

NAVODAYA / ~~SAHNIK~~ / RMS**FORCE, FRICTION & PRESSURE**

1. While taking off synthetic clothes, seeing a spark or hearing a crackle, are due to
 - a) an motion of charge through air.
 - b) production of shock wave
 - c) electric dis charge
 - d) cannot be explained.
2. During dry weather while combing hair, we experience hair flying apart. The force responsible for this is,
 - a) force of gravity.
 - (b) electrostatic force
 - c) force of friction.
 - d) magnetic force.
3. The pressure exerted by liquid due to increase in depth
 - a) Reduces
 - b) increases.
 - c) remain same
 - d) None of the above.
4. which of the following is non contact force?
 - a) Force of Friction.
 - b) Electromagnetic force
 - c) Muscular Force.
 - d) Mechanical force.
5. The wear and tear. can be prevented using.
 - a) Lubrication
 - b) Ball Bearings.
 - c) Polishing
 - d) All of the above.

SOUND

1. Vibrations in a body produce.
 - a) Sound
 - b) Pressure
 - c) Density
 - d) Current
2. A characteristic of sound which depends on its amplitude is as
 - a) Pitch
 - b) speed
 - c) quality
 - d) loud ness



3. Ultrasound, can penetrate matter to larger extent because re

a) higher frequency.

b) high speed

c) high quality

d) high amplitude

4. By Number of oscillations per second is called

a) Time period.

b) Wavelength

c) Frequency

d) Amplitude

5. A human heart beats 60 times a minute. Its frequency will be

a) 12 Hz

b) 1.2Hz

c) 1.0 Hz

d) 11 Hz

HEAT

- Heat flows from.
 - Hot body to cold body.
 - In Both direction
 - cold body to hot body.
 - None of the above
- Plastic wire is
 - Pusulatar
 - conductor
 - semi conductor
 - Both
- One litre water at 20°C is mixed with one litre of water at 40°C . The temperature of the mixture will be
 - 60°C
 - more than 40°C but less than 20°C
 - Between 20°C & 40°C
 - 20°C
- Triple point of water is
 - 100°C
 - 0°C
 - 50 K
 - 100 K
- The temperature of water below frozen lake will be
 - -10°C
 - 0°C
 - 4°C
 - -4°C

NAVODAYA / SAINIK / RMS**LIGHT**

1. The person cannot see vertical or horizontal lines. is having defect
 - a) Myopia
 - b) cataract
 - c) Presbiopia
 - d) None of the above.
2. Rainbow can be seen when
 - a) sun is in front of you.
 - b) Sun is behind you
 - c) sun is at overhead
 - d) only at sunrise
3. stars twinkle due to
 - a) Reflection of light
 - b) Diffraction of light
 - c) Refraction of light
 - d) Dispersion of eight.
4. An object appears blue when seen in a white light when seen in red light, it will appear
 - a) Black
 - b) Blue
 - c) Red
 - d) Green
5. To get an inverted image you can use how many types or combination of lens and mirrors?
 - a) 3
 - d) 4
 - c) 5
 - d) 6

CURRENT ELECTRICITY

1. Rate of flow of charge is called.
 - a) Power
 - b) work
 - c) Energy
 - d) Current
2. Commercial unit of energy is
 - a) watt
 - b) Kwh
 - c) Joules
 - d) Horse power
3. With increase in resistance, heating effect.
 - a) Decrease
 - b) Increase
 - c) Nothing happens
 - d) None of the above

NAVODAYA / SAINIK / RMS

4. An electrolyte works on the principle of
- | | |
|--------------------|--------------------|
| a) Heating effect | b) chemical effect |
| b) magnetic effect | d) None of these. |
5. To conduct electricity, there should be free
- | | |
|------------|--------------|
| a) ions | b) solution |
| c) battery | d) non-metal |

MAGNETISM

1. The first discovered magnet was.
- | | |
|---------------|-----------------|
| a) Iron | b) Steel |
| c) Load stone | d) Nickle Oxide |
2. Two like poles.
- | | |
|-----------------------------|------------------|
| a) Repel | b) attract |
| c) First repel then attract | d) None of above |
3. All magnetic material loses magnetism when
- | | |
|-----------------|----------------------------------|
| a) Dipped in al | b) brought near a piece of iron. |
| c) Heated | d) cooled. |
4. Magnet used in electric bell is
- | | |
|---------------------|----------------------|
| a) temporary magnet | c) Bar Magnet |
| b) Permanent magnet | d) None of the above |
5. At equator a compass needle will point in
- | | |
|-------------------|---------------------------|
| a) east direction | b) North-south direction |
| c) West direction | d) north- west direction. |