

# **SANSKAR INTERNATIONAL SCHOOL**

## **SCIENCE (BIOLOGY)**

### **ASSIGNMENTS**

#### **Chapter-7 (Control and coordination)**

##### **Important Exercise Questions For Board Exams**

###### **A. Objective questions**

1. All multicellular organism, except....., have well developed nervous system.
  - a) Porifera
  - b) Mammals
  - c) Arthropoda
  - d) Insect
  
2. Hormones are secreted by.....
  - a) Endocrine glands
  - b) Blood
  - c) Midbrain
  - d) Liver
  
3. ....is not the part of hindbrain.
  - a) Cerebellum
  - b) Pons
  - c) Medulla oblongata
  - d) Cerebrum
  
4. -----protects spinal cord
  - a) Cranium
  - b) Vertebral column
  - c) Skull
  - d) Ribs
  
5. ....is the hormone responsible for development of female characteristics.
  - a) Adrenalin
  - b) Testosterone
  - c) Thyroxin

d) Progesterone

6..... is called the master gland.

- a) Pineal
- b) Pituitary
- c) Thyroid
- d) Thymus

7.....hormone regulates ionic balance

- a) Vasopressin
- b) Thyroxin
- c) Glucagon
- d) Testosterone

8.....is responsible for lowering glucose level in blood.

- a) Glucagon
- b) Oxytocin
- c) Insulin
- d) Adrenalin

9.. is responsible for increasing glucose level in blood

- a) Glucagon
- b) Oxytocin
- c) Insulin
- d) Adrenalin

10. Prolactin regulates .....

- a) Blood pressure
- b) Heartbeat
- c) Mammary glands
- d) Glucose metabolism

11: Which of the following is a plant hormone?

- (a) Insulin
- (b) Thyroxin
- (c) Oestrogen
- (d) Cytokinin

12:The gap between two neurons is called a

- (a) Dendrite.

- (b) Synapse.
- (c) Axon.
- (d) Impulse.

B. Question carry one marks

1. Define Neuron.

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2. Name any two types of tropism.

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3. What is phytohormone? Name any two phytohormones.

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4. Name the part of the neuron:

- i. where information is acquired
- ii. Through which information travels.

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5. Name the hormones that regulate heart beat and blood pressure.

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6. Name one gland in human body which secretes digestive enzymes as well as hormones.

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7. Name the cause of the following disorders: diabetes mellitus, goiter and gigantism.

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8. Insulin is a hormones secreted by an endocrine gland. Name the gland and write about the functions of insulin.

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9. 'adrenaline is an emergency hormone'. Justify.

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10. Name the various types of tropic movements.

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11. Which organ secretes hormone when the blood sugar rises? name a digestive enzyme released by this organ.

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12. What will happen when plant is exposed to unidirectional light?

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13. A particular hormone requires iodine for its synthesis. Name the endocrine gland which secretes this hormone and state its location in human body.

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14. How are our brain and spinal cord protected?

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15. What is the role of Medulla?

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16. What is the function of cerebellum?

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17. What is the function of fore brain?

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18. What is reflex arc?

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19. What is synapse?

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20. Which part of brain is responsible for precision of voluntary actions?

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21. Name one plant hormone which inhibits growth. Write its one more function.

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22. Name two components of central nervous system in humans.

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23. Name the hormone secreted by an endocrine gland during emergency? Name the gland which secretes this hormone.

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24. Which endocrine gland is called master gland? Why?

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25. Why is pancreas a dual gland?

26. How is brain protected against mechanical shocks?

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**C. Question carry two marks**

1. Write the names of various plant hormones.

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2. Differentiate between Nastic and tropic movement.

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3. List the functions of testosterone and estrogen.

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4. (a). name the hormones secreted by ovary and testis.

(b). name the part of human brain that maintains posture and equilibrium in the body.

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5. Which part of the human brain is:

(i) The main thinking part of the brain?

(ii). responsible for maintaining the posture and balance of the body?

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6. Role of hormones in human body justify .

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7. Why the immune responses of old person become weak?

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8. What prevent a normal gland from secreting too much of a hormone?

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9. what do you understand by the terms control and co-ordination?

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10. How does the nervous tissue cause action?

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11. what is the difference between sensory neuron and motor neuron?

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12. How is brain protected?

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13. which gland secretes digestive enzyme as well as hormones?

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14. What is the difference between sensory neuron and motor neuron?

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15. what happen at the synapse between two neurons?

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16. How do we detect the smell of an agarbatti (incense stick)?

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**D. Question carry three marks**

1. Name the hormone synthesized at the shoot tips. How does it help the plant to respond to light?

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2. What are the characteristics of animal hormones?

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3. Write the mechanism of adrenaline hormone?

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4. Why adrenaline is called emergency hormone?

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5. Which organ secretes hormones when blood sugar rises in our body? Name the hormones and name one enzymes released by this organ?

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6. (a) draw diagram of a neuron and label the following parts-

- (i) Cell body      (ii) nucleus      (iii) Dendrites      (iv) axon

(b).mention the function of dendrites.

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7. How do Auxins promote the growth of tendril around a support?

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8. Mention the three major regions of brain. Write one function each.

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9. In a neuron:

- i. Where is the information received?
- ii. Through what information travels as an impulse?
- iii. Where does the impulse get converted into chemical signal for outward transmission?

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10. (a) how is movement of leaves of touch me not plant and movement of growth in stem toward light differ?

(b) Give a suitable example of chemotropism.

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11. Identify the glands and mention hormones produced.

- a. Gland which prepares our body to function at maximum efficiency during anger or danger.
- b. Gland that helps in growth of bones and muscles.
- c. Gland that helps in growth of secondary sexual characters in males.

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2. Give reasons:

- (i) Why we must take iodised salt?
- (ii) Why the touch –me-not (Mimosa pudica) plant leaves droop when touched?

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3. What are the characteristics of animal hormones?

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4. Write the mechanism of adrenaline hormone? OR Why adrenaline is called emergency hormone?

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5. What regulates the timing and amount of release of hormones?

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6. Which animal or plant hormone is associated with the following

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|-----------------------------------|---------------------------|
| a. Change at puberty in boy's     | b. Goitre                 |
| c. Inhibits growth of plants      | d. promotes cell division |
| e. Increased sugar level in blood | f. Dwarfism               |

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7. Mention the three main major regions of the brain and mention the function of each one of them?

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8. What is phototropism? How does it occur in plants? Describe an activity to demonstrate phototropism.

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9. Name a hormone secreted by : a) pancreas b)pituitary c)thyroid. State one function of each of the hormone.

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10. What Is a Reflex Arc? Draw a flowchart showing of events which occur during sneezing

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11. Which gland secretes digestive enzyme as well as hormones?

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12. Why is the flow of signals in a synapse from axonal end of one neuron but not the reverse?

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**E. Question carries five marks**

1. (a) State the functions of mid brain and hind brain respectively.

(b) How is the brain and spinal cord protected?

(c) Why do tendrils coil around a support?

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7.(a) Draw a diagram of human brain and label any four parts. Write one function each of any two parts.

(b) What is chemotropism? Give one example. Name any two plant hormones and mention their functions.

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8.(a) Define tropic movement.

(b) Why do multicellular organisms need another means of communication between cells besides nervous co-ordination ?

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9. Describe the steps involved in reflex action.



12. Give a reason to explain why :

(i) adrenaline helps in dealing emergency situations?

(ii) Secretions of growth hormone should be specific in the human body?

(iii) Some patients of diabetes are treated by giving injections of insulin?

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5. List four plants hormones and write one function of each?

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