## Chapter - 7

## **Control and Coordination**

## ( Assertion and Reasoning Questions )

Following questions consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- (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.

**Q.1. Assertion(A)**: Insulin regulates blood sugar level.

**Reason (R):** Insufficient secretion of insulin will cause diabetes.

**Q.2. Assertion(A)**: Animals can react to stimuli in different ways.

**Reason (R):** All animals have a nervous system and an endocrine system involving hormones.

**Q.3. Assertion(A)**: The effect of auxin hormone on the growth of root is exactly opposite to that on a stem.

**Reason (R):** Auxin hormone increases the rate of growth in root and decreases the rate of growth in stem.

**Q.4. Assertion(A)**: A receptor is a specialized group of cells in a sense organ that perceive a particular type of stimulus.

**Reason (R):** Different sense organs have different receptors for detecting stimuli.

**Q.5. Assertion(A)**: Cyton region of nerve fibre collects information for the brain.

**Reason (R):** Nerve fibres can either have or lack myelin sheath.

**Q.6. Assertion(A)**: A nerve impulse is an electrochemical event.

**Reason (R):** In a nerve impulse there are changes in the resting potential which spreads down the nerve fibre.

**Q.7. Assertion(A)**: The brain is also known as the central nervous system.

**Reason (R):** Central nervous system controls and regulates the voluntary actions.

**Q.8. Assertion(A)**: The spinal nerves are 31 in number.

**Reason (R):** Spinal nerves only have sensory neurons in them

-X-X-X-

## **ANSWER KEY**

<b>Q.1</b> : (a)	<b>Q.2</b> : (a)	<b>Q.3</b> :(c)	<b>Q.4</b> : (b)
<b>Q.5</b> : (d)	<b>Q.6</b> : (a)	<b>Q.7</b> : (d)	<b>Q.8</b> :(c)