Global Scholars School

Unit Test 1

Date: 18 Aug 2026 | **Class IX · Science** | Duration: 45 Minutes | Max. Marks: 27

Section A — 1 Mark Questions

Q1. Grouping organisms based on similarities and differences is called

(A) classification **(B)** reproduction
(C) germination **(D)** nutrition

Q2. A tissue is a group of cells that

(A) have no function **(B)** work together to perform a specific function
(C) are always dead **(D)** occur only in plants

Q3. Plants with seeds enclosed in fruits are

(A) gymnosperms **(B)** angiosperms
(C) pteridophytes **(D)** bryophytes

Q4. The red colour of blood is due to

(A) plasma **(B)** platelets
(C) haemoglobin **(D)** WBCs

Q5. In an activity on a pea plant, some flower buds and flowers are loosely wrapped in muslin cloth bags, and in some of them the stamens are first removed. What is the purpose of the muslin cloth bag?

(A) To keep the flower warm so that pollen germinates faster **(B)** To stop pollen from other flowers (carried by insects or wind) from reaching the stigma
(C) To stop the flower from losing water **(D)** To protect the flower from sunlight so that it does not wilt

Q6. The female reproductive part of a flower is the

(A) stamen **(B)** pistil (carpel)
(C) petal **(D)** sepal

Q7. An ion with 18 electrons and 17 protons carries a charge of

(A) +1 **(B)** −1
(C) 0 **(D)** −2

Q8. A cricketer moves his hands backward while catching to

(A) increase the force **(B)** decrease the time
(C) increase the time and reduce the force **(D)** stop the ball faster

Q9. Assertion (A): A heavier body has more inertia.
Reason (R): Inertia depends on mass.

(A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).

(B) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).

(C) Assertion (A) is true but Reason (R) is false.

(D) Assertion (A) is false but Reason (R) is true.

Q10. Assertion (A): Power is the rate of doing work.
Reason (R): Two people doing the same work in different times have different powers.

(A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).

(B) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).

(C) Assertion (A) is true but Reason (R) is false.

(D) Assertion (A) is false but Reason (R) is true.

Section B — 2 Marks Questions

Q1. An atom X^{2-} has 18 electrons and 16 neutrons. Find its atomic number and mass number.

Q2. Study a concept map of the five kingdom classification and list the criteria which form its basis.

Q3. Why is a cloudy night usually warmer than a clear night?

Section C — 3 Marks Questions

Q1. The molecular formula of glucose is $C_6H_{12}O_6$. Take C = 12, H = 1 and O = 16.

(a) The molecular mass of glucose is

(A) 24 u **(B)** 180 u

(C) 96 u **(D)** 186 u

(b) The total number of atoms in one molecule of glucose is

(A) 18 **(B)** 12

(C) 24 **(D)** 6

(c) Glucose is a

(A) ionic compound **(B)** metal

(C) mixture **(D)** covalent compound

Q2. You are asked to construct a simple machine from easily available materials (rulers, pencils, thread, bottle caps, paper cups) and use it to lift a small load. Describe one such model and explain how you would find its mechanical advantage.

Section D — 5 Marks Questions

Q1. Derive the kinematic equation $v^2 = u^2 + 2as$ from $v = u + at$ and $s = ut + \frac{1}{2}at^2$. Using it, find the acceleration of a car that is moving at 20 m s^{-1} and stops after travelling 50 m with constant acceleration. Also find the time it takes to stop.