

Class: X
Subject: Biology
Topic: Control and Coordination
No. of Questions: 20
Duration: 60 Min
Maximum Marks: 60

Q1 Gustatory receptors will detect _____

- A. light
- B. Taste
- C. Smell
- D. Touch

Ans. B the gustatory system allows humans to distinguish between safe and harmful food. Bitter and sour foods we find unpleasant, while salty, sweet, and meaty tasting foods generally provide a pleasurable sensation.

Q2 The gap between two neurons is called _____

- A. Synapse
- B. Synthesise
- C. Dendron
- D. Axon

Ans. A In the nervous system, a synapse is a structure that permits a neuron (or nerve cell) to pass an electrical or chemical signal to another cell (neural or otherwise).

Q3 Involuntary actions including blood pressure, salivation and vomiting are controlled by the _____ in the hind-brain.

- A. Medals
- B. Cerebellum
- C. Medulla
- D. Cerebrum

Ans. C The medulla contains the cardiac, respiratory, vomiting and vasomotor centers and therefore deals with the autonomic(involuntary) functions of breathing, heart rate and blood pressure.

Q4 A potted plant kept in a room tends to bend towards the direction of light. This movement is called

- A. Photographism
- B. Photonastism
- C. Photoperiodism
- D. Phototropism

Ans. D Phototropism is the growth of organisms in response to light. It is most often observed in plants, but can also occur in other organisms such as fungi.

Q5 _____ is a growth inhibitor hormone in plants

- A. Auxin
- B. Cytokinin
- C. Absciscic acid
- D. Gibberellic acid

Ans. C Auxin, cytokinin and gibberellin induces growth whereas absciscic acid inhibits growth.

Q6 The endocrine organ present in human female but not in human male is

- A. Testis
- B. Ovary
- C. Pituitary gland
- D. Thymus

Ans. Testis is present in human male whereas pituitary and thymus gland are present in both males and females.

Q7 If there is a deficiency of growth hormone the child becomes _____

- A. Blind
- B. Mentally retarded
- C. Giant
- D. Dwarf

Ans. D Dwarfism occurs when an individual person or animal is short in stature resulting from a medical condition caused by slow growth.

Q8 People living in coastal areas suffer less from goiter. This is because

- A. They eat sea food
- B. They drink sea water
- C. They bathe in sea water
- D. All of the above

Ans. A Because sea food contains iodine.

Q9 The upward or downward movement of shoot and root respectively is influenced by gravity. Such movement is called

- A. Gravity movement
- B. Gravitytropism
- C. Geotropism
- D. Gravitism

Ans C Geotropism

Q10 The direction of impulse in a typical neuron is

- A. Axon to dendron
- B. Dendron to axon
- C. Both a and b are correct
- D. Both a and b are wrong

Ans. B The nerve impulse flows in one direction. The dendrites receive incoming nerve impulses from other neurons, and the axon transmits the impulse to another neuron or receptor.

Q11 The plant hormone which is essential for cell division is

- A. Ethylene
- B. Auxin
- C. Gibberellin
- D. Cytokinin

Ans. D Cytokinins (CK) is a class of plant growth substances (phytohormones) that promote cell division, or cytokinesis, in plant roots and shoots.

12 The activities of internal organs are controlled by

- A. Central nervous system
- B. vertebral column
- C. Autonomic nervous system
- D. None of these

Ans. C The autonomic nervous system (ANS), also known as the visceral nervous system and involuntary nervous system, is a division of the peripheral nervous system that influences the function of internal organs.

13 The seat of intelligence and voluntary action in the brain is

- A. Diencephalon
- B. Cerebrum
- C. Cerebellum
- D. Medulla oblongata

Ans. B Cerebellum regulates the muscular movement of locomotion. Medulla oblongata regulates the involuntary actions.

14 Tropic movements are

- A. In response to light
- B. In response to gravity
- C. Uni-directional
- D. Bi-directional

Ans. C A tropism is a biological phenomenon, indicating growth or turning movement of a biological organism, usually a plant, in response to an environmental stimulus. In tropisms, this response is dependent on the direction of the stimulus (as opposed to nastic movements which are non-directional responses).

15 Artificial ripening of fruit is carried out by

- A. Auxins
- B. Ethylene
- C. Abscisic acid (ABA)
- D. Gibberellins

Ans. B Ethylene serves as a hormone in plants. It acts at trace levels throughout the life of the plant by stimulating or regulating the ripening of fruit, the opening of flowers, and the abscission (or shedding) of leaves.

16 Part of brain that controls respiration, heartbeat and peristalsis is

- A. Cerebrum
- B. Cerebellum
- C. Pons
- D. Medulla

Ans. D Respiration, heartbeat and peristalsis all are involuntary actions.

17 Which body organ is surrounded by meninges?

- A. Heart and lungs
- B. Brain and heart
- C. Brain and spinal cord
- D. Spinal cord and lungs

Ans. C the meninges are the membranes that envelop the brain and spinal cord of the central nervous system. The primary function of the meninges and of the cerebrospinal fluid is to protect the central nervous system.

18 Growth of stem is controlled by

- A. Gibberellin
- B. Auxin
- C. Abscisic acid
- D. Cytokinin

Ans. A Gibberellins (GAs) are plant hormones that regulate growth and influence various developmental processes, including stem elongation, germination, dormancy, flowering, sex expression, enzyme induction, and leaf and fruit senescence.

19 Wilting of leaves is caused by which hormone

- A. Gibberellin
- B. Auxin
- C. Abscisic acid
- D. Cytokinin

Ans. C Wilting refers to the loss of rigidity of non-woody parts of plants. This occurs when the turgor pressure in non-lignified plant cells falls towards zero, as a result of diminished water in the cells. Wilting is an effect of the plant growth inhibiting hormone, abscisic acid.

20 Which part of the brain controls posture and balance of the body?

- A. Cerebrum
- B. Cerebellum
- C. Pons
- D. Medulla

Ans. B the cerebellum helps to control motor functions such as balance, posture, and coordination of complex muscle activities. The cerebellum also controls the timing and finesse of complex motor actions such as walking, writing, and speech.