

# Important Diagrams (SSC Public Exams-2024)

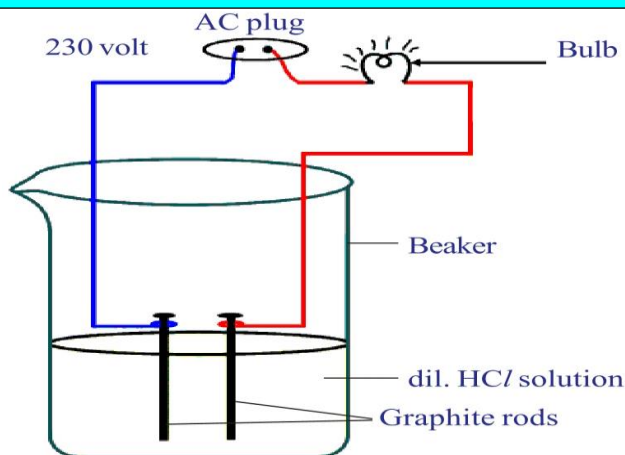
## CHEMISTRY

• 4 Marks and 1 Mark Diagrams

## PHYSICS

• 4 Marks and 1 Mark Diagrams

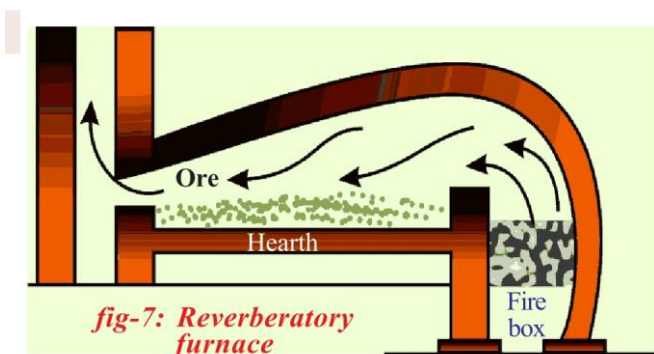
1. Draw a neat diagram showing an acid solution in water conducts electricity. Why the solution of sugar/glucose in water do not conduct electricity?



*fig-3: Acid solution in water conducts electricity*

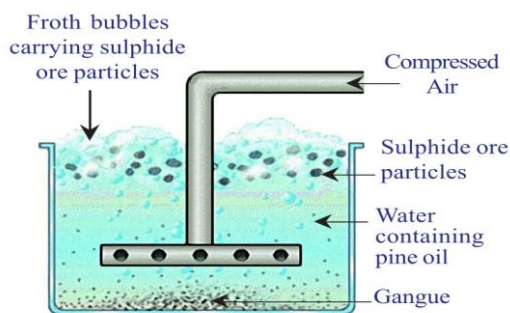
2. Draw Reverberatory furnace and label its parts (OR)

Which furnace is generally used for roasting?  
Draw a neat diagram and label the parts of this



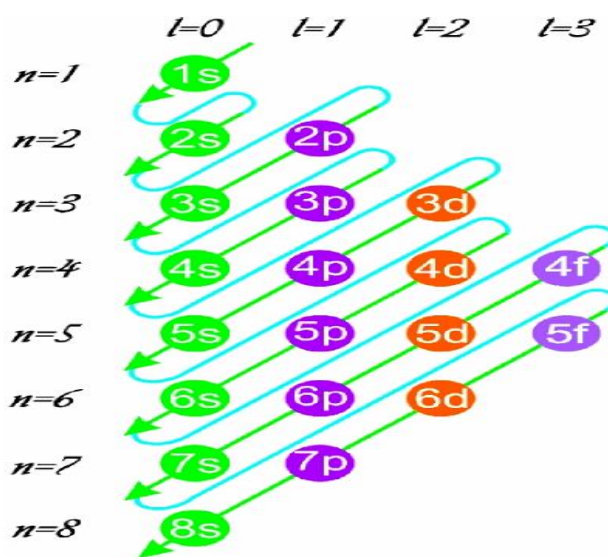
*fig-7: Reverberatory furnace*

3. Which method is suitable to enrich sulphide ores? Draw a neat diagram and label the parts (OR)  
Draw the diagram showing Froth floatation method and label its parts.



