

# Chapter 5

## Endocrine System

### LESSON PLAN

#### SPECIFIC OBJECTIVES

The students will learn about

- ❖ control and coordination
- ❖ endocrine system
- ❖ growth in human beings
- ❖ adolescence and accompanying changes
- ❖ importance of personal hygiene

#### Teaching Aids

**Pictures/charts/models/animation** on exocrine and endocrine glands, thyroid gland, simple goitre, structure and location of adrenal glands, location of pituitary gland, location and section of pancreas; infancy, childhood, adolescence, adulthood, Adam's apple, VS of skin; pictures related to personal hygiene

#### Teaching Strategy

- ❖ Teacher will start the chapter by introducing the terms homeostasis, chemical control and neural control and will discuss control and coordination in multicellular animals.
- ❖ Teacher will differentiate between chemical and neural controls.
- ❖ Now, teacher will introduce endocrine system explaining and differentiating between exocrine and endocrine glands.
- ❖ Teacher will explain hormones and their characteristics.
- ❖ Teacher will discuss endocrine glands, their location, functions and effects of their hyper- and hyposecretions in human body.
- ❖ Now, teacher will ask students to solve 'Check Point 1'.
- ❖ Now, teacher will introduce and explain four phases of growth – infancy, childhood, adolescence and adulthood in human beings.

- ❖ Teacher will define adolescence and will discuss physical, social and emotional changes during adolescence.
- ❖ Teacher will discuss adolescence and related problems.
- ❖ Teacher will explain importance of personal hygiene and the ways to maintain personal hygiene.
- ❖ Now, teacher will ask students to solve 'Check Point 2'.
- ❖ At last, teacher will sum up the lesson by going through the points given under the head 'Wrapping It Up'.
- ❖ Teacher will finally help students to answer the questions given under the head 'Test Yourself'.

### Boost Up

- ❖ Teacher can make students revise new terms given under the head 'Know These Terms'.
- ❖ Teacher can encourage students to learn the facts given under the head 'Something More'.
- ❖ Teacher can show animations related to the topics taught, if possible.
- ❖ Teacher can act as counsellor and help students to solve problems related to adolescence.
- ❖ Teacher can guide stress management.
- ❖ Teacher should emphasise on the requirement of hygiene and motivate students for keeping personal hygiene.

### Expected Learning Outcomes

The students understand and know:

- ❖ endocrine system and endocrine glands in human body
- ❖ growth phases in human beings
- ❖ adolescence, related changes and problems
- ❖ stress management
- ❖ personal hygiene, its requirement and ways to keep personal hygiene

### Evaluative Questions

The teacher should ask the following questions to evaluate the students:

1. What is homeostasis?
2. What are endocrine and exocrine glands?
3. What is adolescence?
4. What are secondary sexual characters?
5. What is stress?
6. What is personal hygiene?