

**St. Joseph's High School**  
**Mandi Dabwali.**  
**Winter Holiday Homework(2023-2024)**  
**Classes-IX(A,B,C and D)**  
**Subject:English-I**

**Email**

1. Write an email to the General Manager of a local hospital requesting them to send a senior doctor to talk to the participants at the event about the quality of the mask that will give them the best protection.

**Notice**

2. Every year in the central part of the city a flower show is held in the month of January. Your school has received a circular from the District Collector inviting your students to visit it. Write a notice informing the students about the show and advising them to go and enjoy it.

**Formal Letter**

3. Write a letter to the Editor of a local newspaper about a road that needs repair in your city and how it is causing a lot of problems to the local people.

**Informal Letter**

4. Write a letter to your friend inviting him to spend the winter vacation at your place in Mumbai.

*Note: Revise, the rules of the chapters included in the final semester*

**Subject:English-II      Classes:IX(A,B,C and D)**

1. 'A Doctor's Journal Entry for August 6,1945'(Poem)

Passage No.5-"She did not wish.....caused so much pain."

2.Act II Scene I(Julius Caesar)

Passage No.3-"**Brutus**-no,not an oath.....hence to his idle bed."

3.'The Boy who broke the Bank'(Story)

Passage No.6-"Men stood in groups.....morning by the sweeper -boy."

**Note:Do all the questions of the above mentioned extracts given in your workbook in a separate notebook.**

**Learn all the chapters included in the final semester.**

St. Joseph's High School  
Mandi Dabwali  
Holidays Homework

Class - IX

Subject: Hindi

हिंदी सरस व्याकरण में से प्रश्न पत्र-1 और प्रश्न पत्र-2  
का लिखकर अभ्यास करें।

साहित्य सागर में से  
संक्षिप्त कहानियाँ (1 से 5), कविताएँ (1 से 5) और  
एकांकी संचय में से  
एकांकी (1 से 3) दोहराएँ।

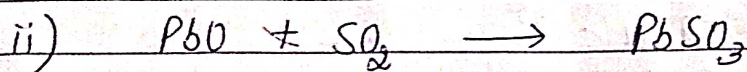
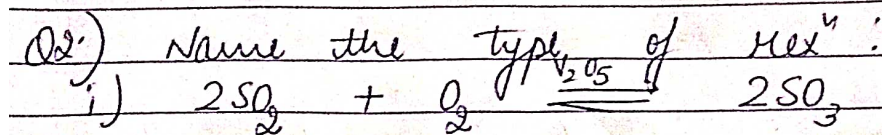


Chemistry (Worksheet).

Q1) Fill in the blanks:

- i)  $\text{SO}_2$  gas turns \_\_\_\_\_ potassium dichromate paper green.
- ii) Pressure - Volume relationship is given by \_\_\_\_\_.
- iii) The drying agent to dry  $\text{H}_2$  gas is \_\_\_\_\_.

Q2) Name the type of  $\text{Hex}^n$ :



Q3) Give reasons:

- i) Alkali metals are kept in inert solvent.
- ii) Inert gases don't form compounds.
- iii) The level of conc.  $\text{H}_2\text{SO}_4$  increases when exposed to air.
- iv)  $\text{FeCl}_3$  is stored in air tight bottles.

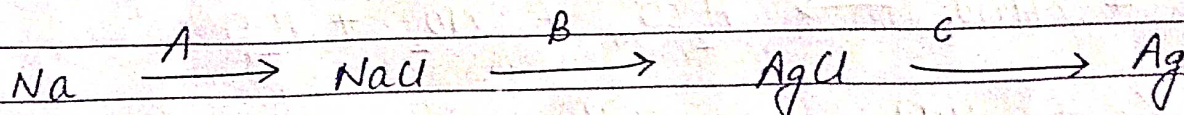
Q4) Name:

- i) A metal which reacts reversibly with steam.
- ii) A metal which doesn't react with water at any condition.
- iii) A neutral oxide which exists in liquid state at room temp.

Q5) State observations:

- i) When copper nitrate is heated.
- ii) When  $\text{Pb}(\text{NO}_3)_2$  reacts with  $\text{HCl}$  acid.
- iii) When  $\text{Fe}$  is added to  $\text{CuSO}_4$  sol<sup>n</sup>.
- iv) When  $\text{FeS}$  reacts with dil  $\text{HCl}$ .

Q6) Convert:



Q7) Give equations for the following:



- i) Colour Change :
- Blue to green
  - White to yellow

- ii) Example of precipitation Rx<sup>n</sup>
- Yellow ppt
  - dirty green ppt

Q8) State and explain in brief anomalies of Mendeleev's Periodic Table.

