** SINDHI HIGH SCHOOL, HEBBAL**

**PERIODIC TEST - III (2023-24)**

**SUBJECT – Science**

**Class: VII Marks: 30**

**Date: 1/02/2024 Reading Time: 8:20 to 8:30 am Number of printed sides: 3 Writing Time: 8:30 to 09:30 am**

**GENERAL INSTRUCTIONS:**

This Question Paper has 5 Sections A-E.

1. This question paper consists of 14 questions in 5 sections.

2. **Section A** consists of 6 objective type questions carrying 1 mark each.

3. **Section B** consists of 3 Very Short questions carrying 02 marks each. Answers to these questions should be in the range of 30 to 50 words.

4. **Section C** consists of 3 Short Answer type questions carrying 03 marks each.

5. **Section D** consists of 1 Long Answer type question carrying 05 marks..

6. **Section E** consists of 1 source-based/case-based units of assessment of 04 marks with sub-parts

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|  | **Section A** |  |
| 1 | Rainbow formation takes place due to:  a) Refraction and dispersion of light. b) Reflection and dispersion of light  c) Refraction and splitting of light. d) Reflection and refraction of light | **[1]** |
| 2 | Alex observed that a pond with clear water was covered up with green algae within a week. By which method of reproduction did the algae spread so rapidly?  a) Budding b) Sexual reproduction.  c) Fragmentation d) Pollination | **[1]** |
| 3 | Light is a form of  a) Energy. b) Mass. c) Power d) Length | **[1]** |
|  | Questions No. 4 to 6 consists of two statements- Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:  a) Both A and R are true/ and R is the correct explanation of A.  b) Both A and R are true, and R is not the correct explanation of A.  c) A is true but R is false.  d) A is false but R is true. |  |
| 4 | **Assertion (A):** White light is dispersed into its seven-colour components by a prism.  **Reason (R):** Different colours of light bend through different angles with respect to the incident ray as they pass through a prism. | **[1]** |
| 5 | **Assertion (A):** Dispersal of seeds means scattering of seeds over a wide area.  **Reason (R):** Winds only can disperse the seeds all over. | **[1]** |
| 6 | **Assertion (A):** Manhole is like a transport system that carries sewage from the point of being produced to the point of disposal, i.e. treatment plant.  **Reason (R):** Manholes are located at every 50 m to 60 m in the sewerage, at the junction of two or more sewers. | **[1]** |
|  | **Section B** |  |
| 7 | Why is convex lens called converging lens and concave lens called diverging lens? Explain with suitable diagram. | **[2]** |
| 8 | Sahil and Amit were playing with magnifying glass on hot summer day. Amit placed magnifying glass on a piece of paper and started talking to Sahil. After some time, they noticed that paper caught fire. How did this incident happen? Explain. | **[2]** |
| 9 | List some housekeeping practices to minimize or eliminate waste at their source. | **[2]** |
|  | **Section C** |  |
| 10 | a) Differentiate between concave lens and convex lens based on their structure.  b) What are the characteristics of the image formed by concave lens?  c) Write any two applications of concave lens. | **[3]** |
| 11 | a) Pick out the suitable term for the following definitions.  i) The settled solids are removed in wastewater treatment with a scraper.  ii) Water from the kitchen used for washing dishes.  iii) Wastewater released from homes, industries, hospitals, and other public buildings.  b) Write the full form of WWTP.  c) Explain the function of bar screen in WWTP. | **[3]** |
| 12 | Write the various processes involved in the formation of a plant seed. | **[3]** |
|  | **Section D** |  |
| 13 | **a) Name the following parts of the flower,**  **i) The part which contains pollen grains.**  **ii) The part where the female gamete is formed.**  **iii) The female reproductive part where pollen grains germinate.**  **iv) The colourful part of the flower which attracts insects.**  b) Observe the given diagrams and answer the following questions    A B  i) Identify the mode of reproduction in both A and B.  ii) Name atleast one organism which reproduce by above mentioned methods.  iii) In A, there is hard protective coat to withstand unfavorable conditions. Name any two such unfavorable conditions. | **[5]** |
|  | **Section E** |  |
| 14 | Drains serve a good purpose in preventing flooding, but when they lack covers, as is the case for open drains, solid and domestic wastes collect in them and may lead to blockage. As a result, they threaten the people living in the surrounding areas.  According to the information about the international distribution of open drains, most are found in middle and low-income countries. If the open drains are left unchecked, they can be a health hazard to the neighboring population, and that’s because they turn into a breeding ground for disease causing parasite and other microorganisms.  a) Name any two water-borne diseases.  b) If there are no sewerage facilities, write any two alternative arrangements which can be done for sewage disposal.  c) i) What is the purpose of aeration tank in sewage treatment plant?  ii) Name two chemicals used to disinfect water. | **(4)** |

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