

HP Board Class 10 2026 Science and Technology Question Paper

Time Allowed :3 Hours

Maximum Marks :70

Total questions :37

General Instructions

Read the following instructions very carefully and strictly follow them:

1. The paper is divided into Section A and Section B.
2. Section A includes objective-type questions.
3. All questions in Section A are compulsory.
4. Section B includes short answer, and long answer type questions.
5. Answers must be written legibly within the word limit.
6. Use of unfair means or electronic devices is prohibited.
7. Follow the correct format and instructions for each section.

Section - A

1. An electric bulb is rated 220 V and 100 W. When it is operated on 110 V, the power consumed will be -

- (A) 100 W
- (B) 75 W
- (C) 50 W
- (D) 25 W

2. The gap between two neurons is called a

- (A) dendrite
- (B) synapse
- (C) axon

(D) impulse

3. The anther contains

- (A) sepals
 - (B) ovules
 - (C) pistil
 - (D) pollen grains
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4. A student performs an experiment to form aluminium chloride from aluminium and chlorine. Which of the following option gives the chemical equation of the reaction?

- (A) $\text{Al} + \text{Cl}_2 \rightarrow \text{AlCl}_2$
 - (B) $2\text{Al} + \text{Cl}_2 \rightarrow 2\text{AlCl}$
 - (C) $2\text{Al} + 3\text{Cl}_2 \rightarrow 2\text{AlCl}_3$
 - (D) $3\text{Al} + 3\text{Cl}_2 \rightarrow 3\text{AlCl}_3$
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5. In amoeba, food is digested in the:

- (A) Food vacuole
 - (B) Mitochondria
 - (C) Pseudopodia
 - (D) Chloroplast
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6. Lactic Acid is present in

- (A) Orange
 - (B) Tea
 - (C) Curd
 - (D) Vinegar
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7. A non-metal used to preserve food material is:

- (A) Carbon
 - (B) Phosphorus
 - (C) Sulphur
 - (D) Nitrogen
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8. A carbon compound contains two atoms of carbon. Which name should the carbon compound bear?

- (A) Butane
 - (B) Ethane
 - (C) Methane
 - (D) Propane
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9. Which statement is true for the reflection of light?

- (A) The angle of incidence and reflection are equal.
 - (B) The reflected light is less bright than the incident light.
 - (C) The sum of the angle of incidence and reflection is always greater than 90° .
 - (D) The beams of the incident light, after reflection, diverge at unequal angles.
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10. What is the purpose of making urine in the human body? Name the organ that stores and releases the urine.

11. In which part of the human eye is the image of an object formed?

- (A) Iris
- (B) Pupil
- (C) Retina
- (D) Cornea

Section - B

12. Light enters from air to glass having refractive index 1.50. What is the speed of light in the glass? The speed of light in vacuum is $3 \times 10^8 \text{ m s}^{-1}$.

13. Why do we prefer a convex mirror as a rear view mirror in vehicles?

14. Why is the normal eye not able to see clearly the objects placed closer than 25 cm?

15. Why is diffusion insufficient to meet the oxygen requirements of multicellular organisms like humans?

16. How is the movement of leaves of the sensitive plant different from the movement of shoot towards light?

17. Why should a magnesium ribbon be cleaned before burning in air?

18. While diluting an acid, why is it recommended that the acid should be added to water and not water to the acid?

19. A mixture of oxygen and ethyne is used for welding. Can you tell why a mixture of ethyne and air is not used?

20. Which hormone is present in the areas of rapid cell division in a plant and which hormone inhibits growth?
