

QB365 Question Paper Software
11th Standard - Biology
Animal Kingdom Assertion and reason

Exam Time: 00:20 Hrs

Date: 2025-10-10

Total Marks: 10

Questions:

Assertion and reason

1. **Assertion** : Nematocysts are present in coelenterates.

Reason : Nematocysts are specialized cells.

Codes:

- A) If both the assertion and the reason are true and the reason is a correct explanation of the assertion
- B) If both the assertion and reason are true but the reason is not a correct explanation of the assertion
- C) If the assertion is true but the reason is false
- D) If both the assertion and reason are false
- E) If the assertion is false but reason is true

2. **Assertion** : Scolex with hooks are present in Taenia.

Reason : The uterus is present in gravid proglottid.

Codes:

- A) If both the assertion and the reason are true and the reason is a correct explanation of the assertion
- B) If both the assertion and reason are true but the reason is not a correct explanation of the assertion
- C) If the assertion is true but the reason is false
- D) If both the assertion and reason are false
- E) If the assertion is false but reason is true

3. **Assertion** : Metamerism is the characteristic of annelida.

Reason : Metamerism is one type of body segmentation.

Codes:

- A) If both the assertion and the reason are true and the reason is a correct explanation of the assertion
- B) If both the assertion and reason are true but the reason is not a correct explanation of the assertion
- C) If the assertion is true but the reason is false
- D) If both the assertion and reason are false
- E) If the assertion is false but reason is true

4. **Assertion** : Rhabdome is present in Palaemon.

Reason : Rhabdome has an important role in digestion.

Codes:

- A) If both the assertion and the reason are true and the reason is a correct explanation of the assertion
- B) If both the assertion and reason are true but the reason is not a correct explanation of the assertion
- C) If the assertion is true but the reason is false

- D) If both the assertion and reason are false
- E) If the assertion is false but reason is true

5. **Assertion** : Pedicellariae are minute structure found in echinoderms.

Reason : Pedicellariae help in locomotion.

Codes:

- A) If both the assertion and the reason are true and the reason is a correct explanation of the assertion
- B) If both the assertion and reason are true but the reason is not a correct explanation of the assertion
- C) If the assertion is true but the reason is false
- D) If both the assertion and reason are false
- E) If the assertion is false but reason is true

6. **Assertion** : Lateral line canal is one of the main characteristics of fishes.

Reason : Lateral line canal is a system of sense organ concerned with life in water.

Codes:

- A) If both the assertion and the reason are true and the reason is a correct explanation of the assertion
- B) If both the assertion and reason are true but the reason is not a correct explanation of the assertion
- C) If the assertion is true but the reason is false
- D) If both the assertion and reason are false
- E) If the assertion is false but reason is true

7. **Assertion** : Parental care is seen in amphibians.

Reason : Amphibians have taken several method to protect their eggs and offspring.

Codes:

- A) If both the assertion and the reason are true and the reason is a correct explanation of the assertion
- B) If both the assertion and reason are true but the reason is not a correct explanation of the assertion
- C) If the assertion is true but the reason is false
- D) If both the assertion and reason are false
- E) If the assertion is false but reason is true

8. **Assertion** : In snakes, the transference of venom is controlled by muscles.

Reason : The poison apparatus in snake is associated with three types of muscles.

Codes:

- A) If both the assertion and the reason are true and the reason is a correct explanation of the assertion
- B) If both the assertion and reason are true but the reason is not a correct explanation of the assertion
- C) If the assertion is true but the reason is false
- D) If both the assertion and reason are false
- E) If the assertion is false but reason is true

9. **Assertion** : The birds can maintain a constant body temperature.

Reason : Birds possess feathers covering their body.

Codes:

- A) If both the assertion and the reason are true and the reason is a correct explanation of the assertion

- B) If both the assertion and reason are true but the reason is not a correct explanation of the assertion
- C) If the assertion is true but the reason is false
- D) If both the assertion and reason are false
- E) If the assertion is false but reason is true

10. **Assertion :** Liver helps in destruction of germs.

Reason : Liver has some components which help in killing of germs.

Codes:

- A) If both the assertion and the reason are true and the reason is a correct explanation of the assertion
- B) If both the assertion and reason are true but the reason is not a correct explanation of the assertion
- C) If the assertion is true but the reason is false
- D) If both the assertion and reason are false
- E) If the assertion is false but reason is true

Answers Key:

Assertion and reason

1. C) If the assertion is true but the reason is false

Explanation:

One of the most characteristic structure of all coelenterates are the stinging cells, called nematocysts. These are not cells but cell organelles found in specialized cells called cnidocytes or cnidoblasts. These develop from modified interstitial cells of epidermis and are not found in gastrodermis. The cnidoblasts act as organs for offence and defence. They also serve for locomotion, food capture and anchorage. Nematocysts occur on oral arms, ex-and sub-umbrellar surface, marginal tentacles as well as gastric filaments. Above 30 different kinds of nematocysts are found in cnidarians.

