CHAPTER - 10

TOOTH – STRUCTURE AND FUNCTIONS

P. 126 CHECK YOUR PROGRESS 1

- A. Give the technical names for the following types of teeth in humans.
 - 1. incisors
 - 2. canines
 - 3. molars

B. Fill in the blanks.

- **1.** 2I 1C 2PM 3M/2I 1C 2PM 3M
- 2. enamel
- 3. gum
- 4. odontoblasts

P. 126 Exercises

I. Multiple-Choice Questions

A. Choose the most appropriate answers.

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

II. Assertion–Reason Type Questions

A.1.c 2.a 3.d 4.b

III. Very Short Answer Type Questions

A. Name the following.

- 1. Enamel
- 2. Crown
- 3. Root
- 4. Periodontal fibres
- B. Complete the following paragraph by filling in the blanks (1) to (5) with appropriate words.
 - 1. crown
 - **2.** root
 - **3.** gum
 - 4. enamel
 - 5. Enamel

C. Answer these questions.

 Arrangement of teeth in a person or animal is called dentition. 2. Dental formula of permanent teeth in humans:

Upper jaw = 2I, 1C, 2PM, 3M

Lower jaw = 2I, 1C, 2PM, 3M = 32

Dental formula of deciduous teeth in humans:

Upper jaw = 2I, 1C, 2M

Lower jaw = 2I, 1C, 2M = 20

IV. Short Answer Type Questions

A. Answer these questions.

- **1.** Different kinds of teeth present in humans and their functions are as follows:
 - i. **Incisors:** They are used of cutting and biting the food.
 - **ii. Canines:** These help in holding and tearing the food.
 - iii. **Premolars:** These are specialized for crushing and grinding the food.
 - iv. **Molars:** They are used for crushing and grinding the food.
- 2. Refer to fig. 10.3 on page 124 of the textbook.
- **3.** Carnivores such as dog and cat, have pointed incisors and canines that can be used to kill prey and tear off flesh. The premolars and molars are modified for crushing and shredding.

B. Differentiate between the following.

1. Homodont dentition: All the teeth in the jaws are similar in shape, size and structure. Examples: frog, fish, etc.

Heterodont dentition: All the teeth in the jaws are not similar in shape, size and structure. Example: humans.

2. Incisors: Situated at the front of the buccal cavity. Straight with sharp edges. For cutting and biting.

Canines: Situated at one end on either side of the incisors in each jaw. Sharp and pointed for holding and tearing of food.

3. Premolars: There are two premolars situated on either side, next to the canines, having two roots and two cusps.

Molars: Last three teeth in each jaw. Have more than one root, molars in the upper jaw have three roots, while in lower jaw have two roots five cusps.

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4. Enamel: Crown is covered by enamel which is the hardest substance of the tooth.

Dentine: Beneath the enamel is dentine which forms bulk of the teeth.

5. Enamel: Crown is covered by enamel which is the hardest substance of the tooth.

Cement: Bone-like structure that covers and fixes the root in position.

6. Odontoblast: Odontoblasts are tall columnar cells located at the periphery of the dental pulp. They produce dentine.

Pulp cavity: Contains odontoblasts, sensory endings of nerves and blood vessels. Nerves allow to sense the pressure and touch. Blood vessels help to deliver nutrients.

 Milk teeth: In humans, teeth appear in two sets during life. The milk teeth or deciduous teeth appear first.

Permanent teeth: The milk teeth are replaced by the permanent teeth by about 12 years of age.

- V. Structured/Application/Skill Type Questions
- A. Given below is the longitudinal section of a human tooth.



2. Enamel: Enamel is the hardest substance and is the covering of the tooth.

Periodontal fibres: Connect cement at one end and the jaw bone at the other end to fix the tooth firmly in the socket of the jaw bone.