

Kendriya Vidyalaya,NDA Pune

PERIODIC TEST-I (2018-19)

SUBJECT: SCIENCE SET-2

Class-X

Time:90 min

Max Marks: 40

- Q.1. What will happen to a plant if its Xylem is removed? 1
- Q.2. Which Part of the Central nervous system controls reflexes? 1
- Q.3. The pH of the soil A is 7.5 while that of soil B is 4.5. Which of the two soils should be treated with powdered chalk (CaCO_3) to adjust its pH and Why? 2
- Q.4. Name the acid present in an ant sting. Also give the common method to get relief from the discomfort caused by the ant sting? 2
- Q.5. What is olfactory indicator? Name two such Indicators. 2
- Q.6. Why are 'danger' Signal lights red in colour? 2
- Q.7. Answer the following 2
- i) Dwarfism results due to deficiency of which hormone.
- ii) Blood sugar level rises due to deficiency of which hormone.
- Q.8. Write the balanced Equation for the following reactions 3
- a) Sodium Carbonate on reaction with HCl in equimolar concentration gives Sodium chloride and Sodium Hydrogen Carbonate
- b) Sodium Hydrogen carbonate on reaction with HCL gives Sodium Chloride, Water and Liberates carbon dioxide
- c) Copper Sulphate on treatment with potassium iodide precipitates Cuprous Iodide (Cu_2I_2) liberates Iodine gas and also forms potassium Sulphate.
- Q.9. Distinguish between real Image and Virtual Image. 3
- Q.10. How is the refractive Index of a medium related to the speed of light? Obtain an expression for refractive Index of a medium with respect to another in terms of speed of light in these two media 3

Q.11. Define Nerve Impulse. Which Structure in a neuron helps to conduct a nerve impulse 3

- a) towards the cell body
- b) away from the cell body

Q.12. Explain the nutrition Process in an Amoeba. 5

OR

Give the role of Liver in humans .

Q.13. What is hypermetropia? Write two causes for development of this effect. Describe with a ray diagram how this defect of vision can be corrected by using spectacles 5

OR

State the functions of each of the following parts of the Human eye-

- i) Cornea
- ii) Iris
- iii) Pupil
- iv) Retina
- v) Optic Nerves

Q.14. A student adds a few drops of the Universal Indicator to a solution of dilute Hydrochloric Acid. What will be the colour change he observe? 2

Q.15. Which light influences the opening of stomata? 2

Q.16. In an Experiment the image of a distant object formed by a concave mirror is obtained on the screen. To determine the focal length of the mirror which distance do we need to measure? 2