

SANT NIRANKARI PUBLIC SCHOOL  
NIRANKARI COLONY  
CLASS XI SCIENCE

PHYSICS

JUNE WEEK4 ASSIGNMENT 1

1. What is the difference between 4.0 & 4.000?
2. Which of the distance measurements is most precise & why?(i) 500.0 m (ii) 0.0005 m (iii) 6.00 m
3. Find the number of significant figures in the following results:(i)  $2.924927 \times 10^8$  m/s (ii) 3.0120 s
4. The mass of a body is 275.32 g & its volume is  $36.61 \text{ cm}^3$ . Express its density upto appropriate significant figures.
5. If Energy, velocity & Time are the fundamental units, find the dimension of surface tension?
6. For the determination of 'g' using simple pendulum which of either L or T have larger effect on the value of 'g' thus obtained & why?
7. If a unit of force, velocity & energy are 100 dyne, 10 cm/s & 400 ergs. What will be the units of mass, length & time?
8. Force (F) & density (d) are related as :  $F = A / (B + vd)$ . Find the dimensions of A & B.
9. A physical quantity Q is given by  $Q = (A^2 \cdot B^{3/2}) / C^4 \cdot D^{1/2}$   
The percentage error in A, B, C & D are 1%, 2%, 4% & 2%. Find the percentage error in

Q.

10. Assuming that the mass (m) of a stone that can be moved with flowing water depends only on the velocity v, the density d of water & g. Show that m varies with the sixth power of the velocity of flow.

PHYSICS

JUNE WEEK 4 ASSIGNMENT 2

- Q1 - What are errors? Explain two types of errors?
- Q.2 - Convert 25 Joule into erg.
- Q3 - Derive the formulae for velocity (v) of water waves that may depend upon their wavelength  $\lambda$ , density of water  $\rho$  and acceleration due to gravity g.
- Q4 - Find the expression for centripetal force if it depends upon mass of the body, speed of the body, and the radius of the circular path.
- Q5 - What is the significance of precision?
- Q6 - Name the error associated with the resolution of the instrument.

**Assignment- 1 (Week 4)**  
**Subject: MATHEMATICS**

1. Find the power of set  $A = \emptyset$  and the number of element of

- of power of set.
2. *Find the power of set  $A = \{1\}$  and the number of element of power of set.*
  3. *Find the power of set  $A = \{1, 2\}$  and the number of element of power of set.*
  4. *Find the power of set  $A = \{1, 2, 3\}$  and the number of Of element of power of set.*
  5. *Find the power of set  $A = \{1\}$  and the number of element Of element of power of set.*

**Assignment- 2 (Week 4)**  
**Subject: MATHEMATICS**

- 1 Out of 100 students; 15 passed in English, 12 passed in Mathematics, 8 in Science, 6 in English and Mathematics, 7 in Mathematics and Science; 4 in English and Science; 4 in all the three. Find how many passed (i) in English and Mathematics but not in Science (ii) in Mathematics and Science but not in English (iii) in Mathematics only (iv) in more than one subject only 25.
- 2 In a survey of 200 students of a school, it was found that 120 study Mathematics, 90 study Physics and 70 study Chemistry, 40 study Mathematics and Physics, 30 study Physics and Chemistry, 50 study Chemistry and Mathematics and 20 none of these subjects. Find the number of students who study all the three subjects.
- 3 In a town of 10,000 families it was found that 40% families buy newspaper A, 20% families buy newspaper B, 10% families buy newspaper C, 5% families buy A and B, 3% buy B and C and 4% buy A and C. If 2% families buy all the three newspapers. Find (a) The number of families which buy newspaper A only. (b) The number of families which buy none of A, B and C
- 4 In a group of 50 students, the number of students studying French, English, Sanskrit were found to be as follows: French = 17, English = 13, Sanskrit = 15 French and English = 09, English and Sanskrit = 4 French and Sanskrit = 5, English, French and Sanskrit = 3. Find the number of students who study (i) French only (v) French and Sanskrit but not English (ii) English only (vi) French and English but not Sanskrit (iii) Sanskrit only (vii) at least one of the three languages (iv) English and Sanskrit (viii) none of the three languages but not French
- 5 Let U be the set of all boys and girls in a school, G be the set of all girls in the school, B be the set of all boys in the school, and S be the set of all students in the school who take swimming. Some, but not all, students

in the school take swimming. Draw a Venn diagram showing one of the possible interrelationship among sets U, G, B and S.

