

**Grade- VII**

**PHYSICS**

1. Thermometer
2. Degree Celsius
3. 37° C
4. Mercury
5. It prevents mercury level from falling in its
6. Moves faster
7. Copper is better conductor of heat than the stainless steel.
8. Joule
9. 100°C
10. Does not become cold

a.  $K = C + 273$   
We have  $C = 25^{\circ}\text{C}$   
 $K = 25 + 273$   
 $K = 298$

b.  $K = C + 273.15$   
 $252 = C + 273.15$   
 $C = 252 - 273 = -31$   
 $C = -31^{\circ}\text{C}$

c.  $F = \frac{9}{5} (C + 32)$   
 $= \frac{9}{5} (30 + 32)$   
 $= \frac{9}{5} (62)$   
 $= 9 \times 12.4$   
 $= 111.6^{\circ}\text{F}$

$$\begin{aligned}
 \text{d. } F &= \frac{9}{5} (K - 273) + 32 \\
 K &= 293\text{k} \\
 F &= \frac{9}{5} (293 - 273) + 32 \\
 &= \frac{9}{5} (20) + 32 \\
 &= 9 \times 4 + 32 \\
 &= 36 + 32 \\
 &= 68^{\circ}\text{F}
 \end{aligned}$$

## BIOLOGY

### I.

1. Spinning
2. Ginning
3. Stem
4. Takli and charka
5. Nylon

### II

- |                  |        |                              |
|------------------|--------|------------------------------|
| 1. Coconut fiber | —————→ | Ropes , mats                 |
| 2. Jute fiber    | —————→ | Carpets, Curtains, area rugs |
| 3. Wool fiber    | —————→ | Sweaters, socks              |
| 4. Silk fiber    | —————→ | sarees, shirts               |
| 5. Cotton fiber  | —————→ | Diapers                      |

1. Cotton plant , coconut plant.

2. Wool fiber cotton fiber

Wool is hair from many animals. Cotton from plants

Act as warmer

Act as cool

3. After maturing the bolls burst open and seeds covered with cotton fibers can be seen.
4. Spinning of yarn on a large scale is done by using spinning machines in Mills or factories.
5. We use woolen clothes in winter because they are bad conductor of heat, so they keep intact the body temperature and we feel warm during winter.
6. Cotton clothes should be used in kitchen because it does not catch fire easily. Cotton clothes are comfortable and easy to maintain.