- Q9) The ques. is related to lab prepr<sup>n</sup> of  $H_2$ .
- How the gas is collected?
  - Name the drying agent.
  - Why dil. nitric acid is not used to prepare  $H_2$ ?
  - Name the sol<sup>n</sup> used to remove impurities of  $H_2S$  from  $H_2$ .
  - Give eq<sup>n</sup> for the prepr<sup>n</sup> of  $H_2$ .

- Q10) Arrange :
- gp - 1 elements (↑ order of At. Size)
  - gp - 2 " (↑ " " No. of shells)
  - Period - 2 " (↑ " " valence shells)

Q11) Why Newland's law of octaves was rejected?

Q12) Explain by taking the eg of Halogens, why Dobereiner's Triads failed?

Q13) Balance :

- $P + HNO_3 \longrightarrow NO_2 + H_2O + H_3PO_4$
- $S + HNO_3 \longrightarrow H_2SO_4 + NO_2 + H_2O$
- $Zn + HNO_3 \longrightarrow Zn(NO_3)_2 + H_2O + NO_2$
- $MnO_2 + HCl \longrightarrow MnCl_2 + H_2O + Cl_2$



Q14)  $MCl_2$  is a chloride of Metal. Write formula of M with its :

- a) sulphate                      b) hydroxide

Q15) State valency & Symbol of :

- a) Ferric ion                      b) Cuprous ion                      c) Acetate ion  
d) Zincate ion.

Q16) An element  $^{40}_{20}X$  :

- a) Write Electronic configuration  
b) Oxidising / Reducing agent  
c) When X combine with Chlorine. State the type of bonding & formula of compound formed  
d) Identify X.

Q17) The ques is related to the Rutherford's scattering experiment :

- i) Name the metal used & why?  
ii) What would be the observation if the metal used in exp. is replaced by Li?

Q18) Explain Boyle's law on the basis of Kinetic theory.

Q19) State the significance of Charles law.

Q20) Solve :

i) To what temp, must a gas at 300 K be cooled down in order to reduce its vol. to  $\frac{1}{3}$ rd of its original volume, pressure remaining constant?

ii) At constant Temp, a gas is at a pressure of 1080 mm Hg. If the vol. of gas is decreased by 40%, find the new pressure of the gas.



Q21.) What are the causes for the destruction of Ozone layer?

Q22.) Give eq<sup>n</sup> for the formation of Ozone in air.

Q23.) Name:

- i) Allotrope of Oxygen which cause green house effect.
- ii) The oxide of Nitrogen which causes global warming.

Chemistry - Revise all the chapters  
of syllabus for the  
Final Exams



St. Joseph's High School  
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Std: IX

Holidays Homework

Sub: Geography

1. Paste 6 Physical Maps (World) on the scrap book and mark the following:-

- a. Tropical Desert Regions
- b. Tropical Monsoon Regions
- c. Equatorial Forest Regions
- d. Major Water Bodies
- e. Major Mountains
- f. Major Plateaus

2. Draw the following diagrams on the scrap book:-

- a. Pressure Belts of the World.
- b. Heat Balance
- c. Convectional Rainfall
- d. Orographic Rainfall
- e. Frontal Rainfall

3. Learn Ind Semester Syllabus properly. Monthly Test of full portion will be conducted on 16.01.2024.



Std. IX

Sub: History & Civics

1. Paste the following pictures on the scrap Book and Frame picture-studies questions with answers:-

- a. The Red Fort
- b. Ain-i-Akbari
- c. Jama Masjid
- d. The Last Supper

2. Learn II<sup>nd</sup> Semester syllabus properly. Monthly Test of full syllabus will be conducted on 19.01.2024.



# Physics Worksheet

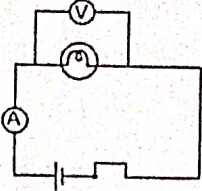
## Std. IX

### Holiday Homework.

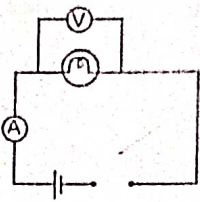
#### Level 1

- A charge is taken from point X to point Y. What do you call the work done per unit charge in this process?
  - The potential at point X
  - The potential at point Y
  - The current flow from point X to Y
  - The potential difference between point Y and X.
- Which of the following circuits is a closed circuit?
 

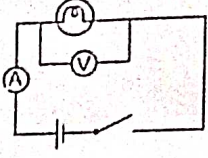
(a)



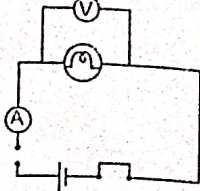
(b)

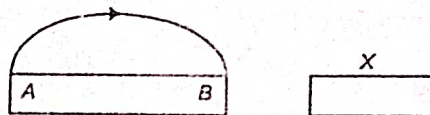


(c)



(d)


- What is the use of voltmeter in an electric circuit?
  - To measure resistance
  - To measure potential difference
  - To measure electric current
  - To measure electric power
- When does current flow in a circuit?
- State two characteristics if resistors are connected in series.
- How is the current flowing in a conductor changes, if the resistance of the conductor is doubled keeping the same potential difference across it?
- A magnet  $AB$  is placed near an iron bar  $X$ . Name the poles at  $A$  and  $B$ . How do you draw your conclusion?



