexia

Q43. Parasympathetic stimulation causes?

- A. Relaxation of Intestinal sphincters & increased peristalsis
- B. Decreased Intestinal motility
- C. Relaxation of Detrusor
- D. Dilatation of Bronchi
- E. Dilatation of pupillary sphincters

Q44. Sympathetic nervous system exerts its action on target organ through following receptors?

- A. Cholinergic Nicotinic receptors
- B. Cholinergic Muscarinic receptors
- C. Alpha adrenergic receptors
- D. Beta adrenergic receptors
- E. Both C & D

Q45. Lesion of right Optic tract will lead to?

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

Q46. The patient who had Neurosyphilis, comes to doctor?? On examination it is found that Accommodation reflex is present but Light reflex is absent. Which area of the brain is damaged?

- A. Edinger Westphal nucleus
- B. Optic Nerve
- C. Optic tract
- D. Optic chiasma
- E. Pre-tectal nuclei

Q47. Depolarization of the cochlear hair cells is caused primarily by the inflow of?

- A. K<sup>+</sup> into the stereocilia
- B. Na<sup>+</sup> into the hair cells
- C. Ca<sup>2+</sup> out of the hair cells
- D. Ca<sup>2+</sup> into the hair cells
- E. Mg<sup>2+</sup> into the hair cells

Q48. The receptor protein for appreciation of bitter taste act by which mechanism?

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

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. Frost bite is a condition in which?

- A. Body is exposed to extreme heat
- B. Formation of ice crystals and permanent damage to tissue
- C. Affected area becomes 100% normal
- D. Results from bacterial infection
- E. Results from viral infection

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