

Tick the correct option

10

No	Question	A	B	C	D
1	A travelling disturbance is called:	Wave	Power	Frequency	Time
2	The unit of intensity of sound is:	Wm^{-1}	Wm^{-2}	Wm^{-3}	Wm
3	Lens formula is	$1/P = 1/f + 1/q$	$1/f = 1/p + 1/q$	$1/f = q/p + 1/q$	$1/f = 1/p - 1/q$
4	When Q coulomb of charge flows between the two points having potential difference of V volts then the energy in joules is represented by?	$W=Q/V$	$W=V/Q$	$W=QV$	$W=F.S$
5	The graphical representation of Ohm's law is:	Hyperbola	Ellipse	Parabola	Straight line
6	MRI stands for	Magnetic resonance imaging	Magnetic resistance and current	Magnetic resistance imaginary	None of these
7	A and B are two inputs of NAND gate. Its output would be zero when	$A=0, B=0$	$A=1, B=0$	$A=0, B=1$	$A=1, B=1$
8	NOT gate is also called	converter	inverter	adder	subtractor
9	Which refers to computer programs and the manuals that support them?	Software	Hardware	Data	Information
10	Who accidentally discovered that uranium salt crystals emit an invisible radiation that can darken a photographic plate?	Becquerel	Marie Curie	Pierre	Rutherford

Subjective Section

Attempt any five questions

5x2=10

1. Define Mechanical and Electromagnetic waves with example?

2. What is meant by refractive index?

3. Why the focal length of a convex mirror is taken as negative?

4. State the Coulomb's law.

5. Define fission and fussion with example?

6. What is working principle of transformer?

Attempt the following long questions

$$2 \times 50 = 10$$

1. What is AND gate? Give its symbols and truth table.

2. Carbon-14 has a half-life of 5730 years. How long will it take for the quantity of carbon-14 in a sample to drop to one-eighth of the initial quantity? _____