- Name one practical use of soft iron and steel each based on its magnetic properties.
- State uses of the following:
 

(i) Voltmeter

(ii) Cell

(iii) Ammeter

(iv) Galvanometer

#### Level 2

- What does magnetic field lines indicate?
  - south-north direction
  - electric field
  - magnetic field
  - both magnetic and electric field
- What is the objective of energy management?
  - minimising waste
  - minimising energy costs
  - minimising environmental degradation
  - all of these
- Define the following:
 

(i) electric potential

(ii) one volt

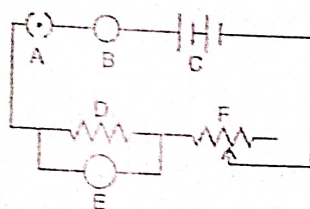
(iii) closed circuit

(iv) accumulator
- State three observations regarding a bar magnet, if it is broken into two equal parts.
- Define magnetic field. State three properties of magnetic field lines.
- You are given a cell, a key, a resistance wire, an ammeter and a voltmeter. You are required to measure the current in the resistance wire and potential difference across it. Draw a labelled diagram to show how are they connected. Also mark the direction of current in the circuit.



### Level 3

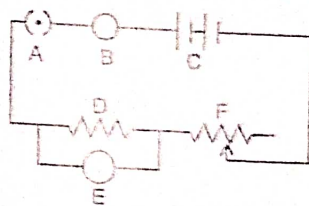
16. Which of the following is the best material for making an electromagnet?  
(a) silver (b) soft iron (c) nickel (d) steel
17. Label the different parts A, B, C, D, E and F in the electric circuit shown below.



18. (i) State three differences between a primary cell and a secondary cell.  
(ii) Write three requirements of a good cell.
19. When the starter motor of a car is switched on for 1.7s, a charge of 34 C passes through the coil of the motor. Calculate the current in the motor.
20. Define magnetic pole and magnetic equator. Also state the nature of magnetic field lines at magnetic pole and magnetic equator.
21. A charge of 0.5 C passes through a cross-section of a conductor in 5 s. Find:  
(a) How many electrons will flow in this time interval, if the charge on one electron is  $1.6 \times 10^{-19} \text{ C}$ ?  
(b) Current through the conductor.

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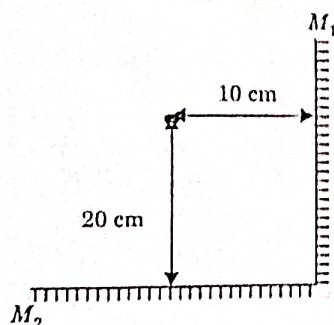


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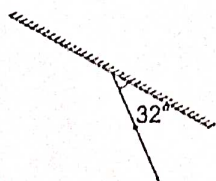


### Level 1

- What is the focal length of a plane mirror?  
(a) zero (b) infinity  
(c) positive (d) negative
- Which of the following mirrors is used in cars to have a very wide field of view?  
(a) concave  
(b) plane  
(c) convex  
(d) convex mirror and concave mirror
- A very small object  $O$  is placed in front of two mirrors  $M_1$  and  $M_2$  which are placed perpendicular to each other. Locate the positions of all the images formed by the mirrors.



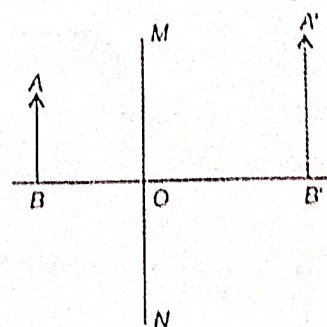
- A ray of light strikes a plane mirror at an angle of  $32^\circ$  as shown in the figure. What is the angle between the incident and the reflected rays?



- State two uses each of concave mirror and convex mirror.
- You are given a concave mirror of focal length 10 cm. An object is placed in front of the concave mirror at a distance equal to twice of focal length of the mirror. Where will the image be formed? State its nature also.
- You are given three mirrors of equal size—plane, convex and concave. How will you identify them without touching their surfaces?

