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|  | **SINDHI HIGH SCHOOL, HEBBAL** |

**PT-3 ANSWER KEY**

**CLASS VII - SCIENCE**

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|  | **Section A** |  |
| 1 | a) Refraction and dispersion of light | **[1]** |
| 2 | **c)** Fragmentation | **[1]** |
| 3 | a) Energy | **[1]** |
| 4 | a) Both A and R are true and R is the correct explanation of A. | **[1]** |
| 5 | c) A is true but R is false. | **[1]** |
| 6 | d) A is false but R is true. | **[1]** |
| 7 | If parallel rays of light fall on a convex lens they converge when passing through and meet at a point on the other side. That's why the convex lens is known as a converging lens. If parallel rays of light fall on a concave lens they diverge as they pass through the lens never to meet at a point. That's why we call them diverging lenses.  A close-up of a diagram  Description automatically generated | **[1]**  **[1]**  **[1+1]** |
| 8 | Magnifying glass is made up of convex lens.  Magnifying lens is a **converging lens**, so it converges the rays of sunlight falling on it to a single point on the paper. Since the rays of sun are heat radiation, So it **raises the temperature** of the paper and thus it starts burning. | **[1]**  **[1]** |
| 9 | i)Cooking oils and fats should not be thrown down the drain. They can harden and block the pipes. ii). Chemicals like paints, solvents, insecticides, motor oil and medicines may kill microbes that help purify water. (ANY TWO POINTS) | **[2]** |
| 10 | 1. A concave lens is thinner in the middle and thicker at the edges. A convex lens is thicker in the middle and thinner at the edges. 2. virtual, erect, and diminished 3. (i) A concave lens is used as the eye lens in a Galilean telescope to obtain the final erect image of the object.   (ii) A person suffering from short sightedness or myopia (i.e., unable to see the far objects distinctly) wears spectacles having the concave lens. | **[1]**  **[1]**  **[1]** |
| 11 | a) 1. Sludge. 2.Wastewater. 3. Sewage  b) Waste Water Treatment Plant  c)  Bar screen removes large solids from the water. As the drainage passes through the bar screen, it can remove large solids such as rags, napkins, sticks, cans, plastic bags, and polyethylene that are present in the drainage. | **[0.5 each]**  [**0.5]**  **[1]** |
| 12 | The transfer of pollen grains from anther to the stigma of a flower is called pollination.  Now the male gamete enters the ovary where fusion of male and female gametes takes place. This process is called fertilisation.  After fertilisation ovary containing several fertilised ovules is called fruit. The fertilised and developed ovule is called seed | **[1]**  **[1]**  **[1]** |
| 13 | 1. i) Anther. ii) Ovary. iii) Stigma. iv) Petals 2. i) A- Spore formation. B- Budding   ii) A-fungi, B-Yeast  iii) Hot temperature and less humidity | **0.5 each**  **[0.5+0.5]**  **[0.5+0.5]**  **[0.5+0.5]** |
| 14 | 1. Typhoid, cholera  2. Septic tanks , Vermicompost tiolets  3. a) To kill harmful microorganisms present in filtered water, by activating aerobic bacteria.  b) Chlorine and Ozone. | **[0.5+0.5]**  **[0.5+0.5]**  **[1]**  **[0.5+0.5]** |