### **SUBJECT – CHEMISTRY**

#### **CLASS – XI ASSIGNMENT -3**

1. State Avogadro's law.
2. Define one atomic mass unit (amu).
3. Calculate the number of molecules present in 0.5 moles of CO<sub>2</sub>?
4. 1L of a gas at STP weighs 1.97g. What is molecular mass?
5. How much potassium chlorate should be heated to produce 2.24L of oxygen at NTP?

### **SUBJECT – CHEMISTRY**

#### **CLASS – XI ASSIGNMENT -4**

1. What is 1molal solution?
2. Write seven fundamental quantities & their units.
3. How can we say that sugar is solid and water is liquid?
4. What is the difference between mass & weight? How is mass measured in laboratory?
5. Classify following substances as element, compounds and mixtures – water, tea, silver, steel, carbondioxide and platinum.

## **PHYSICAL EDUCATION**

### **JUNE WEEK-4 [Assignment 1]**

#### **Short-I Question Answers (1 Marks)**

1. What are the objectives of Paralympic?
2. what do you mean by special Olympics
3. Explain about the opening ceremony Paralympic
4. Explain the Olympic symbol.
5. Write down about the Olympic Ideals.
6. How many ring on Olympic flag

#### **JUNE WEEK 4-(Assignment 2)**

1. What is the importance of Olympic games
2. Explain the main features the International Olympic committees.
4. .By whom Olympic oath was initially written and who was the founder of modern Olympic games
5. What are the objectives of special Olympics?
5. Explain in detail the functions of Indian Olympic Association.

Subject –English  
Assignment-1 (June Week-4)

Topic-NOTICE WRITING

<b>Name of the Issuing Agency/Authority</b> <b><u>NOTICE</u></b>	
<b>Date of issue/Release of the notice</b>	
<b>Title/Subject of the Event</b>	
BODY (Date/time/duration/Place/Venue)	} Up to 50 words
<b>Authorized signatory</b> Name Signature (Designation )	

**Practice Questions**

**Q1.** As Principal of Sardar Patel Vidyalaya, Lucknow, draft notice in not more than 50 words informing students of the change in school timings with effect from the 1st of February 2021. State valid reasons for the change.

**Q2.** You are the Secretary of the English Literary Association of Tagore Memorial School, Patna. Write out a notice for notice-board, inviting names of those who would like to participate in the proposed inter-house debate contest. (word limit: 50)

**Q3.** You are Rohit/Rashi. As the Secretary of the Cultural Club of your school, you have organised, a Cultural Evening as a thanks giving programme on the last day of your school. Write a notice for your school notice-board, giving necessary information about this event in not more than 50 words.

**Q4.** You are Praveen jPrabha. As the secretary, Science Club of your school write a notice informing students about an Inter-School Science Exhibition and, encouraging them, to attend it.

**Q5.** The Students' Council of your school has organised an excursion to Ajanta and Ellora for the students of classes XI and XII. As President of the Council, write a notice in not more than 50 words telling the students about this excursion and inviting their names for joining it. Invent other necessary details.

## Lesson-1.The Summer Of the Beautiful white Horse (Snapshot)

### **Q. Answer the following questions in about 30-40 words each:**

- Q1. Why did Mourad steal the horse and then return it?
- Q2. How did little Aram define stealing when he had to decide whether or not to ride the horse?
- Q3. Why did John Byro visit Aram's house in his squirey after getting his horse back?
- Q4. What did John Byro say to the boys when he found them walking with it one morning?
- Q5. What do you think induced the boys to return the horse to its owner?
- Q6 What were the peculiarities in Uncle Khosrove's behaviour?
- Q7. What are the unique traits of the Garoghlanian tribe?

## WORKSHEET [June]

### CLASS XI BIOLOGY [BIOLOGICAL CLASSIFICATION]

- Q1. What is the principle underlying the use of cyanobacteria in agricultural fields for crop improvement?
- Q2. Suppose you accidentally find an old preserved permanent slide without a label. In your effort to identify it, you place the slide under microscope and observe the following features
  - a. Unicellular
  - b. Well defined nucleus
  - c. Biflagellate—one flagellum lying longitudinally and the other transversely.What would you identify it as? Can you name the kingdom it belongs to?.
- Q3. How is the five-kingdom classification advantageous over the two kingdom classification?.
- Q4. Polluted water bodies have usually very high abundance of plants like Nostoc and Oscillatoria. Give reasons.
- Q5. Are chemosynthetic bacteria—autotrophic or heterotrophic?
- Q6. The common name of pea is simpler than its botanical (scientific) name *Pisum sativum*. Why then is the simpler common name not used instead of the complex scientific/botanical name in biology?.
- Q7. A virus is considered as a living organism and an obligate parasite when inside a host cell. But virus is not classified along with bacteria or fungi. What are the characters of virus that are similar to non-living objects?
- Q8. In the five kingdom system of Whittaker, how many kingdoms are eukaryotes?

