

Review Exam - Review
Exam_Metabolism_Blood_Nervous_Endocrine_Class
Test_Online_Foundation_1

Total Mark: 100

Time: 90 Min

<p>1. In diabetic ketoacidosis there is decreased metabolic breakdown of</p> <p>A) Ketones B) Glycogen C) Fat D) Glucose E) Amino acid</p> <p>Answer: D Discussion: Reference: (Ref: Rodde/Q-207)</p>	<p>2. A 12 years old boys noted to bleed excessively during dental extraction. On examination reveals petechial skin hemorrhage.CBC shows- Hb 12.3gm/L, Plt-255×109/L, WC 7.9× 109/L. PT 13.3secs, APTT-39 secs. Factor VIII activity 87%. What the most likely diagnosis-</p> <p>A) DIC B) ITP C) VWD D) Hemophilia A E) Hemophilia B</p> <p>Answer: C Discussion: Reference: (Ref: Hoffbrand 7th/Page-294)</p>
<p>3. A 12 years old girl assessed in the endocrine clinic ,she has begun to develop axillary and pubic hair.Which of the following hormone is responsible for development of axillary and pubic hair in this situation?</p> <p>A) Oestrogen B) Progesterone C) Prolactin D) LH E) DHEA</p> <p>Answer: E Discussion: (Ref:Vision physiology 7th ,P-186) Reference:</p>	<p>4. A 20-year-old woman was diagnosed with Bell palsy (damage to facial nerve). Which of the following symptoms is she likely to exhibit?</p> <p>A) Loss of sense of taste B) Facial twitching C) Droopy eyelid D) Ipsilateral facial paralysis E) All of the above</p> <p>Answer: E Discussion: Reference: (Ref: Ganong 25th/P-123)</p>
<p>5. A 26-year-old man is seen in the Accident and Emergency Department with a lower motor neurone lesion of long standing. This patient will have:</p> <p>A) Hyperaesthesia B) Hyper-reflexia C) Muscle wasting D) Positive Babinski's sign E) Spasticity</p> <p>Answer: C Discussion: Reference: (Ref: Pastest Q-7.16)</p>	<p>6. A 32-year-old woman presented in the antenatal clinic with history of habitual abortion. Deficiency of which of the following hormones is associated with habitual abortion?</p> <p>A) LH B) FSH C) hCG D) Oestrogen E) Progesterone</p> <p>Answer: E Discussion: Reference: (Ref: Pastest)</p>

<p>7. A 36-year-old woman is diagnosed with a pheochromocytoma. She is most likely to have increased serum levels of</p> <p>A) Aldosterone B) Cortisol C) Noradrenaline D) Oxytocin E) Vasopressin</p> <p>Answer: C Discussion: Reference: (Ref: Pastest)</p>	<p>8. A 43 years old women admitted for elective cholecystectomy was noted to have prolonged bleeding time. Which of the following is most likely cause for prolonged bleeding time in this women?</p> <p>A) Factor II deficiency B) Factor VII deficiency C) Factor IX deficiency D) Hemophilia E) Thrombocytopenia</p> <p>Answer: E Discussion: Reference: (Ref: Hoffbrand 7th/Page-277)</p>
<p>9. A ballet dancer spins to the left. During the spin, her eyes snap quickly to the left. This fast eye movement is</p> <p>A) Nystagmus B) Postrotatory nystagmus C) Ataxia D) Aphasia E) Dyslexia</p> <p>Answer: A Discussion: The fast eye movement that occurs during a spin is nystagmus. It occurs in the same direction as the rotation. After the spin, postrotatory nystagmus occurs in the opposite direction Reference: (Ref: BRS Physiology 6th/P-II E 3]</p>	<p>10. Absolutely ketogenic aminoacid is</p> <p>A) Tryptohan B) Tyrosine C) Leucine D) Phenylalanine E) Isoleucine</p> <p>Answer: C Discussion: Reference: [Ref: ABC Biochemistry 7th edition/P-60]</p>
<p>11. Blood levels of which of the following substances is decreased in Graves' disease?</p> <p>A) Triiodothyronine (T3) B) Thyroxine (T4) C) Diiodotyrosine (dit) D) Thyroid-stimulating hormone (TSH) E) Iodide (I⁻)</p> <p>Answer: D Discussion: Reference: (Ref: BRS Physiology) [IV B 2; Table 7-5]</p>	<p>12. Cutting which structure causes blindness in the temporal fields of the left and right eyes?</p> <p>A) Optic nerve B) Optic chiasm C) Optic tract D) Geniculocalcarine tract E) Occipital cortex</p> <p>Answer: B Discussion: Optic nerve fibers from both temporal receptor fields cross at the optic chiasm Reference: (Ref: BRS Physiology 6th/P- [II C 3 b].</p>
<p>13. During prolong starvation metabolic fuel of brain is</p> <p>A) Glucose B) Fatty acid C) Amino acid D) Ketone body E) Cholesterol</p> <p>Answer: D Discussion: Reference: [Ref: ABC Biochemistry 7th edition/P-254]</p>	<p>14. Following are the enzymes of respiratory chain except-</p> <p>A) Glucose -6 phosphate dehydrogenase B) Succinate dehydrogenase C) NADH dehydrogenase D) Lactate dehydrogenase E) Cytochrome oxydase</p> <p>Answer: D Discussion: (Lactate dehydrogenase) Reference: [Ref: ABC Bio/5th/P-142-143]</p>

