

# NATIONAL MODEL SCHOOL, COIMBATORE

## CLASS 12 PHYSICS WORKSHEET

### CH 8: ELECTROMAGNETIC SPECTRUM

**Match the following:**

| Type of wave     | Wavelength          | Application   |
|------------------|---------------------|---|
| 1. Radio Waves   | 700 nm to 400 nm    | Remote control, Photography, Infra red lamps            |
| 2. Micro waves   | $<10^{-3}$ nm       | Chemical reaction, detected by human eye                |
| 3. Infrared      | $>0.1$ m            | Radiography, Photoelectric emission, Detecting cracks   |
| 4. Visible light | 1nm to $10^{-3}$ nm | Radio Communication                                     |
| 5. Ultraviolet   | 0.1 m to 1mm        | Malignant tumours, Radiotherapy, food preservation      |
| 6. X-rays        | 400 nm to 1 nm      | Air craft navigation, microwave oven                    |
| 7. Gamma rays    | 1mm to 700 nm       | Food preservation, Finger prints, tanning of human skin |