*fig-1: Froth floatation process for the concentration of sulphide ores*

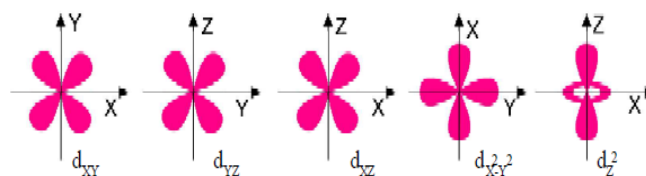
4. Draw a diagram showing the increasing value of  $(n+l)$  of orbitals (OR) Draw moeller chart of filling order of atomic orbitals.



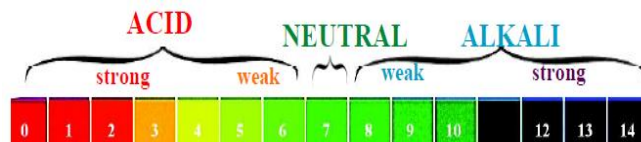
*fig-6: The filling order of atomic orbitals (Moeiler Chart)*

5. Draw the d-orbitals (OR)

Draw the shapes of orbitals with  $l = 2$



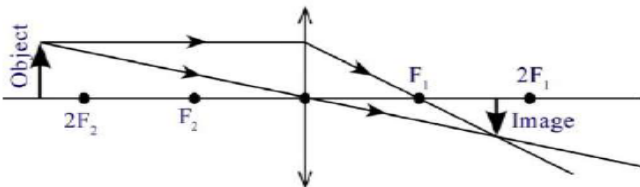
6. Draw pH value as shown by different colour in universal indicator



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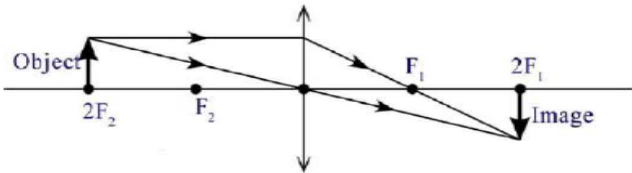
1. Draw ray diagrams for the Convex lens following positions and explain the nature and position of image.
- 2) Object is placed at beyond  $2F_2$
- 3) Object is placed at  $2F_2$
- 4) Object is placed between  $F_2$  and  $2F_2$
- 5) Object is placed at  $F_2$
- 6) Object is placed between  $F_2$  and optic centre

**2) Object placed beyond the centre of curvature on the principal axis:**



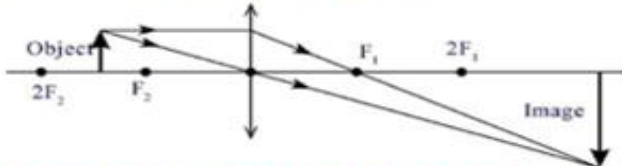
- Nature and position of the image:**  
 a) Real, Inverted and Diminished image  
 b) Between  $F_1$  and  $2F_1$

**3) Object placed at the centre of curvature:**



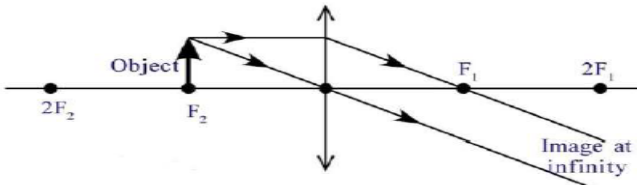
- Nature and position of the image:**  
 a) Real, Inverted and same size of the object  
 b) At  $2F_1$

**4) Object placed between the centre of curvature and focal point:**



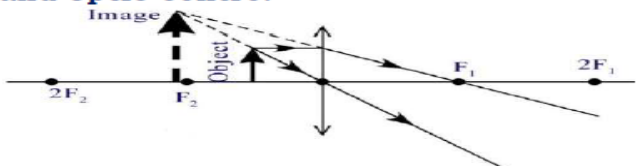
- Nature and position of the image:**  
 a) Real, Inverted and Enlarged (Magnified) image  
 b) Beyond  $2F_1$