2. C) If the assertion is true but the reason is false

Explanation:

Scolex represents the anterior part of Taenia's body. It has several hooks and suckers within it. The scolex with the help of its hooks and suckers, lies buried in the host's intestinal mucosa, providing firm adhesion to the body against the loosening action of peristaltic movement of the host's intestine. It is thus an organ for attachment or holdfast. It has no role in perceiving or catching food or in absorption.

3. B) If both the assertion and reason are true but the reason is not a correct explanation of the assertion

Explanation:

The body of annelids is divided into segments called metameres, externally ring like grooves (annuli) and internally by vertical partitions called septa. The external segmentation corresponds to internal segmentation. This phenomenon is called metamere or metameric segmentation. Phylum annelida represents the first group of metazoan animals developing a true coelom with metameric segmentation.

4. C) If the assertion is true but the reason is false

Explanation:

Inner ends of cone cells lie upon an elongated, spindle shaped rod, the rhabdome. Rhabdome is secreted and surrounded by a group of seven elongated retinal cells. Rhabdome and retinal cells together form the receptor region of eye.

- 5.

C) If the assertion is true but the reason is false

Explanation:

Pedicellariae (stalked) of sea stars are minute, whitish, jaw like structures found on both the body surfaces, in association with spines. It may be stalked or sessile. They help in the capture and removal of debris and minute organism, such as larvae, which may settle on the body surface and interfere with respiration. In some starfishes, the pedicellariae may help in capturing of small prey. Locomotion occurs with the help of tube feet.

6. A) If both the assertion and the reason are true and the reason is a correct explanation of the assertion

Explanation:

A faint line runs on either side of the body extending from the head to the posterior end of the tail, this is called lateral line (also called neuromast system). It marks the position of an underlying canal which runs along side of the body and contains special receptor organs. The lateral line canal extends anteriorly into the head, where it branches into several canals; at intervals these canals open to the exterior through the pores. These canals contain neuromast organs like rheoreceptors or current receptors. The latter can perceive vibration of very low frequency and detect disturbances in water.

7. A) If both the assertion and the reason are true and the reason is a correct explanation of the assertion

Explanation:

Parental care is clearly seen in amphibians. They protect their eggs by keeping them - (i) In enclosures in the water, (ii) In holes near water, (iii) In nests, on trees or on rocks, overhanging water, (iv) In transparent gelatinous bag in the water, (v) On trees or in moss, away from water. They also show direct nursing by the parent. The examples are - (i) Tadpoles transported from one place to another by males, (ii) Eggs protected by male who covers with his body, (iii) Eggs carried round the legs by the female, on the back of the female etc.

8. A) If both the assertion and the reason are true and the reason is a correct explanation of the assertion

Explanation:

The poison apparatus is associated with specialized bands of three types of muscles, viz, digastric, sphenoterygoid, and anterior and posterior temporalis. During the contraction of the digastric muscle, the posterior ligament is relaxed and during the rotation of the squamosal bone, the fan-shaped ligaments are stretched to squeeze the wall of the poison gland. This makes the poison to come out of the poison gland through the poison duct and fang. Other types of muscle help in jaw movement.

9. A) If both the assertion and the reason are true and the reason is a correct explanation of the assertion

Explanation:

Birds have a constant body temperature which commonly remains in between to even in subzero weather. Thus they are called homoiothermal. The feathers serve the most important function of retention of heat. Because the plumage forms an efficient, non-conduction covering with its innumerable dead air spaces, useful as insulation. In cold weather, the heat loss is reduced to minimum by fluffing out the feathers, which increases the depth of insulating material by adding to the air spaces within the feathery layers. In warm weather, the feathers are often held close to the body to allow some escape of body heat.

10. A) If both the assertion and the reason are true and the reason is a correct explanation of the assertion

Explanation:

Some specialized kupffer cells are found in the live cells which generally help in the destruction of many germs. Liver secretes bile, which acts as an antiseptic, therefore it does not allow the growth and multiplication of bacteria. By the help of these two components liver helps in the destruction of germs. Liver is the primary site of detoxification and elimination of body wastes and poisons.

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