

44. Read the given paragraph where few words have been italicised and select the correct option.

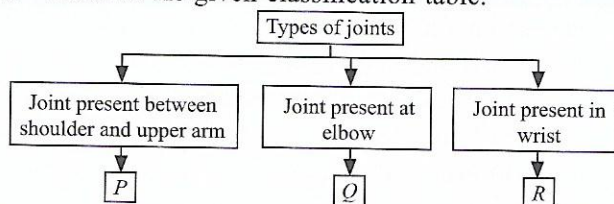
An economical alternative of sewage disposal is known as onsite sewage disposal system. Its examples are septic tanks and composting toilets.

Composting toilet is a *dry* toilet that uses *anaerobic* processing system which treats excreta with *excess* water via managed *aerobic* decomposition.

Septic tank is used in areas where ground water level is very *high*. It is often used in *hospitals*.

- Dry* should be replaced by *wet* and *hospitals* should be replaced by *schools*.
- Positions of *anaerobic* and *aerobic* should be interchanged.
- Dry* and *aerobic* should not be replaced as they are correctly mentioned.
- Excess* should not be replaced as it is correctly mentioned whereas *high* should be replaced by *low*.

45. Refer to the given classification table.

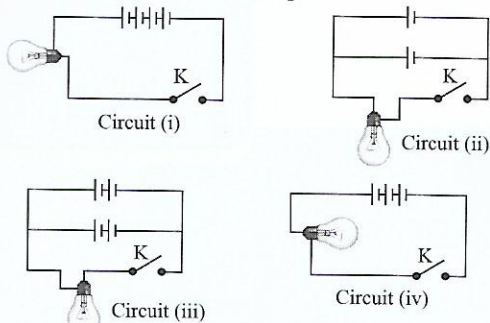


Select the incorrect option regarding joints P, Q and R.

- P type of joint is also present between hip bone and upper leg.
- Q type of joint is also present at knee.
- P is the most freely movable joint that allows 360° movement of bones in all planes.
- R type of joint is also present between the intervertebral disc of spinal cord and bones of skull.

ACHIEVERS SECTION

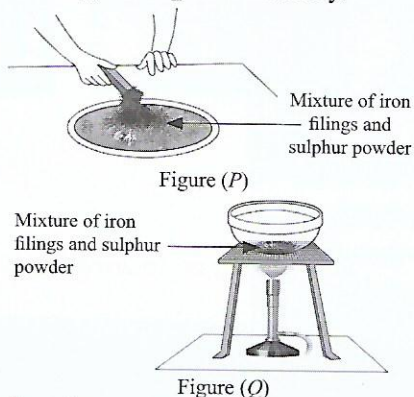
46. Study the four electric circuits (i), (ii), (iii) and (iv) carefully. [One cell (-|+) is equivalent to one volt.]



Similar bulbs were used in the four circuits. When the switches in the electric circuits were closed, the light bulbs lit up. Arrange the circuits, (i), (ii), (iii) and (iv) according to the brightness of their bulbs in ascending order.

- (i), (ii), (iv), (iii)
- (i), (iv), (iii), (ii)
- (ii), (iii), (iv), (i)
- (iii), (i), (iv), (ii)

47. Observe the given figures carefully.



Read the given passage and fill in the blanks by selecting an appropriate option.

In figure (P), a (i) change takes place while in figure (Q), (ii) change takes place.

In figure (Q), a new (iii) called (iv) is formed which has properties (v) from those of its constituent elements.

- | | | | | | |
|----|----------|----------|----------|---------------|-----------|
| | (i) | (ii) | (iii) | (iv) | (v) |
| A. | Physical | Chemical | Element | Iron sulphate | Different |
| B. | Chemical | Physical | Compound | Iron sulphide | Same |
| C. | Chemical | Physical | Mixture | Iron sulphide | Same |
| D. | Physical | Chemical | Compound | Iron sulphide | Different |

48. Refer to the given food chain operating in a forest ecosystem.

Tree → Aphids → Birds → Parasites

Insecticide was sprayed in this area on a large scale. Which of the following graphs correctly depicts the changes in aphid, bird and parasite population over a time period?

