SCIENCE

01. If the area over which the force acts decreases, the pressure
   A. decreases  B. increases  C. does not change  D. becomes half the value

02. The diagrams show liquids of different density filled in containers. Which column of liquid exerts the greatest pressure on the base of its container?

   P  Q  R  S
   Density= 1.8gm/cm³  Density= 0.8gm/cm³  Density= 1.0gm/cm³  Density= 1.2gm/cm³

   A. P  B. Q  C. R  D. S

03. The pressure cooker at high altitudes has proved to be beneficial because at higher altitude
   A. the pressure is very less.  B. the pressure is too high to be managed.
   C. it is the hygienic way of cooking.  D. it keeps the food warm.

04. What do you call a material in which electrons cannot move easily?
   A. conductor  B. insulator  C. metal  D. non-metal

05. Identify the optical instrument used in a solar cooker.
   A. Concave lens  B. Plane mirror  C. Convex mirror  D. Magnifying glass

06. The electrolytic cell converts
   A. chemical energy into electrical energy  B. electrical energy into chemical energy
   C. mechanical energy into chemical energy  D. electrical energy into mechanical energy

07. Identify the type of friction present in the ball bearing shown in the picture.
   A. Static friction  B. Sliding friction
   C. Rolling friction  D. Fluid friction

08. Which of the following is true for a person suffering from myopia?
   A. Can see far-off objects clearly but near objects appear blurred
   B. Can be corrected using a convex lens
   C. Cannot see far-off objects clearly
   D. Near point is beyond 25 cm

09. Which of the following graph represents sound with lowest pitch?
   A.  B.  C.  D.
10. Radhika carried out tests on four elements W, X, Y and Z. The results are shown in the table below.

<table>
<thead>
<tr>
<th>Element</th>
<th>Solid at room temperature</th>
<th>Conducts electricity</th>
<th>Can be hammered into sheets</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>X</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Y</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Z</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

From these results, which of the four elements could she say is a metal?
A. W  B. X  C. Y  D. Z

11. In a neutralization reaction, the products formed are
A. salt and water  B. base and water  C. acid and water  D. acid and base

12. Excess acid in the stomach can cause indigestion. What would be the safest substance to neutralize excess acid in the stomach?
A. Vinegar (acid)  B. Salt water (neutral)  C. Sodium hydrogen carbonate (mild alkali)  D. Caustic soda (strong alkali)

13. Polycot, a blended fibre is made from
A. polyester and nylon  B. polyester and wool  C. polyester and cotton  D. polyester and acrylic

14. This non-metal is used in the manufacture of fireworks.
A. Sodium  B. Sulphur  C. Magnesium  D. Chlorine

15. The experiment given in the diagram shows three different test tubes with iron nails under different conditions.

The conditions needed for rusting are:
A. Air  B. Moisture  C. Both air and moisture  D. Oil and soda lime

16. Brass is an alloy of
A. copper and lead  B. copper and tin  C. copper and zinc  D. copper and iron
17. What is known as black gold?
   A. Petroleum  B. Coal  C. Coal tar  D. Natural gas

18. A viscous black liquid containing numerous organic compounds is a byproduct of coal. Identify the product
   A. Petroleum  B. Coke  C. Bitumen  D. Coal tar

19. During the corrosion of silver, the color changes to
   A. black  B. blue  C. green  D. red

20. This Indian geneticist introduced improved farming practice. Identify him.
   A. C N R Rao  B. Chidambaram.S
   C. M.S Swaminathan  D. Varghese Kurien

21. Carrier of malaria causing protozoan is
   A. male anopheles mosquito  B. female anopheles mosquito
   C. male aedes mosquito  D. female aedes mosquito.

22. Identify the protozoa in the picture shown.
   A. Amoeba  B. Plasmodium
   C. Euglena  D. Paramecium

23. Which of the following is a non-biodegradable pollutant?
   A. Paper  B. Styrofoam  C. Cloth  D. Wood

24. DDT, BHC, Baygon, Methyl parathion are used for killing
   A. insects  B. fungal infections  C. germs  D. rats

25. The method which involves partial sterilization of milk, by heating it for 1-2 seconds, at a temperature exceeding 135°C is known as
   A. Ultra Warm Treatment  B. Ultra Temperature Treatment
   C. Ultra Heat Treatment  D. Ultra Sterilization Treatment