

## Biology - 12th Class Biology Chapter 17 Short Questions Preparation

Q1. Define Nissl's Granules.

**Ans 1:** Nissl's granules which are groups of ribosomes associated with rough endoplasmic reticulum and golgi apparatus for protein synthesis, present in cell body of neuron.

Q2. Discuss the role of two hormones produced by gut.

**Ans 1:** Gastrin produced from mucosa of pyloric region of stomach. It stimulates the production of gastric juice.

**Ans 2:** secretin produced from intestinal mucosa and it stimulates the production of pancreatic juice.

Q3. Differentiate between chemoreceptors and mechanoreceptors.

**Ans 1:** Chemoreceptors These are sensitive for chemical changes. These are for smell, taste and for blood carbon dioxide and oxygen, glucose, amino acids and fatty acids (receptors in hypothalamus)

**Ans 2:** Mechanoreceptors These detect stimuli of touch, pressure hearing and equilibrium

Q4. What is sodium potassium pump?

**Ans 1:** These are the special proteins which are present on the neuron membrane and act as pump to move the K ions across the membrane during the transmission of nerve impulse

Q5. What do you know about saltatory nerve?

**Ans 1:** In myelinated neuron the nerve impulse jumps from one node to another node (node of Ranvier). It is called saltatory nerve impulse.

Q6. What are commercial applications of abscisic acid?

**Ans 1:** Abscisic acid can be sprayed on tree crops to regulate fruit drop at the end of the season. This removes the need for picking over a long time span.

**Ans 2:**

1.

Q7. Name various structural that protect our brain.

**Ans 1:** Following are the structures which protect our brain

**Ans 2:** skull

**Ans 3:** Meninges(though membrane)

**Ans 4:** Cerebrospinal fluid which act as shock absorber.

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Q8. Define habituation. Give its example.

**Ans 1:** It is the simplest form of learning and involves modification of behavior through decrease in response due to repeated stimuli e.g Rodents respond to alarm calls by others in their groups,if these calls are continued and no danger is confirmed further calls may be ignored.

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Q9. What is reflex action?

**Ans 1:** Reflex action is a type of involuntary action.The direction of stimulus is from receptors to sensory neuron to associative neuron and then through motor neuron to the effectors.

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Q10. Write down the role of hypothalamus in chemical coordination.

**Ans 1:** It is a part of fore brain.It is here that many of the sensory stimuli of nervous system are converted into hormonal responses.It is believed that oxytocin and ADH are produced in hypothalamus.

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