**Chapter 7**

 **Control and Coordination**

(Whole chapter removed, Topics deleted –Tropic movements, Introduction to plant hormones, Control and coordination in animal nervous system, Voluntary, Involuntary, reflex action, Chemical coordination in animal –animal hormones)

1. State the two types of movement seen in the plants. Give one example of each type.
2. What are plant hormones? Name the plant hormones responsible for the following
3. Growth of stem
4. Promotion of cell division.
5. Inhibition of growth
6. Elongation of cells.
7. How is the movement of leaves of the sensitive plant different from the movement of shoot towards light?
8. What are nastic movement and how are they different from topic movement?
9. Which is the largest and most prominent part of the brain?
10. What is synapse?
11. How is the spinal cord protected in human body?
12. Which parts of human body has a) thermo receptors b) Phono receptors?
13. Nissil’s granules are characteristic feature of which cells? Which cell organelle is present in such cells?
14. Name one Gustatory receptor and one olfactory receptor in human beings.
15. Identify the A and B in the given flow chart of neuron through which information travels as an electrical impulse.

End point of Neuron

B

A

Dendrite

1. Give one function of the following
2. Sensory neuron
3. Motor neuron
4. Vertebral column
5. Cranium
6. Name 3 parts of hind brain and which controls rate of heart beat, swallowing , coughing , sneezing and vomiting.
7. Name the two major division of autonomic nervous system in man. In the human body what is the effect of the following?
8. Why does the signal flow from axonal end of one neuron to dendrite end of another neuron takes place and not in the reverse direction, explain
9. ‘Reflex arcs continue to be more efficient for quick responses’ justify this statement giving reason.
10. Mention 3 major regions of brain and give one function of each.
11. Define plant growth regulators
12. What are plant hormones? Name the plant hormones responsible for the following
13. Growth of stem
14. Promotion of cell division
15. Inhibition of growth
16. Elongation of cells
17. Name various plant hormones. Also give their physiological effects on plant growth and development.
18. A) What is bolting? What conditions can induce it naturally and how can it be induced artificially?

B) Identify and name the hormones in each of the following

a) causes ripening of fruits

b) Promotes flowering in pineapple

c) is a gaseous hormone

1. Multiple choice questions
2. Which is not a growth promoter?
3. Auxin b) Cytokinin c) Gibberllins d) Abscissic acid
4. The outermost layer of meninges is
5. Myelin member b) arachnoid matar c) dura matar d) pia matar
6. Spinal cord originates from
7. Cerebrum b) cerebellum c) medulla d) pons
8. Assertion and reasons.
9. If both assertion and reason are true and reason is correct explanation of assertion
10. If both assertion and reason are true but reason is not correct explanation of assertion.
11. If assertion is true and reason is false.
12. If assertion is false and reason is true
13. Assertion: The synapse acts as a one way valve to conduct nerve impulse in one direction only.

Reason: Neurotransmitter is secreted by synaptic vesicles on axon’s side of the gap.

1. Assertion: Tobacco plant is an example of short day plant.

Reason: It flowers on photoperiod shorter than critical day length.

1. Assertion: Autonomic nervous system is under the control of will

Reason: Autonomic nervous system controls and regulates internal organs like heart, urinary bladder, pupil

  **Chapter 8**

 **How do Organisms Reproduce?**

1. State two advantages of vegetative propagation.
2. Complex organisms cannot give rise to individual through regeneration Justify the statement.
3. How vegetative propagation takes place in potato?
4. Name secondary sex organs of human female.
5. Colonies of yeast fail to multiply in water but multiply in sugar solution. Give one reason for this.
6. Why are budding, fragmentation and regeneration considered as asexual mode of reproduction?
7. Differentiate fission from fragmentation.
8. How can population growth be prevented?
9. Name 2 bacterial and two viral STD’s
10. Fertilisation cannot take place in flowers if pollination does not occur, explain
11. Differentiate between the following
12. Gamete and Zygote
13. Asexual and sexual reproduction
14. What is contraceptive? List 3 advantages of adopting contraceptive measures.
15. What are different ways to avoid pregnancy? Elaborate any one method.
16. Read the paragraph and answer the following questions

