

## MID-TERM ASSIGNMENT

### Physics for SSS1

1. At  $30^{\circ}\text{C}$  the volume of an aluminium sphere is  $30\text{cm}^3$ , the coefficient of linear expansion is  $24 \times 10^{-6}/^{\circ}\text{C}$ . If the final volume is  $30.5\text{cm}^3$ , what is the final temperature of the aluminium sphere.
2. Explain the process of heat transfer in Land and breezes
3. Explain the principle of human body as a conductor
4. What is the principle behind lightning and why is lightning conductors installed?
5. Explain what is meant by a field as used in physics
6. What do you understand by Poles in magnet?
7. Three resistors of resistance  $1\Omega$ ,  $2\Omega$  and  $4\Omega$  are connected in series. Find the equivalent resistance of the combination.
8. Why the sensation of cold when ice is placed in mouth?