

# Winter Vacation Home Work- 2023-24

## Class- IX

### COMPUTER APPLICATION

- 1) Calculate Total Marks, Percentages, and Grades and generate a Report Card with a chart, of your class student in MS Excel.
- 2) Calculate the Salary of the employee using different Columns like Employee ID, Name, Address, DOB, DOJ, Designation, Basic, DA, HRA, TA, Total Salary, IT, EPF and Net Salary and generate a Report with the chart in MS Excel.

Note:

- a) DA =10% of Basic,
- b) HRA =10% of Basic
- c) TA = 5% of Basic
- d) EPF deducted 12% of Total\_sal
- e) IT (Income Tax) deducted on condition that Total Salary is greater than 25000.00Rs. Then IT will be 8 % of the Total Salary otherwise IT will be 0.00)

### हिंदी

1. दिए गए संकेत-बिंदुओं के आधार पर 200-250 शब्दों में एक निबंध लिखिए-

#### विद्यार्थी और फैशन

फैशन का बोलबाला..... विद्यार्थियों पर फैशन का प्रभाव..... फैशन के लाभ..... हानियाँ..... समाज पर प्रभाव ।

#### मेट्रो रेल

महानगरों की भीड़..... यातायात और प्रदूषण..... मेट्रो रेल योजना..... लाभ..... आगामी योजना ।

- 2.आपके पसंदीदा सीरियल के किसी पात्र से अचानक मुलाकात को संवादात्मक रूप में लिखिए।

## **ENGLISH**

**1. Think and write a note in about 200 words on account of what life in Rameswaram in the 1940s must have been like this. (Were people rich or poor? Hard-working or lazy? Hopeful of change or resistant to it?)**

**2. Read the book “Five Tales of Shakespeare” and write a brief synopsis of the book.**

**Author- plot- characters- your opinion – conclusion. And design an attractive cover page of the book review was written.**

## **MATHS**

### **SECTION: A**

**Activity work: 1-make the clay model of any one of the following and calculate LSA/ CSA, TSA and volume of the selected model.**

- (I) Cube**
- (ii) Cuboid**
- (iii) Right circular cylinder**
- (IV) Right circular cone**
- (v) Sphere**
- (vi) hemisphere**

### **SECTION: B**

**Project work: 1- Draw a circle and its related terms on a chart paper.**

### **SECTION: C**

#### **Pen-Paper work**

- (i) state and prove the midpoint theorem.**
- (ii) write down the properties of a parallelogram.**
- (iii) list the all formulas used in chapter surface areas and volumes.**
- (IV) state the linear pair axiom.**
- (v) state and prove the vertically opposite angles property.**

## **SOCIAL SCIENCE**

Make a project file on a given topic.

- 1. Public distribution system in India.**
- 2. Mahatma Gandhi National Rural Employment Scheme.**
- 3. Right to Information Act.**
- 4. One nation one election need and challenges.**

## **BIOLOGY**

Visit a crop field, a poultry farm, a nursery/ horticulture, to cow/ cattle shed, to a pond if possible and click the picture of these agricultural practices and list the grains, live stocks wood stocks.

## **PHYSICS**

**Class 9<sup>th</sup> B**

- 1) Sound cannot travel in a vacuum. Describe an experiment to demonstrate this.**
- 2) Explain the structure of the human ear with the help of a diagram.**

### **Value-Based Questions**

1: Raj noticed that his pet dog was frightened and trying to hide in a safe place in his house when some crackers were bursting in the neighbourhood. He realized the problem and he decided not to burst crackers during Diwali or for any other celebrations.

- (a) What must be the range of the crackers' sound?**
- (b) Name two diseases that can be caused due to noise pollution.**
- (c) Name the values of Raj reflected in the above act.**

2: **It is not advisable to construct houses near airports, despite that many new residential apartments are constructed near airports. Sumit files RTI and also complains to the municipal office about the same.**

- (a) Why one should not reside near the airport?**
- (b) Name other two places where there is noise pollution.**
- (c) What value of Sumit is reflected in this act?**

## **CLASSES 9<sup>th</sup> A, C, D**

- 1) Sound cannot travel in a vacuum. Describe an experiment to demonstrate this.
- 2) Explain the structure of the human ear with the help of a diagram.
- 3: Given that sound travels in air at 340 m/sec, find the wavelength of the waves in air produced by a 20 kHz sound source. If the

same source is put in a water tank, what would be the wavelength of the sound waves in the water? (Speed of sound in water = 1480

m/s.)

4: A child watching the Dussehra celebration from a distance sees the effigy of Ravana burst into flames and hears the explosion

associated with it 2 sec after that. How far was he from the effigy if the speed of sound in air that night was 335 m/sec?

### **Value-Based Questions**

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2: It is not advisable to construct houses near airports, despite that many new residential apartments are constructed near airports. Sumit files RTI and also complains to the municipal office about the same.

- (a) Why one should not reside near the airport?
- (b) Name other two places where there is noise pollution.
- (c) What value of Sumit is reflected in this act?

2) ASSERTION: If the frequency of vibration is higher, we say that the sound is shrill and has a higher pitch.

REASON: The frequency determines the shrillness or pitch of a sound.

- a) Assertion and reason both are correct statements and reason is the correct explanation for assertion.
- b) Assertion and reason both are correct statements and reason is not the correct explanation for assertion.
- c) Assertion is a correct statement but reason is a wrong statement.
- d) Assertion is a wrong statement but reason is a correct statement.

3.) ASSERTION: The voices of children and adults are different in their voices.

REASON: This happens because the frequency of the voice of a child is lower than the of an adult.

- a) Assertion and reason both are correct statements and reason is the correct explanation for assertion.
- b) Assertion and reason both are correct statements and reason is not the correct explanation for assertion.
- c) Assertion is a correct statement but reason is a wrong statement.
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## **CHEMISTRY**

1. Define polyatomic ions. Give one example.
2. What is the formula unit of mass? How is it different from molecular mass?
3. What is the Law of conservation of mass and the Law of constant proportions?
4. What is an ion? Explain the types of ions with examples.
5. Find the molecular mass of  $H_2O$ .
6. Define the term valency. What is the valency of magnesium and copper?
7. What is the difference between cation and anion?
8. What is atomicity? What is the atomicity of phosphorus and nitrogen?
9. Calculate the formula unit mass of  $NaCl$  and  $CaCl_2$ .
10. What is the difference between molecules  $2O$  and  $O_2$ ?