**5) Object located at the focal point:**



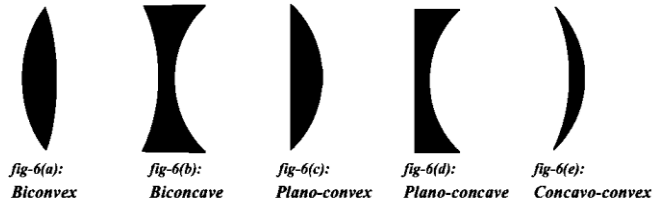
- Nature and position of the image:**  
 a) Real, Inverted and Enlarged (Magnified) image  
 b) At infinite distance

**6) Object placed between focal point and optic centre:**

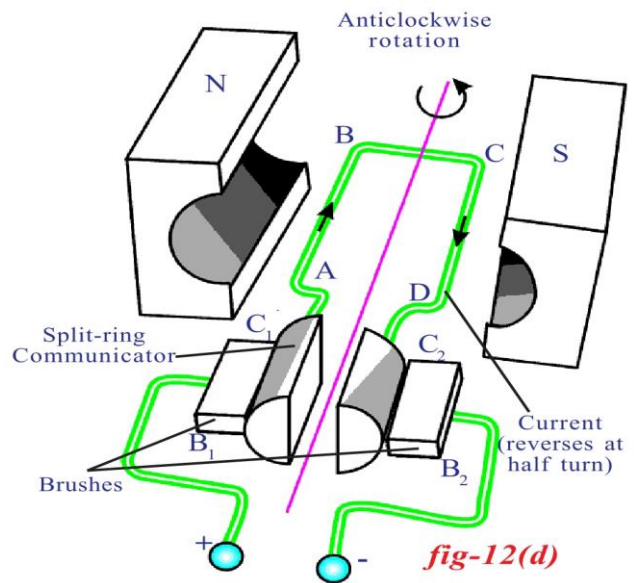


- Nature and position of the image:**  
 a) Virtual, Erected and Enlarged (Magnified) image  
 b) Behind the object (same side of the object)

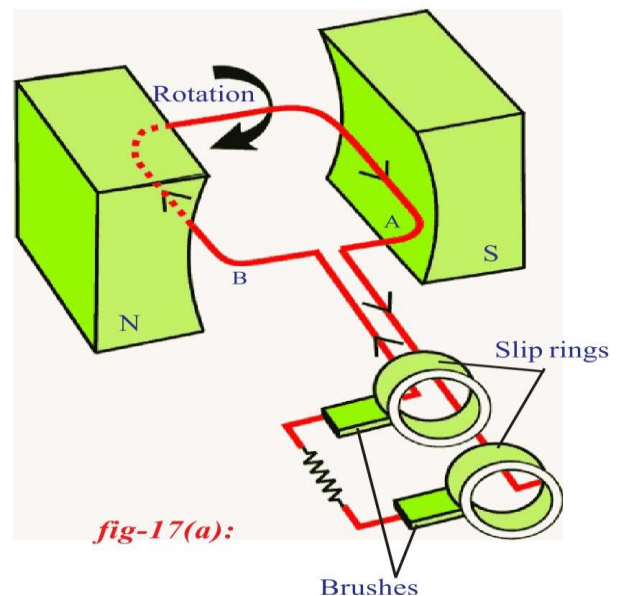
**2. Draw various types of lenses.**



**3. Which device is used to convert electric energy into mechanical energy? Draw a neat diagram and label the parts of this device (OR) Draw a neat diagram of the Electric motor and name the parts.**

