

I Choose the correct answer

10 x 1 = 10

1. Which one is referred as "Master Gland"?

- a) Pineal gland b) Pituitary gland
- c) Thyroid gland d) Adrenal gland

2. LH is secreted by

- a) Adrenal gland b) Thyroid gland
- c) Anterior pituitary d) Hypothalamus.

3. Gibberellins cause

- a) Shortening of genetically tall plants b) Elongation of dwarf plants
- c) Promotion of rooting d) Yellowing of young flowers

4. Which one of the following hormones is naturally not found in plants:

- a) 2, 4-D b) GA3
- c) Gibberellin d) IAA

5. Avena coleoptile test was conducted by

- a) Darwin b) N. Smit
- c) Paal d) F.W. Went

6. To increase the sugar production in sugarcane they are sprayed with

- a) Auxin b) Cytokinin
- c) Gibberellins d) Ethylene

7. Identify the exocrine gland

- a) Pituitary gland b) Adrenal gland
- c) Salivary gland d) Thyroid gland

8. The hormone which has positive effect on apical dominance is

- a) Cytokinin b) Auxin
- c) Gibberellin d) Ethylene

9. Which organ acts as both exocrine gland as well as endocrine gland

- a) Pancreas b) Kidney
- c) Liver d) Lungs

10. _____ causes stomatal closure

- a) Auxin b) Absciscic Acid
- c) Gibberellins d) Ethylene

II Fill in the blanks

2x1 = 2

1. _____ is a gaseous hormone involved in abscission of organs and acceleration of fruit ripening.

2. In the islets of Langerhans, beta cells secrete _____.

III Match Column I with Columns II and III

(5)

- | | | |
|----------------|------------------------|-------------------------|
| Auxin | - Gibberella fujikuroi | - Abscission |
| Ethylene | - Coconut milk | - Internodal elongation |
| Absciscic acid | - Coleoptile tip | - Apical dominance |
| Cytokinin | - Chloroplast | - Ripening |
| Gibberellins | - Fruits | - Cell division |

IV State whether True or false, If false write the correct statement

2x1=2

1. A plant hormone concerned with stimulation of cell division and promotion of nutrient mobilization is cytokinin.

2. Estrogen is secreted by corpus luteum.

V. Short answer questions(any 8)

8x2=16

1. a) Which hormone promotes the production of male flowers in Cucurbits?

b) Name the hormones which regulates water and mineral metabolism in man?

2. What will you do to prevent leaf fall and fruit drop in plants? Support your answer with reason.

3. What is the role of parathormone?

4. What are the hormones secreted by posterior lobe of the pituitary gland? Mention the tissues on which they exert their effect.
5. Senthil has high blood pressure, protruded eyeball and an increased body temperature. Name the endocrine gland involved and hormone secretion responsible for this condition.
6. What are synthetic auxins? Give examples.
7. What is bolting? How can it be induced artificially?
8. What are chemical messengers.
9. Write the differences between endocrine and exocrine gland.
10. Bring out any two physiological activities of abscisic acid.

VI. Long answer questions(any 3)

3x5 = 15

1. Where are estrogens produced? What is the role of estrogens in the human body?
2. (a) Name the gaseous plant hormone. Describe its three different actions in plants.
(b) Which hormone is known as stress hormone in plants? Why?
3. What are the conditions which occur due to lack of ADH and insulin? How are the conditions different from one another?
4. Write the physiological effects of Gibberellins.