

## 7. COORDINATION IN LIFE PROCESS

1. 3:2:1:2 the ratio of our dentition. Here 1 Represents \_\_\_\_\_
2. Large protein molecule are broken down in \_\_\_\_\_ of digestive track \_\_\_\_\_
3. \_\_\_\_\_ is the strong acid which is secreted during digestion
4. Olfactory receptors present in \_\_\_\_\_ trigger signals to brain
5.  $P_H$  of saliva is \_\_\_\_\_ in nature
6. Fill in the blanks with suitable words given below

Fluctuations of hormone (i) \_\_\_\_\_ levels results in sensation of hunger and motivation of consuming food. When you feel your stomach is full and there is no need of food any more. Another hormone (ii) \_\_\_\_\_ that gets secreted suppresses hunger. When we take food into the mouth it has to be chewed thoroughly. For this purpose the (iii) \_\_\_\_\_ Muscles help in chewing actions, while the (iv) \_\_\_\_\_ muscles of the Jaw moves the Jaw up, down, forward and backward during food mastication . The (v) \_\_\_\_\_ nerve controls the muscles of the jaw under the action of (vi) \_\_\_\_\_ nervous system saliva are released by the salivary glands moistens the food to make chewing and swallowing easier. The salivary (vii) \_\_\_\_\_ in the saliva breaks down the starch into sugar. As a result of chewing the food is transported into the oesophagus by the action of swallowing which is coordinated by the swallowing centre in the (viii) \_\_\_\_\_ and the (ix) \_\_\_\_\_ the tongue which is gustatory recognizes the taste and (x) \_\_\_\_\_ nerve plays an important role in sensation of taste.

### Choose the right ones

- (i) Leptin, Ghrelin, Gastrin, Secretin
- (ii) Ghrelin, Leptin, Secretin, Gastrin
- (iii) Deep muscles, surface muscles, circular muscles, striated muscles
- (iv) Surface muscles, deep muscles, neck muscles, long muscle.

(v)Fifth cranial nerve, second cranial nerve, fifth facial nerve, spinal nerve.

(vi)Central nervous system, peripheral nervous system, autonomous nervous system.

(vii)Lipase, Sucrose, Galactose, Amylase

(viii)Medulla oblongata, cerebrum, brain stem, 7<sup>th</sup> cranial nerve.

(ix)Pons varolii, brain stem, medulla oblongata, mid brain.

(x)6<sup>th</sup> Cranial nerve, 5<sup>th</sup> cranial nerve, 10<sup>th</sup> cranial nerve, optic nerve

7. Ghrelin is secreted from \_\_\_\_\_

8. \_\_\_\_\_ play a major role in carrying the hunger pangs.

9.Increase of ghrelin levels result in \_\_\_\_\_

10.The sense of taste is carried to the brain for analysis only after \_\_\_\_\_

11.The food in the mouth has been broken down in small pieces to \_\_\_\_\_

12.Teeth helps in the process of \_\_\_\_\_

13.The teeth which have sharp and pointed edges are \_\_\_\_\_

14. \_\_\_\_\_ have blunt and nearly flat surface

15. \_\_\_\_\_ muscles help in the movement of jaws

16. \_\_\_\_\_ muscles help in pushing the food into the mouth

17.Starch is broken down into maltose and dextrose by the action of \_\_\_\_\_

18.Swallowing is coordinated by \_\_\_\_\_

19.P<sub>H</sub> beyond 7 is known as \_\_\_\_\_

20.P<sub>H</sub> below 7 is known as \_\_\_\_\_

21.P<sub>H</sub> 7 is known as \_\_\_\_\_

22. \_\_\_\_\_ litres of saliva is secreted daily.

23. \_\_\_\_\_ acts as lubricant in the oesophagus

24.Bleaching and burning sensation of stomach is due to \_\_\_\_\_

25.Partially digested food in stomach \_\_\_\_\_

26. Reverse peristalsis can be seen in \_\_\_\_\_
27. The time taken for complete digestion is \_\_\_\_\_
28. \_\_\_\_\_ counteracts the action of acid in stomach
29. \_\_\_\_\_ increase the area of absorption in the intestine.
30. Chyme initiates the production of hormones like \_\_\_\_\_
31. The last part of the alimentary canal \_\_\_\_\_
32. The dental formula of man is \_\_\_\_\_

## Key

- |             |            |
|-------------|------------|
| 1) Canier   | 2) Stomach |
| 3) HCl      | 4) Nose    |
| 5) Alkaline |            |
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- |                     |   |                               |
|---------------------|---|-------------------------------|
| 6. i) Ghrelin       | ii) Leptin                                    | iii) Circular muscles         |
| iv) Surface muscles | v) Cranial                                    | vi) Autonomous nervous system |
| vii) Amylase        | viii) Brain stem                              | ix) Medulla oblongata         |
| x) Olfactory        | <b>Choose in right ones Ans: - 2,6,7,9,10</b> |                               |
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- |                            |                                 |
|----------------------------|---------------------------------|
| 7) The wall of the stomach | 8) Diencephalon and vagus nerve |
|----------------------------|---------------------------------|
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- 9) Sensation of hunger and motivation to consume food.
  - 10) The dissolved food touches the taste bud
  - 11) Increase the area for action of enzymes
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- |                                      |               |
|--------------------------------------|---------------|
| 12) Mastication                      | 13) Canines   |
| 14) Molars and premolars             | 15) Surface   |
| 16) Circular                         | 17) Ptyalin   |
| 18) Medulla oblongata and brain stem | 19) Alkaline  |
| 20) Acidic                           | 21) neutral   |
| 22) 1 to 1.5 liters                  | 23) Mucus     |
| 24) Secretion of HCl                 | 25) Chyme     |
| 26) Ruminants                        | 27) 30-40 hrs |

28) Mucus

30) Secretion, Cholecystokinin

32) 2123\2123

29) Villi

31) Rectum