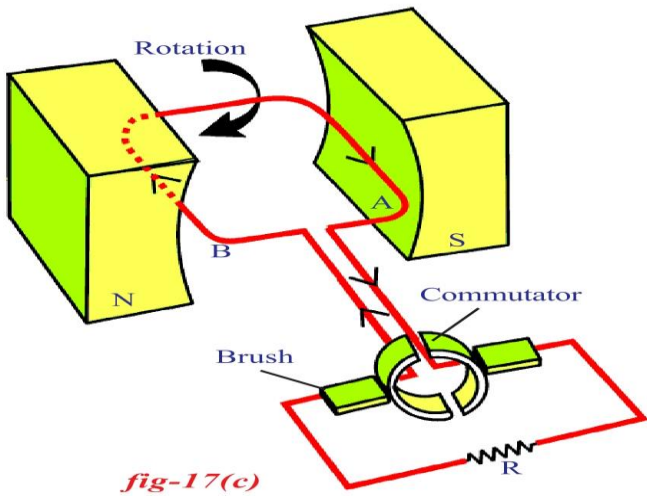


**4. Which device is used to convert mechanical energy into electrical energy? Draw a neat diagram and label the parts of this device (OR) Draw a neat diagram of A.C generator and name the parts.**



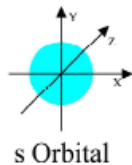
# Important Diagrams (SSC Public Exams-2024)

5. Which device is used to convert mechanical energy into electrical energy? Draw a neat diagram and label the parts of this device (OR) Draw a neat diagram of D.C generator and

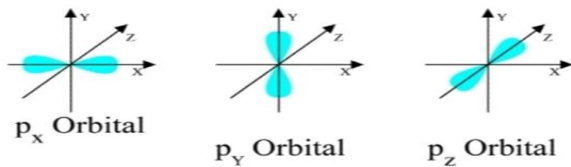


## 1 Mark Diagrams (Physics and Chemistry)

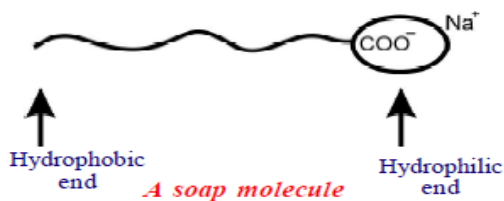
1. Draw the shape of s-orbital



2. Draw the shape of any one of p-orbital



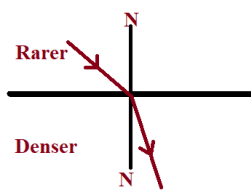
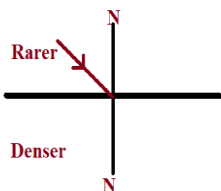
3. Draw the simple figure of a soap molecule.



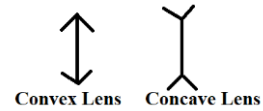
4. Represent Calcium atom using Lewis notation.



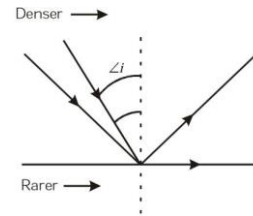
1. Complete the ray diagram



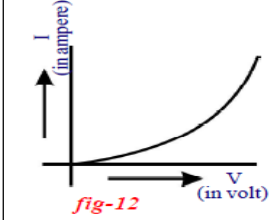
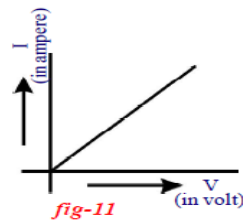
2. Draw the symbols of Convex lens and concave lens



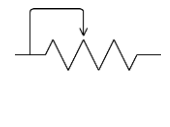
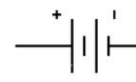
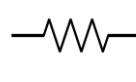
3. Which phenomenon do you observe from the figure?



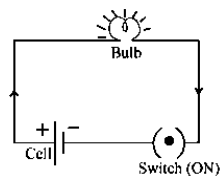
4. Draw V-I shapes of Ohmic and Non-Ohmic conductors



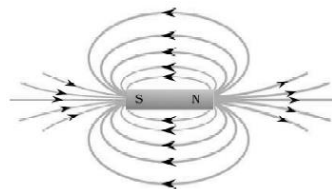
5. Draw the symbols of  
a) Resistance b) Resistor c) Battery d) Rheostat



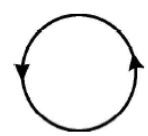
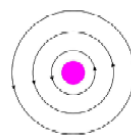
6. Draw a simple electric circuit.



7. Draw the magnetic field lines to form around the bar magnet.



8. Observe figure. a) What is the direction of current  
b) What type of magnetic pole formed at the face



a) Into page

b) North pole

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