<p>15. Following is w (omega) 6 fatty acid-</p> <p>A) Linoleic acid B) Linolanic acid C) Oleic acid D) Palmitic acid E) Stearic acid</p> <p>Answer: A Discussion: Reference: [Ref: ABC Biochemistry 7th edition/P-79]</p>	<p>16. Half-life of thyroxine (T4) is</p> <p>A) 1 day B) 18 hours C) 7 days D) 1 Month E) 21 days</p> <p>Answer: C Discussion: Reference: (Ref: Ganong /26th /P-837)</p>
<p>17. Highest cholesterol containing lipoprotein is –</p> <p>A) HDL B) LDL C) VLDL D) IDL E) Chylomicron</p> <p>Answer: B Discussion: Reference: [Ref: ABC Biochemistry 7th edition/P-232]</p>	<p>18. Hypophysectomised individual show more tendency to become hypoglycemic due to-</p> <p>A) Increase hypoglycemic effect of insulin B) Lack of pituitary hormones C) Lack of adrenal hormones D) Lack of glucagon. E) Lack of androgens</p> <p>Answer: A Discussion: Reference: (Ref: Ganong/25th /P-333)</p>
<p>19. Liver is the only site for –</p> <p>A) Gluconeogenesis B) Glycogenesis C) Ketogenesis D) Glycolysis E) Globulin synthesis</p> <p>Answer: C Discussion: Reference: [Ref: ABC Biochemistry 7th edition/P-218]</p>	<p>20. Pathway of ATP formation mainly</p> <p>A) Oxidative phosphory lation B) Glycolysis C) TCA cycle D) β-oxidation of fatty acid E) Ketogenesis</p> <p>Answer: A Discussion: Reference:</p>
<p>21. Sensory systems code for the following attributes of a stimulus:</p> <p>A) Modality, location, intensity, and duration B) Threshold, receptive field, adaptation, and discrimination C) Touch, taste, hearing, and smell D) Threshold, laterality, sensation, and duration E) Sensitization, discrimination, energy, and projection</p> <p>Answer: A Discussion: Reference: (Ref: Ganong 25th/P-175)</p>	<p>22. the glucose transporter that causes transport of glucose in mammal through secondary active mechanism is-</p> <p>A) GLUT-1 B) GLUT-2 C) GLUT-3 D) GLUT-4 E) SGLT-2</p> <p>Answer: E Discussion: Reference: (Ganong-25th -433)</p>

<p>23. The hormone which has maximum glucocorticoid activity but no mineralocorticoid property is-</p> <p>A) Cortisol B) Aldosterone C) Cortisone D) Dexamethasone E) prednisolone</p> <p>Answer: D Discussion: Reference: (Ref: Ganong-25th/P-359)</p>	<p>24. The inverse stretch reflex</p> <p>A) Occurs when Ia spindle afferents are inhibited</p> <p>B) is a monosynaptic reflex initiated by activation of the Golgi tendon organ</p> <p>C) is a disynaptic reflex with a single interneuron inserted between the afferent and efferent limbs</p> <p>D) is a polysynaptic reflex with many interneurons inserted between the afferent and efferent limbs</p> <p>E) uses type II afferent fibers from the Golgi tendon organ</p> <p>Answer: C Discussion: Reference: (Ref: Ganong 25th/P-253)</p>
<p>25. Which autonomic receptor is activated by low concentrations of epinephrine released from the adrenal medulla and causes vasodilation?</p> <p>A) Adrenergic α receptors B) Adrenergic α_1 receptors C) Adrenergic α_2 receptors D) Cholinergic muscarinic receptors E) Cholinergic nicotinic receptors</p> <p>Answer: C Discussion: α_2 Receptors on vascular smooth muscle produce vasodilation. α_1 Receptors on vascular smooth muscle produce vasoconstriction. Because α_2 receptors are more sensitive to epinephrine than are α receptors, low doses of epinephrine produce vasodilation, and high doses produce vasoconstriction Reference: (Ref: BRS Physiology 6th/P- I C 1 d]</p>	<p>26. Which is not a source of gluconeogenesis</p> <p>A) Lactate B) Glycerol C) Propionate D) Spertate E) Pyrovate</p> <p>Answer: D Discussion: Reference: [Ref: ABC Biochemistry 7th edition/P-172]</p>
<p>27. Which is the most potent stimulant for prolactin release?</p> <p>A) Sleep B) Nursing C) TRH D) Breast stimulation E) Sexual intercourse</p> <p>Answer: B Discussion: Reference: [Ref: Ganong 25th 332.]</p>	<p>28. Which of the following conditions is associated with a decrease in skeletal muscle tone?</p> <p>A) Activation of gamma fibers B) Upper motor neuron lesions C) Anxiety D) Lower motor neuron lesions E) Parkinson's disease</p> <p>Answer: D Discussion: Reference:</p>