#### Short Answer Type Questions

- Q9. Diatoms are also called as 'pearls of ocean', why? What is diatomaceous earth?
- Q 10. There is a myth that immediately after heavy rains in forest, mushrooms appear in large number and make a very large ring or circle, which may be several meters in diameter. These are called as 'Fairy rings'. Can you explain this myth of fairy rings in biological terms?

## WORKSHEET [June]

### CLASS XI BIOLOGY [BIOLOGICAL CLASSIFICATION]

Q1. Neurospora—an ascomycetes fungus has been used as a biological tool to understand the mechanism of plant genetics much in the same way as Drosophila has been used to study animal genetics. What makes Neurospora so important as a genetic tool?

Q2. Algae are known to reproduce asexually by variety of spores under different environmental conditions. Name these spores and the conditions under which they are produced.

Q3. Apart from chlorophyll, algae have several other pigments in their chloroplast. What pigments are found in blue-green, red and brown algae that are responsible for their characteristic colours?

Q4. 'Peat' is an important source of domestic fuel in several countries. How is 'peat' formed in nature?

Q5. Biological classification is a dynamic and ever evolving phenomenon which keeps changing with our understanding of life forms. Justify the statement taking any two examples..

Q6. Write a short note on Mycoplasma.

Q7. Describe the kingdom Monera.

Q8. Write a short note on plants

Q9. What are the slime molds?

Q10. Write the distinct characters of protozoa

### ASSIGNMENT-1 (WEEK- 4)

#### SUBJECT: Computer Science

Objective type questions (OTQs)

1. The physical and tangible electronic components of a computer system are known as \_\_\_\_\_.
2. The programs which provide commands to work upon and govern the working on the computer is known as \_\_\_\_\_.
3. Which of the following function(s) does not require the user's involvement – Input, Process, Output, Storage
4. The \_\_\_\_\_ of CPU is responsible for supervising the requests received from CPU.
5. Which part of the CPU carries out the arithmetic instructions and logical comparison to complete the task?
6. The computer follows the IPO cycle that refers to Input-Performance-Output. (True/False)

7. The small units of data storage hold the places of data in the CPU is \_\_\_\_\_.
8. When the power is turned off, data will be lost. This is known as \_\_\_\_\_.
9. The \_\_\_\_\_ is volatile memory where \_\_\_\_\_ non-volatile memory.
10. SRAM is faster memory than DRAM. (True/False)
11. The \_\_\_\_\_ memory is high-speed memory available inside CPU to speed up access to data and instructions stored in RAM.
12. The output carried out from the mobile system using \_\_\_\_\_ systems.
13. The mobile system doesn't have RAM and ROM. (True/False)
14. The external storage of mobile systems are known as \_\_\_\_\_ storage.
15. The battery in the mobile system is known as \_\_\_\_\_.
16. The software that controls the internal operations of a computer is known as \_\_\_\_\_ software.
17. The program code written by the user is known as \_\_\_\_\_.
18. The converted code into machine-readable form is known as \_\_\_\_\_ code.
19. Which language processor executes the program line-by-line?
20. Which language process executes the whole program in one go?
21. The set of some basic applications are provided by \_\_\_\_\_ type for application software.
22. The software made to fulfill users need is known as \_\_\_\_\_ software.
23. The pre-written code that can be used to develop applications are known as \_\_\_\_\_.
24. The software provided in Operating Systems to assist the user is known as \_\_\_\_\_.
25. Notepad is a very popular package for documentation. (True/False)

## **ASSIGNMENT-2 (WEEK- 4)**

### **SUBJECT: Computer Science**

1. Internet security is a major issue for many people. The following is a list of four typical security issues:

- a. Pharming
- b. Phishing
- c. Spyware
- d. Virus

For each one, describe the security issue and suggest a way of protecting against it .

2. What is the significance of a firewall in a computer's security scheme?
3. How is pharming similar to and different from phishing?
4. What is digital property? Give some examples of digital property.
5. Why should intellectual property rights be protected?