

DAV PUBLIC SCHOOLS, ODISHA ZONE

HALF YEARLY (2023-24), CLASS : VII, SUBJECT : SCIENCE & TECHNOLOGY

MARKING SCHEME

QN NO.	Value Points	Marks Allotted	PAGE NO. OF TEXT BOOK
1	Least count=Difference between two marked readings/Total no. of division between them	1	64
2	Conduction, convection(any one)	1	67,69
3	Symbiosis is the mutually benefitting association between two plants, e.g. lichens(Fungi and algae)any other relevant example	½+1/2	6
4	(i) earthworm- moist skin (ii) fish-gills	½+1/2	107
5	A chemical reaction in which more than one product is obtained from a single reactant .Any example of decomposition reaction (any other relevant reaction)	1	39
6	a. Chlorine -Cl b. Potassium-K	1	32
7	Necessary- a) essential substances like food, oxygen, water etc need be transported to all parts b) waste products need be transported to the area from where they will be removed c) Helps to transfer water to a great height in tall trees d) helps to lower the plants body temperature(any one point)	1	118
8	$H_2+Cl_2 \rightarrow 2 HCl$	1	39
9	Haemoglobin	1	120
10	Formation of lactic acid due to anaerobic respiration	½+1/2	104
11	Use of sprinklers and drip irrigation techniques	½+1/2	240
12	High resistivity, Low melting point	½+1/2	251
13	The upper layer of groundwater is called water table.	1	238
14	High resistivity, High melting point	½+1/2	250, 255
15	(c) A is true ,R is false	1	31,32
16	(b) Both A and R are true and R is not the correct explanation of A	1	3
17	i. (d). Left atrium ii. (c) four iii.(c) Right atrium iv. (b). septum	1X4=4	119
18	(i) (b) 0.3 (ii) (d) All of these (iii) (a)Deforestation (iv)(d)Importance of water	1X4=4	238

31	<p>i. As Rhizobium bacterium is commonly present in root nodules of leguminous plant that can take atmospheric nitrogen and convert it into a soluble form like nitrates and thus enriches the soil with nitrogen.</p> <p>Difference between Nutrition in mushroom and Cuscuta.</p> <p>i. On the basis of mode of nutrition.</p> <p>ii. On the basis of their food (any two relevant points)</p>	<p>1</p> <p>1+1</p>	5,6,7
32	<p>Charged by a positively charged rod, through</p> <p>(a) conduction is positive as same charge flows due to direct contact</p> <p>(b) induction is negative as opposite charge is induced by electric induction</p>	<p>0.5+1</p> <p>0.5+1</p>	164,165
33	<p>(a) No, the amount of heat produced in both the wires will be different because amount of heat produced in a wire on passing electric current depends on the length of wire and here length is different for both the wires.</p> <p>Overloading: connection of more than one device/appliance to a single socket.</p> <p>short circuit: touching of the live and neutral wire, due to faulty insulation.</p>	<p>$\frac{1}{2}$</p> <p>+1/2+1+1</p>	248,249
34	<p>The working of an electric bell explanation + Diagram</p> <p style="text-align: center;">OR</p> <p>a) Even if same amount of current flows through the connecting wires and the bulb filament, it is only the filament that glows, as internal resistance is negligible in wire but higher in filament</p> <p>b) Three applications of an electromagnet are –</p> <p>i) Electromagnets are used in electric bells and loudspeakers.</p> <p>ii) It is also used in mobile crane to lift and transfer heavy iron rods & machinery.</p> <p>iii) Many toys also have electromagnets inside them. (Any other relevant point)</p>	<p>3+2(diagram)</p> <p>1+1</p> <p>1</p> <p>1</p> <p>1</p>	249,255 256
35	<p>a. (Any relevant experiment) to show that the charges are always produced in pairs. So the total charge on a pair of objects, that have been rubbed together, is zero. As the combination behaves as uncharged object and will not attract anything.</p> <p>b. Any two precautions that a person can take if he is caught outside in the open during a lightning strike.</p>	3+2	163,164, 168
36	<p>a. In test tube P, blue black colour appeared because of presence of starch.</p> <p>In test tube Q, colour of iodine solution did not change because of starch is digested into sugars by the action of saliva in our mouth.</p> <p>b. Any three preventive measures that one should adopt for avoiding tooth decay</p>	2+3	20, 18,19
37	<p>a. cellular respiration- The process in which the cells use oxygen to breakdown the sugar (glucose) to release energy.</p> <p>b. A- Nasal passage/ nasal cavity B- Pharynx C- Trachea/ windpipe D- Right lung/ lung</p> <p>c. Changes during expiration- (four points)</p> <p>i. the muscles, that lift rib cage and lower the diaphragm, relax</p> <p>ii. the rib cage and diaphragm returns to original position</p> <p>iii. Lungs contract.</p> <p>iv. The air inside the lungs forced out as they contract.</p>	<p>1</p> <p>$\frac{1}{2} \times 4$</p> <p>2</p>	103.108 109