<p>29. Which of the following events typically occurs during rapid eye movement (REM) sleep?</p> <p>A) Enuresis B) Night terrors C) Sleep spindles D) Somnambulism E) Penile erections</p> <p>Answer: E Discussion: Reference: (Ref: Pastest Q-7.30)</p>	<p>30. Which of the following hormones acts on its target tissues by a steroid hormone mechanism of action?</p> <p>A) Thyroid hormone B) Parathyroid hormone (PTH) C) Antidiuretic hormone (ADH) on the collecting duct D) α_1 adrenergic agonists E) Glucagon</p> <p>Answer: A Discussion: Reference: (Ref: BRS Physiology) [II E; Table 7-2]</p>
<p>31. Which of the following is seen in Addison's disease?</p> <p>A) High serum Na⁺ B) High serum K⁺ C) Low BUN D) Dilute urine E) High serum Cl⁻</p> <p>Answer: B Discussion: Reference: (Ref: Guyton 13th P-979)</p>	<p>32. Which one is correct for female sex hormone</p> <p>A) Estrogen causes lobuloalveolar development of breast B) Progesterone causes ductal development of breast C) Progesterone increase heat loss D) Estrogen cause endometrial gland hypertrophy E) LH need to continue pregnancy</p> <p>Answer: D Discussion: Reference: (Ref: Ganong 25th P-404)</p>
<p>33. Withdrawal reflexes are not</p> <p>A) Initiated by nociceptive stimuli B) Prepotent C) Prolonged if the stimulus is strong D) An example of a flexor reflex E) Accompanied by the same response on both sides of the body</p> <p>Answer: E Discussion: Reference: (Ref: Ganong 25th/P-253)</p>	<p>34. A 35-year-old woman in whom multiple system atrophy was diagnosed had symptoms indicative of failure of sympathetic nerve activity. Which of the following statements about the sympathetic nervous system is correct?</p> <p>A) All postganglionic sympathetic nerves release norepinephrine from their terminals B) Cell bodies of preganglionic sympathetic neurons are located in the intermediolateral column of the thoracic and sacral spinal cord C) The sympathetic nervous system is required for survival D) Acetylcholine is released from all sympathetic preganglionic nerve terminals E) The sympathetic nervous system adjusts pupillary diameter by relaxing the pupillary constrictor muscle</p> <p>Answer: D Discussion: Reference: (Ref: Ganong 25th/P-267)</p>

