

DAV PUBLIC SCHOOLS, BHUBANESWAR

PERIODIC ASSESSMENT -I (2022-23)

- Check that this question paper contains 3 printed pages.
- Check that the question paper contains 19 questions.
- Write down the Serial Number of the question in the left side of the margin before attempting it.
- 15minutes time has been allotted to read this question paper. The question paper will be distributed 15 minutes prior to the commencement of the examination. The students will read the question paper only and will not write any answer on the script during this period.

CLASS-VII

SUB: SCIENCE & TECHNOLOGY

Time Allowed: 1½ Hours

Maximum Marks : 40

General Instructions :

- (i) The question paper comprises four sections A, B,C and D. There are 19 questions in the question paper. All questions are compulsory.
- (ii) Section–A – (question no. 1 to 10) - all questions and parts thereof are of one mark each. These questions contain very short answer questions (QN.1-8), assertion – reason type (QN.9), multiple choice questions (case based questions QN-10). Answers to these questions should be given in one word or one sentence.
- (iii) Section–B - question no. 11 to 14 are short answer type questions, carrying 2 marks each. Answers to these questions should in the range of 30 to 50 words.
- (iv) Section–C - question no. 15 to 17 are short answer type questions, carrying 3 marks each. Answers to these questions should in the range of 50 to 80 words.
- (v) Section–D – question no. - 18 & 19 are long answer type questions carrying 5 marks each. Answer to these questions should be in the range of 80 to 120 words.
- (vi) Wherever necessary, neat and properly labeled diagrams should be drawn.

SECTION-A

- Q1.** Name the group of materials which are made up of same kind of particles. (1)
- Q2.** Identify the mode of transfer of heat in liquids and gases, in which molecules themselves move to carry heat. (1)
- Q3.** State the term used for the substances which are made up of positively or negatively charged particles. (1)
- Q4.** Name the carbohydrate which is the initial product of photosynthesis. (1)
- Q5.** Write the chemical symbol of gold and potassium. (1)
- Q6.** Mention the direction in which the transfer of heat normally takes place. (1)

Q7. Some plants feed on insects. Give reason. (1)

Q8. Cooking utensils have wooden or plastic handles. Justify. (1)

Q9. ASSERTION AND REASON QUESTION: The following question consists of two statements –Assertion (A) and Reason (R). Answer the question by selecting the appropriate option given below. (1)

Assertion (A): $\text{Zn(s)} + \text{CuSO}_4(\text{aq}) \rightarrow \text{ZnSO}_4(\text{aq}) + \text{Cu(s)}$ is a neutralization reaction.

Reason (R): In a neutralisation reaction salt and water are formed.

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A & R are true but R is not the correct explanation of A.
- (c) A is true but R is false.
- (d) A is false but R is true.

Q10. Read the following passage carefully. Answer bit no. (i) to (iv) based on your understanding of the studied concept. (1x4=4)

Many a time we have observed white cottony growth on leather articles in humid weather or greenish blue patches on rotting fruits. Cottony growth, developing into coloured patches, is a common occurrence on stale bread. They decay the food and give foul smell.

(i) These organisms belong to the group of _____ .

- (a) green plants
- (b) herbivores
- (c) carnivores
- (d) both fungi and bacteria

(ii) The mode of nutrition observed in these organisms is

- (a) autotrophic
- (b) saprotrophic
- (c) holozoic
- (d) parasitic

(iii) In these organisms, digestion of food takes place

- (a) outside the cells
- (b) inside the cells
- (c) in their stomach
- (d) none of these

- (iv) Saprotrophic mode of nutrition is shown by
- (a) yeast
 - (b) algae
 - (c) leguminous plants
 - (d) pitcher plant

SECTION-B

- Q11.** Write the chemical formulae of the following compounds: (2)
- (i) Magnesium phosphate (ii) Sodium Oxide
- Q12.** Iron rims are heated red hot before ‘fixing’ them on cart wheels. Give reason. (2)
- Q13.** (i) Balance the following equation: (2)
- $$\text{Ca(OH)}_2 + \text{HCl} \rightarrow \text{CaCl}_2 + \text{H}_2\text{O}.$$
- (ii) Also identify the type of chemical reaction in the above case.
- Q14.** (i) Define decomposition reaction. (2)
- (ii) Give an example of decomposition reaction in the form of a chemical equation.

SECTION-C

- Q15.** (i) Write the meaning of symbiotic relationship. (3)
- (ii) Rhizobium bacterium and leguminous plants help each other in their survival. Explain.
- Q16.** (i) State the range of a clinical thermometer. (3)
- (ii) The clinical thermometer has a short temperature range. Give reason.
- (iii) Mention the function of kink in a clinical thermometer.
- Q17.** Mohan puts an iron nail in copper sulphate solution. Identify the changes he will observe after 5 to 10 minutes. Also write the chemical equation for the chemical reaction involved in it. (3)

SECTION-D

- Q18.** (i) Explain briefly the formation of sea breeze . (5)
- (ii) Give an activity to show transfer of heat through conduction method in solids.
- Q19.** (i) The soil needs to be replenished continuously. Justify. (5)
- (ii) List any three ways in which nutrients are replenished in the soil.