

Tuesday, 27th of May 2008 (14⁰⁰-16:30)

University of Buea

Faculty of
Health Sciences



Programme in
Medicine

MED 304(GENERAL ENDOCRINOLOGY) *First Continuous Assessment (2007-2008)*

Instructions: Each of the numbered items or incomplete statements in this test is followed by answers or by completions of the statements. Select the ONE lettered answer or completion that is BEST in each case

- 1) Which of the following hormones acts on its target tissues by steroid hormone mechanism of action? (A) Thyroid Hormone (B) PTH (C) ADH (D) β_1 adrenergic agonists (E) Glucagon
- 2) Which of the following hormones originate in the anterior pituitary? (A) GnRH (B) GhRh (C) TSH (D) Oxytocin (E) ADH
- 3) Which of the following inhibit the secretion of GH by the anterior by the anterior pituitary? (A) GhRH (B) GH (C) Somatomedins (D) Hypoglycemia (E) Sleep
- 4) Selective destruction of zona glomerulosa of the adrenal cortex would produce a deficiency of which hormone? (A) Cortisol (B) Aldosterone (C) Testosterone (D) Androstenedione (E) Hehydrpepiandrosterone.
- 5) Which of the following explains the suppression of lactation during pregnancy?
(A) Blood prolactin levels are too low for milk production to occur
(B) Human placental lactogen levels are too low for milk production to occur
(C) The fetal adrenal gland does not produce sufficient estriol
(D) Blood levels of estrogen and progesterone are high
(E) The maternal anterior pituitary is suppressed
- 6) Which of the following results from the action of PTH on the renal tubules?
(A) Inhibition of 1α -hydrolase
(B) Stimulation of Ca^{2+} resorption in the distal tubules
(C) Stimulation of phosphate reabsorption in the proximal tubule
(D) Interaction with receptors on the luminal membrane of the proximal tubular cells.
(E) Decrease urinary excretion of cAMP
- 7) Which of the following decreases the conversion of 25-hydrocholecalciferol to 1,25-dihroxycholecalciferol? (A) A diet low in Ca^{2+} (B) Hypocalcemia (C) Hyperparathyroidism (D) Hypophostamia (E) Chronic Renal Failure.
- 8) Which of the following hormones acts by an IP_3 - Ca^{2+} mechanism of action? (A) 1,25-dihroxycholecalciferol (B) Progesterone (C) Insulin (D) PTH (E) GnRH

9) Which of the following causes increased aldosterone secretion? (A) Decreased blood Volume (B) Administration of ACE Inhibitors (C) Hyperosmolarity (D) Hypokalemia (E) None of the above

Questions 10-12: (A) T_3 (B) T_4 (C) Diiodotyrosine (DIT) (D) TSH (E) Iodide (I) : Match each numbered description involving thyroid hormones with the correct substance.

10) Deiodination of this substance in the target tissues produces the most form of thyroid hormone

11) In Graves' disease, blood levels of this hormone will be decreased

12) Propylthiouracil can be used to reduce the synthesis of thyroid hormones in the hyperthyroidism because it inhibits oxidation of this substance.

Questions 13-15: (A) Insulin (B) Glucagon (C) Somatostatin (D) Pancreatic Lipase : Match each numbered description with the appropriate pancreatic secretory product.

13) Inhibits the secretion of both insulin and glucagons

14) Receptor has four subunits, two of which have tyrosine kinase activity

15) Secretion is inhibited by the other pancreatic hormones

Good Luck

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