<p>35. A 60-year-old man suffered a stroke. During the recovery phase it was noticed that he had developed a tremor in his fingers. The tremor was most pronounced when he reached for his coffee cup or lointed to an object. Which component of the motor system is most likely to be involved?</p> <p>A) Basal ganglia B) Cerebellum C) Cerebral cortex D) Frontal eye field E) Motor nucleus of the thalamus</p> <p>Answer: B Discussion: Reference: (Ref: Pastest Q-7.14)</p>	<p>36. A pt with 12 years aged came to you with knee joint swelling. His mother gave a history of excessive bleeding during circumcision. You diagnosed the pt as hemophilia. Which following condition is most appropriate?</p> <p>A) <input type="checkbox"/> BT B) <input type="checkbox"/> CT C) <input type="checkbox"/> BT, <input type="checkbox"/> CT D) <input type="checkbox"/> CT E) <input type="checkbox"/> BT</p> <p>Answer: B Discussion: BT= Normal CT= Prolonged APTT= Prolonged PLT count= Normal Reference: (Ref: MR-Khan 5th/Page-308)</p>
<p>37. All monosaccharide are disaccharides are reducing sugar except –</p> <p>A) Ribose B) Maltose C) Galactose D) Sucrose E) Lactose</p> <p>Answer: D Discussion: Reference: [Ref: ABC Biochemistry 7th edition/P-45]</p>	<p>38. Antithrombin III is a serine protease inhibitor with an important role in haemostasis. Which of the following substances enhances antithrombin III activity?</p> <p>A) Aspirin B) Citrate C) Coumarin D) Heparin E) Warfarin</p> <p>Answer: D Discussion: Reference: (Ref: Hoffbrand 7th/Page-313, (Ref: Sembulingum 8th/Page-137)</p>
<p>39. Following are atherogenic lipoprotein except</p> <p>A) VLDL B) IDL C) Lipoprotien (a) D) HDL E) LDL</p> <p>Answer: D Discussion: Reference: [Ref: ABC Biochemistry 7th edition/P-234]</p>	<p>40. Following hormones are under pituitary control except-</p> <p>A) Growth hormone B) Thyroid hormone C) Aldosterone D) Cortisol E) FSH</p> <p>Answer: C Discussion: (EXP: Pituitary Has Slight/Little Control over Aldosterone secrations Reference: (Ref: Vision 9th Page-369)</p>
<p>41. Hormone that does not cross the placenta-</p> <p>A) Cortisol B) PTH C) TSH D) TRH E) Thyroxin</p> <p>Answer: B Discussion: Reference: [Ref: DC Dutta OBS 7th 62.]</p>	<p>42. If the ventromedial nucleus of the hypothalamus is destroyed the affected individual will have:</p> <p>A) Loss of appetite B) Loss of circadian rhythm C) Loss of regulation of antidiuretic hormone secretion D) Loss of satiety E) Loss of vision</p> <p>Answer: D Discussion: Reference: (Ref: Pastest Q-7.23)</p>

<p>43. In pregnancy large amount of fluid retention occurs resulting the development of edema most probably due to</p> <p>A) LH B) FSH C) Estrogen D) Progesteron E) Aldosteron</p> <p>Answer: C Discussion: Reference: (Ref: Gyton/12th /P-995)</p>	<p>44. Most important feature of IDA</p> <p>A) Koilonychia B) Angular stomatitis C) Smooth tongue D) Dysphagia E) Glossitis</p> <p>Answer: A Discussion: \square RBC causes \square viscosity \square ESR Reference: (Ref: Sembulingum 8th/Page-88)</p>
<p>45. Most prevalent antibody in graves diseases</p> <p>A) Thyroid receptor antibody B) Thyroid stimulating immunoglobulin C) Thyroid peroxidase antibody D) Thyroid receptor blocking antibody E) ANA</p> <p>Answer: A Discussion: Reference: (Ref: Ganong/26th /P-852)</p>	<p>46. Platelet transfusion can be given in-</p> <p>A) TTP B) HUS C) ITP D) Acute blood loss E) Therapy related thrombocytopenia</p> <p>Answer: E Discussion: *Platelet transfusion contraindicated in TTP, HUS, Heparin induced thrombocytopenia * PLT transfusion should be avoided in autoimmune thrombocytopenic purpura Reference: (Ref: Hoffbrand 7th/Page-344)</p>
<p>47. Testosterone is synthesised in the testes from:</p> <p>A) Cholesterol B) Glycine C) Oestrogen D) Taurine E) Tyrosine</p> <p>Answer: A Discussion: Reference: (Ref: Pastest)</p>	<p>48. The following statements about the citric acid cycle are true</p> <p>A) It produces most of the ATP in anaerobic organisms B) It oxidizes acetyl-CoA derived from fatty acid oxidation C) It provides acetyl-CoA for the synthesis fatty acids D) It slows down when energy levels are low E) It provides ATP mainly by substrate-linked phosphorylation</p> <p>Answer: B Discussion: Reference: [Ref: ABC Biochemistry 7th edition/P-167]</p>

49. Which of the following effects on salivary secretion will be observed as a result of aldosterone release?

- A) Reabsorption of HCO_3^-
- B) Reabsorption of Na^+
- C) Reabsorption of K^+
- D) Secretion of Cl^-
- E) Secretion of Na^+

Answer: B

Discussion:

Reference: (Ref: Pastest)

50. Which of the following results from the action of parathyroid hormone (PTH) on the renal tubule?

- A) Inhibition of $1\alpha\text{-OHase}$
- B) Stimulation of Ca^{2+} reabsorption in the distal tubule
- C) Stimulation of phosphate reabsorption in the proximal tubule
- D) Interaction with receptors on the luminal membrane of the proximal tubular cells
- E) Decreased urinary excretion of cyclic adenosine monophosphate (cAMP)

Answer: B

Discussion:

Reference: (Ref: BRS Physiology) [VII B 2]