

**Christu Jyothi Convent Senior Secondary School (Baraut)**

**class-8<sup>th</sup>**

**subject- biology**

**chapter-5 (Endocrine system and adolescence)**

**Choose the correct option:**

- 1.** Iodine is necessary for the synthesis of one of the following hormone and this hormone is: **thyroxine**
- 2.** Which of the following is secreted by the thyroid gland: **thyroxine**
- 3.** This gland is also known as the 'master gland' : **pituitary**
- 4.** Which of the following gland break down glycogen into glucose in the liver: **pancreas**
- 5.** Over secretion of growth hormone result in this disorder: **Gigantism**
- 6.** Which of the following is a mismatched pair: **adrenaline: pituitary gland**
- 7.** The faulty functioning of an endocrine gland can make a person very short for very tall this gland is: **pituitary**

**Fill in the blanks:**

- 1.** During **adolescence** great care should be take about hygiene.
- 2.** Sexual maturity is reached at **puberty**.
- 3.** Thyroid gland secretes hormone when they receive instruction from **pituitary** gland through its hormone.
- 4.** Pancreas is the **heterocrine** gland which is situated behind the stomach.
- 5.** Deficiency of iodine results **in goiter**.

**Write true and false:**

- 1.** Thyroid gland secretes insulin: **false**
- 2.** Pituitary gland is present at the base of the brain: **true**
- 3.** Adrenal gland is also called 'master gland' : **false**
- 4.** Adrenal gland secrete glycogen: **false**
- 5.** The start of reproductive maturity in female is called Menopause : **false**
- 6.** The sex hormones help to develop secondary sexual : **true**
- 7.** All adolescent should to physical exercise: **true**

**Answer the following questions in short:**

**1. Where is pancreas situated and what hormones does it produce?**

**Ans.** Pancreas is situated just below the stomach in our body and it secretes hormone called insulin.

**2. What do we call the period when the girls start their first menstrual period?**

**Ans.** The period when the girls start their first menstrual period is called menarche.

**3. What caused goitre?**

**Ans.** Deficiency of iodine causes goitre.

**4. Mention any two changes taking place in the body of girls during adolescence?**

**Ans. A.** The region below the waist becomes wider.

**b.** Girls start their first menstrual period called Menarche.

**5. What is diabetes?**

**Ans.** Deficiency of insulin hormone in the body causes a disease known as diabetes. Diabetes is characterized by a high level of sugar in the blood and even urine.

**6. Name the male and female sex hormones?**

**Ans.** Male sex hormone is testosterone and female sex hormone is oestrogen.

**7. How does the adrenal gland help our body?**

**Ans.** The adrenal gland secretes adrenaline hormone which regulates heart rate, breathing rate, blood pressure and carbohydrate metabolism in our body.

**8. How do drugs affect adversely?**

**Ans.** Drugs destroy mental and emotional development and make the user addictive.

**Answer the following questions in detail:**

**1. How can we stay away from stress during adolescence?**

**Ans.** We can stay away from stress during adolescence by following these methods:

**a.** We should do physical exercise such as walking, jogging, running, swimming, cycling, dancing.

**b.** Yoga and meditation is another way of dealing with stress.

**c.** We can talk to parents and friends when we feel stressed.

**2. Write a short note on physical and emotional development in adolescents?**

**Ans. Physical development:** during adolescence teenagers experience a lot of changes in their body shape, size, voice etc. some of them may grow suddenly as puberty approaches whereas some of them show slow changes and development. hormone secretion from endocrine glands play an important role in physical growth of adolescents.

**Emotional development:** during adolescence teenagers reach mental, intellectual and emotional maturity. they spend considerable time thinking about many things according to their minds. they become more independent and most adolescents start developing a distance from

their parents and find opinions of their friends more convincing they start getting influenced by the lifestyle that people have what they wear etc.

**3. Why is it important to maintain personal hygiene during adolescence?**

**Ans.** The maintenance of personal hygiene is necessary for adolescents for preventing disease and keeping good health. Adolescent girls should take special care of cleanliness of the body during the type of menstrual flow. If personal hygiene is not maintained by adolescent boys and girls there are chances of catching bacterial infection. These infections can make a person ill and spoil good health.

**4. Discuss any two important endocrine glands in the human body?**

**Ans. Pituitary gland:** pituitary gland it is also called as master gland because it secretes a number of hormones that regulate the functioning of other endocrine glands such as testes ovaries thyroid gland and adrenal gland etc. The pituitary gland also secretes growth hormone which regulates the growth and development of the body parts.

**Adrenal gland:** adrenal glands are located on the top of two kidneys. The adrenal gland secretes adrenaline hormone which regulates heart rate, breathing rate, blood pressure and carbohydrate metabolism. Adrenaline hormone is secreted in small amount all the time but in large amount when a person is excited.

**State whether true or false (page number 72)**

1. Pituitary gland is located in the neck region: **false**
2. Thyroid gland secretes insulin: **False**
3. Secretion from pancreas regulates the amount of sugar in the blood: **true**
4. Endocrine glands are also called ductless glands: **true**
5. The persons having severe diabetes is treated by giving injections of insulin: **true**

**State whether true or false (page numbers 76)**

1. Girls develop heavy hoarse voice during adolescence: **false**
2. During adolescence boys and girls sweat a lot: **true**
3. Physical exercise or any kind of sport play a significant role in dealing with a kind of stress: **true**
4. At the onset of puberty in course there is an increase in the production of the oestrogen: **true**
5. Drugs destroy mental and emotional development and make the user addictive : **true**
6. Yoga does not help in coping up with stress : **false**

**END.**

