

REVISION QUESTION PAPER (SET 2)

BIOLOGY

CHAPTER – CONTROL AND COORDINATION

Q1. The following question consists of two statements – Assertion (A) and Reason (R). Answer the question selecting the appropriate option given below: [1]

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are true but R is not the correct explanation of A.
- (c) A is true but R is false.
- (d) A is false but R is true.

Assertion (A): Failure of secretion of growth hormone in the adults causes dwarfism

Reason (R): Growth hormone stimulates the body growth and elongation of long bones.

Q2. If Anil's cerebellum is damaged due to injury, what are the two things in his body that might not work well because of the damage? [2]

Q3. a) Plants do not have any nervous system, yet if we touch a sensitive plant, some observable changes take place in its leaves. Explain how this plant responds to the external stimuli and how it is communicated.

b) Name the hormone that needs to be administered to:

- i. increase the height of a dwarf plant
- ii. cause rapid cell division in fruits and seeds

[2+1=3]

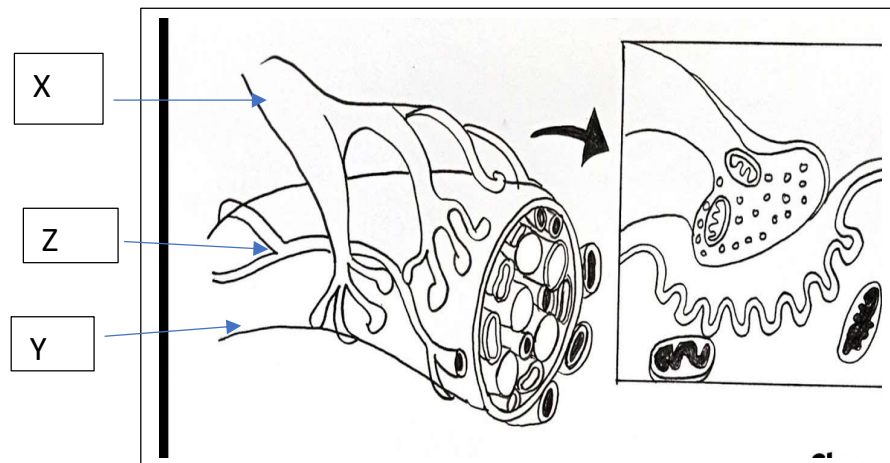
Q4. Consider the following scenarios:

- A. While cooking, Ravi accidentally touched a hot pan and instantly pulled his hand away without any conscious thought.
- B. Later, when Ravi wanted to pick up a book from his shelf, he thoughtfully planned and executed the movement with care.
- a) Explain the difference between the action taking place in scenario A and B.
- b) Enlist the stages in the pathway of the nerve signal involved in the action taking place in A.
- c) Which part of the nervous system primarily mediates response taking place in A.

OR

- c) Which part of the brain is mainly involved in coordinating actions taking place in B. [1+2+1=4]

Q5. a) Identify the given figure and label the following parts.



- b) In animals, hormones can be secreted by one organ and act on multiple organs. Justify this statement by explaining the effect of adrenaline on any two organs in our body.

c) Why is it important for the pancreas to secrete insulin in proper amounts? [2+2+1=5]