



## Section A

1. Which of the following hormones stimulates the breakdown of glycogen in the liver into glucose?  
A. Insulin                      B. Adrenaline                      C. Glucagon                      D. Thyroxine
2. Which one of the following hormones converts excess glucose into glycogen  
A. Glucagon                      B. Thyroxine                      C. Insulin                      D. Adrenaline
3. The emergency hormone to face the danger or to fight is secreted by:  
A. Islets of Langerhans                      B. Adrenal cortex  
C. Pituitary                      D. Adrenal medulla
4. Which one of the following endocrine glands produces its hormone in large quantities as a result of emotional stimulation?  
A. Thyroid                      B. Islets of Langerhans  
C. Adrenal medulla                      D. Adrenal cortex
5. In humans, increased thyroxine production results in:  
A. Increased metabolism                      B. Decreased metabolism  
C. Dwarfism                      D. Cretinism
6. Secretions of exocrine glands are called  
A. Hormones                      B. enzymes                      C. vitamins                      D. proteins

### 7. Match the following:

	Column A		Column B
a	Located at the base of the brain	1	Parathyroid
b	Follicle-stimulating hormone	2	Thyroid gland
c	On either side of the windpipe	3	Pancreas
d	Both endocrine and exocrine gland	4	Adrenal glands
e	Located behind the stomach	5	Pancreas
f	Located on each kidney	6	Testis and ovary
g	Embedded in the thyroid gland	7	Pituitary gland



**8. Match the following:**

	Column A		Column B
a	Increase in heartbeat	1	Oestrogen and progesterone
b	Stimulates metabolism of carbohydrates, fats, and protein	2	Testosterone
c	Glucose utilization by body cells to give them energy	3	Cortisone
d	controls the body's metabolic rate	4	Parathyroid hormone
e	Adapt to extreme cold and heat	5	Thyroxine
f	Male sex hormone	6	Insulin
g	Female sex hormones	7	Thyroxine
h	Calcium metabolism	8	Cortisone

**9. Fill in the blanks:**

1. The over-secretion of thyroxine in adults leads to \_\_\_\_\_
2. The \_\_\_\_\_ and \_\_\_\_\_ together maintain blood sugar levels.
3. Frequent urination, increased thirst, and increased hunger are symptoms of \_\_\_\_\_.
4. \_\_\_\_\_ and \_\_\_\_\_ are symptoms of Type 2 Diabetes.
5. Increase in \_\_\_\_\_ and \_\_\_\_\_ is result of Adrenaline hormone.
6. \_\_\_\_\_ growth occurs during infancy and \_\_\_\_\_ growth rate occurs during adolescent age.
7. \_\_\_\_\_ is the period of growth when reproductive organs attain maturity. During this period, boys grow at an average rate of \_\_\_\_\_ cm a year while girls grow an average of \_\_\_\_\_ cm a year.
8. \_\_\_\_\_ hormones and \_\_\_\_\_ hormones influence adolescent ages in boys and girls.
9. Elongation of \_\_\_\_\_ and \_\_\_\_\_ bones results in increased height and weight of the body.
10. Between the ages of \_\_\_\_\_ and \_\_\_\_\_, the testes start producing sperms, and the ovaries begin producing eggs.
11. \_\_\_\_\_ changes and \_\_\_\_\_ changes in adolescents in adolescent.
12. \_\_\_\_\_ is the feeling of being under too much pressure either mentally or emotionally.



**10. Name the hormone which would be released during the following situations:**

- (a) A frightened person.
- (b) Growth of a child to adult.
- (c) Development of tadpoles to frogs.

## **Section B**

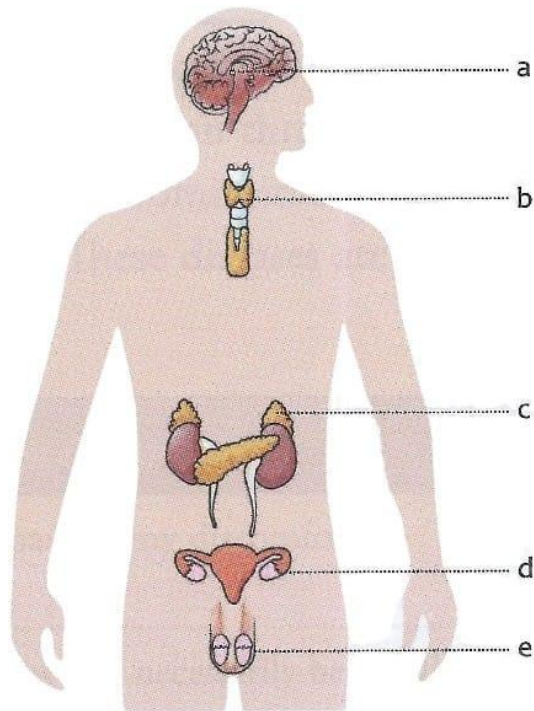
**Short Answer Question:**

- 11.** Define Cretinism
- 12.** Define Adolescence.
- 13.** Distinguish between Cretinism and Myxoedema (symptoms)
- 14.** Give reason/explain — Epinephrine is also called the 'emergency hormone'.
- 15.** Differentiate between Thyroxine and insulin
- 16.** What is the function of the islets of Langerhans?
- 17.** How is the level of glucose regulated by the pancreas?
- 18.** Write the function of the pituitary gland in our body.

## **Section C (Picture Study)**

**19.** In the figure given alongside, label the glands marked a-e and name the hormones secreted by them.

(Answer here)



**20.** The pancreas acts as both exocrine and endocrine glands. Explain.