

HOLIDAYS HOMEWORK

CLASS 9 A,B SUBJECT SCIENCE

Q1- Derive the first, second and third equation of motion graphically.

Q2- Draw diagram showing plant and animal cell.

Q3- Draw showing the process of sublimation.

Q4- Collect the information about Robert Hooke and Robert Brown and write about their contribution for the discovery of cell.

Q5- Plot the graphs between distance- time and velocity-time.

Q6- Convert the following temperatures into $^{\circ}\text{C}$ and Kelvin scale

273K, 992K, 397K,

27°C , 373°C , 735°C

Q7- Write short note about

Mitochondria, Golgi apparatus, Lysosomes, Plastids

Q8- One day Sushma saw her mother making pickle. She cut the carrots, turnips and cauliflowers into small pieces washed them and put them into the sun for few hours. Thereafter, she mixed common salt, oil, paste of onions, ginger and garlic, gur, acetic acid etc as per required with the cut vegetables and heated them. After cooling, she put the contents in air tight jar and kept it in the sun for many days.

(a) Why did Sushma's mother cut the vegetables into small pieces and put them in the sun for few hours?

(b) Why did she mix common salt in the cut vegetables and heated it? Name the process involved?

(c) Why did she mix acetic acid?

Q9. (a) A bus decreases its speed from 80 km/hour to 60 km/hour in 5 seconds. Find the acceleration of the bus.

(b) A train starting from rest attains a velocity of 72 km/hour in 5 minutes. Assuming that the acceleration is uniform, find (i) the acceleration and (ii) the distance travelled by the train for attaining this velocity.

Q10. (a) An artificial satellite is moving in a circular orbit of radius 42250 km. Calculate its speed if it takes 24 hours to revolve around the Earth.

(b) Give two reasons to justify –

(i) Water at room temperature is a liquid.

(ii) An iron almirah is a solid at room temperature.

e process.