### Level 2

- A person looks into the mirror by placing it close to his face. The image of his face is erect, laterally inverted and of the same size. Which mirror is it?  
(a) convex  
(b) concave  
(c) convex or plane  
(d) plane
- If the object is placed in front of a concave mirror at the focus of the mirror, where does the image form?  
(a) At focus  
(b) Between focus and pole  
(c) At centre of curvature  
(d) At infinity
- A patient for eye testing looks in a plane mirror placed 2 m in front of him/her and a chart is placed 3 m behind him. How far away from him/her will the chart seem to be?
- Out of two mirrors (convex or plane) which has wider field of view? Justify your answer with the help of proper ray diagrams.
- Obtain a relation between radius of curvature and focal length of a concave mirror.
- Sunlight is incident on a concave mirror parallel to its principal axis. The image is formed at a distance of 26 cm from the pole. Find the radius of curvature of the concave mirror in SI units.
- In the given figure,  $AB$  is an object,  $A'B'$  is its image and  $MN$  is the position of the mirror. State the kind of mirror. Also complete the ray diagram to show the formation of image.





### Level 3

15. P, Q, R and S denote the object distance, image distance, radius of curvature and focal length of a mirror respectively. Which of the following is the correct relation connecting the above given parameters?
- (a)  $\frac{1}{P} + \frac{1}{Q} = \frac{1}{S} = \frac{2}{R}$
- (b)  $\frac{1}{P} + \frac{1}{Q} = \frac{1}{S} = \frac{R}{2}$
- (c)  $\frac{1}{P} \div Q = \frac{1}{S} = \frac{2}{R}$
- (d)  $\frac{P \div Q}{PQ} = S = \frac{R}{2}$
16. In a dark room, a parallel beam of light is incident on a plane mirror and another parallel beam of light is incident on a white wall. What will be your observation and why?
17. Two plane mirrors  $M_1$  and  $M_2$  are erected 20 cm apart parallel to each other. A point object is placed between them and 5 cm from mirror  $M_1$ , determine the distance of the three nearest images from the mirror  $M_1$ .
18. What do you mean by lateral inversion? Write the letters of English alphabet which in front of plane mirror do not show lateral inversion.
19. Find the position, size and nature of the image formed by a spherical mirror from the given data: Focal length,  $f = -12$  cm, object distance,  $u = -36$  cm and size of the object,  $O = 2$  cm.
20. An object of size 1.2 cm is placed at a distance of 12 cm from a convex mirror of radius of curvature 12 cm. Find the position of the image and size of the image.



Holiday's Home work

26.12.2023

Class IX<sup>th</sup>

Sub. Phy. Edu. (Sports)

1. Draw a neat and clean diagram of Basketball Court on fair note-book.
2. Draw a neat and clean diagram of Football ground on fair note-book.





# Winter Holidays Homework class: 9 Biology.

- Read and revise following chapters -
  - \* Chap- 2, 6, 7, 11, 12, 13, 14, 18.
- Draw the diagrams of foll:-
  - \* Mitochondria
  - \* Nucleus
  - \* Villi
  - \* Bean Seed
- learn progress check and review questions of chapters included in finals.



**St. Joseph's High School**

**Mandi Dabwali**

**Holidays' Homework for Winter break**

Class: 9<sup>th</sup>

Sec - (A+B+C+D)

Sub: Mathematics

Ch – 7 (Indices)

Ex – 7(B): Q10 to Q15.

Ch – 8 (Logarithms)

Ex – 8(B): Q2 to Q10.

Ch – 15 (Constructions of polygons)

Ex – 15: Do sums 3, 7, 9, 12, 16, 18, 22, 30 and 33.

Ch – 17 (Circle)

Ex – 17(B): Q2 to Q5.

Ch – 21 (Solids)

Ex – 21: Q2 to Q8.

Ch – 27 (Graphical Solution)

Ex – 27(B): Q2 to Q5.

**Note: Revise the syllabus for final examination.**



Std IX

### Punjabi Holiday's Home Work

1. Revision for final examination.

2. ਅਣਡਿੱਠਾ ਪੌਰਾ ਰਚਨਾ (1-10) ਹੱਲ ਰਹਿਤ

3. ਲੇਖ ਰਚਨਾ :  
ਓ. ਗੁਰੂ ਤੇਗ ਬਹਾਦਰ ਜੀ  
ਅ. ਮਾਤ ਭਾਸ਼ਾ ਦੀ ਮਹਾਨਤਾ  
ੲ. ਵਿੱਦਿਆ ਦੇ ਲਾਭ  
ਸ. ਮਹਿੰਗਾਈ ਦਾ ਆਸ ਆਦਮੀ 'ਤੇ ਅਸਰ  
ਹ. ਰਾਸ਼ਟਰ ਨਿਰਮਾਣ ਵਿੱਚ ਇਸਤਰੀ ਦਾ ਯੋਗਦਾਨ

Note: Essay and Unseen Passage must be done on holidays H.W. note-book.