ENDOCRINE SYSTEM WORKSHEET

1. State the primary function of the endocrine system in the human body.

2. Describe the physiological mechanism of the endocrine system. Explain the role of hormones, the hypothalamus, and the anterior pituitary gland in your answer.
   i) **Hormones:**

   ii) **Hypothalamus:**

   iii) **Anterior pituitary:**

3. Compile a table showing components of the endocrine system, location, secretion(s) and principal function(s) of each organ/gland.

   Include hypothalamus, anterior lobe of pituitary gland, posterior lobe of pituitary gland, pineal gland, thymus gland, follicular cells of thyroid gland, C cells (calcitonin or parafollicular cells) of thyroid gland, parathyroid glands, adrenal medulla, adrenal cortex, alpha (α) cells of pancreatic islet, beta (β) cells of pancreatic islet, delta (δ) cells of pancreatic islet, granulosa cells in wall of ovarian follicle, corpus luteum of ovary, interstitial cells (between seminiferous tubules) of testes, sustentacular (Sertoli cells) of seminiferous tubules on the table.
4. Distinguish between **hyperglycemic** and **hypoglycemic** hormones.

5. Name a) two hyperglycemic hormones and b) one hypoglycemic hormone.
   a) Hyperglycemic hormones
      i) .................................................. ii) ........................................
   b) Hypoglycemic hormone
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6. Describe medical problems associated with endocrine disorders of the **thyroid follicular cells and adrenal cortex**.
   **Thyroid disorders:**
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   **Adrenal cortex disorders:**
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7. What is **acromegaly**?

8. Explain feedback control of the pituitary gland by target organs.

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