WORKSHEET 2

CHAPTER 12 – ENDOCRINE SYSTEM

A. Name the following.

1. The hormone which prepares the body for defence.
2. The hormone which controls the water exchange in the renal tubules.
3. The condition which results in abnormally long bones, long lower jaw bone due to the hyposecretion of a pituitary hormone.
4. The hormone that controls the calcium content in blood plasma and its metabolism.
5. The hormone which increases blood glucose level.

B. State whether the following statements are True or False.

1. Thyroid gland secretes adrenaline.
2. Adrenal gland is called master gland.
3. Hormones are chemically protein.
4. The pituitary gland is both exocrine and endocrine.
5. Enzymes are secreted directly into the organs.

C. Match the items in Column A with those in Column B and write down the matching pairs.

Column A	Column B
1. Cretinism	a. Condition due to under secretion of thyroxine in adults
2. Addison's disease	b. Glucocorticoids
3. Hyperthyroidism	c. Exophthalmic goitre
4. Myxoedema	d. Increase heart beat.
5. Adrenaline	e. Under secretion of thyroxine in a child.

D. Give reasons.

1. Pancreas is an exo-endocrine gland.
2. People of hilly regions are seen with swelling in the neck.
3. Pituitary gland is known as master gland.
4. Hormones are called as chemical messenger.
5. Facial hair develops in some woman.

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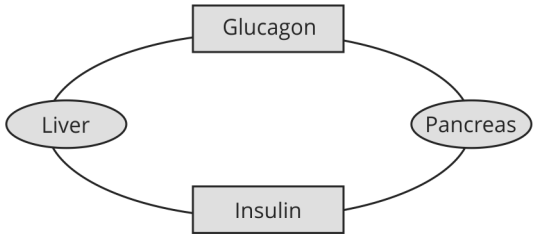
Class: ..... X ..... Date: .....

E. Study the diagram and answer the following.



1. Name the cells of the pancreas that produce a. Glucagon b. Insulin.
2. State the main functions of a. Glucagon b. Insulin.
3. Why is insulin not given orally but is injected into the body?
4. Where in the body is the pancreas located?
5. What do you understand by insulin shock?

ANSWERS

WORKSHEET 2

A. Name the following.

1. Adrenaline
2. ADH
3. Acromegaly
4. Calcitonin
5. Glucagon.

B. State whether the following statements are True or False.

1. False 2. False 3. True 4. False 5. True

C. Match the items in Column A with those in Column B and write down the matching pairs.

1. e. 2. b. 3. c. 4. a. 5. d.

D. Give reasons.

1. Pancreas in both endocrine as well as exocrine in nature. Pancreas has an exocrine part which produce digestive juice. It also has an endocrine part (Islets of Langerhan) that produces hormones so, it is referred to an exo-endocrine gland. Hence, it is exo-endocrine gland.
2. This is because soil in hilly area is deficient in iodine. So, they have deficiency of iodine in their diet resulting in hyposecretion of thyroid and hence causing simple goitre.
3. Because it controls the functioning of all other endocrine glands.
4. Because hormones are chemicals which are directly poured into the blood stream and carried to all the parts of the body for the proper working of the body.
5. This is due to overgrowth of adrenal cortex in some woman which produces cortisol.

E. Study the above diagram and answer the following.

1. a. **Alpha cells –** Glucagon

   b. **Beta cells –** Insulin
2. a. **Glucagon –** Increases blood sugar level

   b. **Insulin –** Decreases the blood sugar level
3. Insulin is chemically a protein. If taken orally, it will be digested by protein digesting enzymes. So, it is injected into the body to increase its effect.
4. It is located below the stomach in the abdominal cavity.
5. Hypersecretion of insulin causes insulin shock or hyperglycemia. In this condition, sugar level in blood is reduced.