Micro propagation is latest method of obtaining a number of plantlets from plant tissue. This method is based on tissue and cell culture technique. Here a cell, tissue or organ is transferred to flasks having suitable nutrient medium, under aseptic conditions. The tissue develops into fast growing amorphous undifferentiated mass in synthetic medium. The undifferentiated mass is transferred into another medium and gets differentiated into plantlets. The plantlets are transplanted in pots or soil and raised to maturity. Culture medium is supplemented with growth hormones.

By micro propagation, disease free plants can be produced to develop healthy stocks. It shortens the breeding cycle. By this method even haploid plants can be reproduced.

1. Which combination of phyto hormones is used in culture medium?
2. What is the undifferentiated mass of tissue formed during tissue culture known as?
3. Which tissue is generally used to get disease free plants?
4. A) Draw a diagram showing spore formation in Rhizopus.

B) List the advantages for organisms that reproduce themselves through spores.

1. Name the two reproductive parts of a bisexual flower which contain the germ cells. State the location and function of its female reproductive part.
2. What changes are observed in the uterus if fertilisation does not occur?
3. What is full form of DNA. Name the part of the cell where it is located. Explain its role in the process of reproduction of the cell.
4. Reproduction is linked to stability of population of a species. Justify the statement.
5. Trace the path of sperm during ejaculation and mention the gland and their functions associated with the male reproductive system.
6. Draw a labelled diagram of longitudinal section of a flower.
7. State in brief the changes that take place in a fertilised egg (zygote) till birth of a child in the human female reproductive system.
8. Explain with help of diagram how pollen grain after landing on stigma of a flower helps the male germ cell to reach the female germ cell.
9. What is pollination? State the difference between self and cross pollination.
10. Define vegetative propagation. List 2 advantages and 2 disadvantages of vegetative propagation.
11. Multiple choice questions
12. The correct sequence of reproductive stages seen in flowering plants
13. Gametes, zygote, embryo, seedling
14. Zygote, gametes, embryo, seedling
15. Seedling, embryo, zygote , gametes d) gametes, embryo, zygote, seedling
16. Cessation of menstrual cycle is called
17. Puberty b)menarche c) pregnancy d) menopause
18. Which of the following vertebrate exhibits maximum power of regeneration?
19. Dog b) Lizard c) Pigeon d) Man
20. The structure that helps the sperm in penetrating into ovum is
21. Tail b) Middle piece c) acrosome d) neck
22. Pollination between different flowers of the same plant is called
23. Autogamy b) Geitonogamy c) Xenogamy d) allogamy
24. A scion is grafted to a stock. The quality of fruits produced will be determined by the genotype of
25. Stock b) Scion c) both stock and scion d) neither stock nor scion.
26. Assertion and Reasons
27. If both assertion and reason are true and reason is the correct explanation of the assertion.
28. If both assertion and reason are true but reason is not correct explanation of the assertion.
29. If assertion is true but reason is false
30. If assertion is false but reason is true.
31. Assertion: Regeneration is quite common in plants as well as lower animals.

Reason: Animals such as sponge, Planaria, Hydra can generate the whole body from a part.

1. Assertion: In human male testes are extra abdominal and lie in the scrotal sacs.

Reason: Scrotum acts as thermo regulator and keeps the testicular temperature lower by two degrees for normal spermatogenesis.

1. Assertion: Ovulation is release of egg.

Reason: Ovulation takes place on 14th day of menstrual cycle.

1. Assertion: Calyx is a floral part.

Reason: Calyx helps in pollination.

1. Assertion: Prostrate gland is a single large gland.

Reason: Prostrate gland secretes an alkaline fluid.

1. Assertion: Vegetative propagation is type of asexual reproduction.

Reason: Vegetative propagation is uni parental and does not involve gamete formation.