

Exemplar Problems

Q. 45 Match the following.

Column I	Column II
A. X-rays	1. $\nu = 10^0 - 10^4$ Hz
B. Ultraviolet wave (UV)	2. $\nu = 10^{10}$ Hz
C. Long radio waves	3. $\nu = 10^{16}$ Hz
D. Microwave	4. $\nu = 10^{18}$ Hz

Ans. A. \rightarrow (4) B. \rightarrow (3) C. \rightarrow (1) D. \rightarrow (2)

Name	Frequency	Uses
A. X-rays	$2 \times 10^{16} - 3 \times 10^{19}$ Hz	Medical pictures, material testing
B. Ultraviolet wave (UV)	$7.9 \times 10^{14} - 2 \times 10^{16}$ Hz	Germisidal lamp
C. Long radio waves	$10^0 - 10^4$ Hz	Signal transmission
D. Microwave	$1 \times 10^9 - 5 \times 10^{11}$ Hz	Cooking radar