## PHYSICS

1. A force of 200 N is applied perpendicular to its surface having area 4 square metres. Calculate the pressure.
2. The density of water is $1000 \mathrm{~kg} \mathrm{~m}^{3}$. If relative density of iron is 7.874 , then calculate the density of iron.
3. Mass of aluminum is 67 kg . Volume of aluminium is $0.025 \mathrm{~m}^{3}$. Calculate the density of aluminium.
4. Define pressure of fluid.
5. A camel can walk easily in Sandy desert than a man although the weight of the camel is mush more than that of the man. Comment.
6. A person weight 60 kg . The area under his feel of the person is $180 \mathrm{~cm}^{2}$. Find the pressure exerted on the ground by the person.
7. What are the laws of floatation in a liquid ? Give some illustrations.

## CHEMISTRY

1. The latent heat of vaporization of steam is more than that of the boiling water explain?
2. What is meant by particulate nature of matter? List four characteristics of Partiche nature of matter.
3. Suggest a method to liquefy atmospheric gases.
4. Which type of metal show properties
a. Soft metal b. Liquid State
5. Some properties show the metal and non metal.
a. Malleable
b. Ductile
c. Sonorous
d. M.P and B.P
6. Four characteristics of compound.

## BIOLOGY

1. What is the basic unit of classification?
2. a. Name the highest taxonomic category.
b. Who is the father of taxonomy?
3. a.What is meant by nomenclature?
b. Who proposed binomial momenclature?
4. a. Name the scientist who proposed the binomial system.
b. What is taxonomy?
5. What are the advantages of classification organisms?
6. Write the binomial name of any one organism. Write down the descending order of taxonomic herarchy.
7. What is five kingdom classification and who proposed it?

## MATHS

1. In figure, $A O C$ is a line, find $x$.

2. In figure, $\angle \mathrm{AOC}$ and $\angle \mathrm{BOC}$ form a linear pair. If $\mathrm{a}-$ $\mathrm{b}=80^{\circ}$, find the values of a and b .

3. In figure, $O P$ and $O Q$ are opposite rays. Find $x$.

4. In the given figure, AB is a mirror, PQ is the incident ray and QR , the reflected ray. If $\angle \mathrm{PQR}=112^{\circ}$, find $\angle \mathrm{PQA}$.

5. The sides of a triangular plot are in the ratio of $3: 5: 7$ and its perimeter is 300 m . Find its area.
6. The sides of a quadrilateral, taken in order are $5,12,14$ and 15 metres respectively and the angle contained by the first two sides is a right angle. Find its area.
7. Find the ratio of the area of a square to that of the square drawn on its diagonal.
8. The base of an isosceles triangle is 6 cm and each of its equal sides is 5 cm . Then find the height of the triangle.
9. The perimeter of a right triangle is 144 cm and its hypotenuse measures 65 cm . Find the lengths of other sides and calculate its area. Verify the result using Hero's formula
10. If semi perimeter of a triangle is $60 \mathrm{~cm} \&$ its two sides are $45 \mathrm{~cm}, 40 \mathrm{~cm}$ then find third side.
