Recap: Endocrine System Chapter 10

1. All hormones travel through ________ to their _________ cells.
2. All hormones are present in blood but act only their target cells due to presence of ________ ______.
3. Anterior pituitary secretes __________ for thyroid; __________ hormone for adrenal gland; __________, and __________ hormones for gonads; __________ for body; and __________ hormone for breasts.
4. Hypothalamus secretes __________ to promote secretion of GH; and __________ to inhibit secretion of GH.
6. Hypothalamus directly controls secretion of hormones by posterior pituitary gland by releasing hormones through its ____________.
7. Hypothalamus directly controls secretion of hormones by adrenal medulla through __________ nerve fibers. Hint: for questions 6-8 look fig 10.4
8. Chemically 2 main groups of hormones are ____________ and ____________.
9. Receptors for polar/ hydrophilic hormones lie mostly ____________.
10. Receptors for amino acid based (peptide and protein) hormones lies mostly ________ ________.
11. ____________ hormones act by producing a 2nd messenger inside the cell.
12. 4 common examples of 2nd messengers are __________, __________, __________, and ____________.
13. Gonadotropin hormone is produced by ____________ ____________.
14. Gonadotropin RH is produced by ____________.
15. High level of Ca$^{2+}$ in plasma causes release of ____________.
16. Low level of Ca$^{2+}$ in plasma causes release of ____________.
17. Hormone secreted during short term stress is ________; and secreted during long-term stress is ________.
18. Insuline lowers ________ level in blood; promotes ________ synthesis; and greater growth of bones.
19. Oxytocin is secreted by __________ __________, and functions include ____________, ____________.
20. 2 functions of ADH/Vasopressin are ____________ ____________ and ____________. Hint: indicated by its 2 names.
21. Anterior pituitary secretes ____________ that stimulates liver to secrete ____________ ____________ which causes greater absorption of dietary Ca$^{2+}$.
22. Only 1 hormone, secreted by anterior pituitary gland is not a tropic hormone = does not result in secretion by other endocrine gland.

23. Gonadotropin-RH → → Estrogen; Gonadotropin-RH → → testosterone

24. → ACTH → ; → TSH → .

25. Name the antagonist hormone; insulin → ; → calcitonin;

26. and are hormones with iodine.

27. , , are catecholamines.

28. T₄, T₃, dopamine, epinephrine and norepinephrine are synthesized from amino acid .

29. causes development of breasts and milk production.

30. causes the release of milk, induces labor and stimulates baby’s birth.

31. is secreted by posterior pituitary gland and increases blood pressure and makes kidney absorb water from urine.

32. Hyposecretion of causes automatic contractions of skeletal muscles, Tetany.

33. Hypersecretion of GH before puberty causes ; after puberty causes .

34. Enlargement of thyroid gland called goiter can be produced by deficiency.

35. Diabetes mellitus is abnormally high plasma glucose level can be caused due to deficiency of hormone or inability of receptors to bind to this hormone = Type .

36. LH causes an empty ovarian follicle to secrete hormone ; a testes to secrete hormone .

37. Kidneys secrete when oxygen delivery gets low, it increases the # of RBC in blood.

38. Oxytocin and vasopressin travel from hypothalamus to posterior pituitary gland through .

39. a part of an endocrine gland actually is a sympathetic ganglion formed of nerve cells without axons.

40. is an endocrine gland well developed at the time of birth but gradually degenerates, is responsible for differentiation of T – lymphocytes.