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Dr Nirkesh Sharma-Physics/Mathematics

#### **Physics**

Q1) Blades of a windmill possess, hence they are turned by a fast wind.

#### **Ans -: Potential Energy**

Q2) A dark-skinned man experiences, as compared to a fair-skinned man.

#### Ans -: Less heat & Less cold

Q3) What device is used to break/complete an electronic circuit?

#### Ans -: Switch

Q4) What is the temperature at which both the Fahrenheit and the centigrade scales have the

same value?

Ans -: -40°

Q5) Acceleration acts always in the direction of the .

Ans -: Net force

Q6) The principle used in working of an atom bomb is.

**Ans -: Nuclear Fission** 

Q7) What is the unit used to measure the depth of sea?

Ans -: Fathom

Q8) Astigmatism can be corrected by .

**Ans -: Cylindrical lenses** 

Q9) Lambert's Law is related to .

Ans -: Illumination

Q10) In a Battery, which energy is converted into Electrical energy?

Ans -: Chemical Energy

Q11) The longitudinal mechanical waves of less than 20 Hz are called.

Ans -: Infrasonic

Q12) Distance of stars are measured in?

**Ans -: Light Years** 

Q13) Albert Einstein was awarded the Noble prize for .

Ans -: Photoelectric Effect

Q14) Electric Motor converts the Electric energy into .

Ans -: Electric energy to Mechanical energy

Q15) Robert Koch has invented the .

Ans -: Electron microscope

Q16) Force of attraction between the molecules of different substances is called .

**Ans -: Adhesive Force** 

Q17) Electrons in Good conductors are.

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Ans -: loosely bound

Q18) One barrel of oil = litres . (approximately)

Ans -: 159

Q19) If a bar magnet is cut length wise into 3 parts, what will the total number of poles be?

Ans -: 6

Q20) If the body is hollow, then its centre of gravity lies?

Ans -: Outside the material

Q21) If the temperature inside a room is increased, the relative humidity will.

Ans -: Decrease

Q22) In summer, the mirages are seen due to the phenomenon of .

Ans -: Total Internal Reflection

Q23) In the visible spectrum which colour has the longest wavelength?

Ans -: Red

Q24) In which medium sound travels faster?

Ans -: Solid

Q25) Insects can move on the surface of water without sinking due to .

Ans -: Surface tension of water

Q26) The Laws of Electrolysis were proposed by –

Ans -: M Faraday

Q27) Light travels in a.

**Ans -: Straight line** 

Q28) What is used as a cooling agent in most of the world's commercial nuclear power plants?

Ans -: Water

Q29) Nature of sound wave is?

**Ans -: Longitudinal** 

Q30) 1 fermi unit is equal to -

Ans -: 10<sup>-15</sup>m

Q31) How many basic S.I. units are there?

Ans -: Seven

Q32) What is the principle on which a transformer works?

**Ans -: Mutual Induction** 

Q33) The distance between Earth and Sun is termed as –

Ans -: 1 Astronomical unit

Q34) Potential energy of your body is minimum when you.

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Ans -: Lie down on ground

Q35) What is the freezing point (temperature) of Pure water?

Ans -: 32 F

Q36) What is the unit of measurement of an Angle?

Ans -: Radian

Q37) Radio waves of constant amplitude can be generated with an .

Ans -: Oscillator

Q38) Hooke's law is related to

**Ans -: Elasticity** 

Q39) Sudden fall in barometer is indication of .

Ans -: Storm

Q40) Water moving up a straw is an example of .

**Ans -: Capillary Action** 

Q41) The blue colour of the clear sky is due to .

Ans -: Dispersion of Light

Q42) What is a magnetic field's direction within a magnet?

Ans -: From South to North

Q43) The experiment demonstrating the existence of electromagnetic wave was first conducted by

**Ans -: Heinrich Hertz** 

Q44) The filament string in an electric bulb is made of which metal?

**Ans -: Tungsten** 

Q45) Drag is the force exerted by fluids.

**Ans -: Friction** 

Q46) The hydraulic brake used in automobiles is a direct application of .

Ans -: Pascal's Law

Q47) The image formed by convex lens in a simple microscope is .

Ans -: Virtual & Erect

Q48) What kind of mirror is used in motor vehicles near the driver's seat?

Ans -: Convex Mirror

Q49) & are present in the nucleus of an atom.

**Ans -: Neutrons and protons** 

Q50) The size of atomic nucleus is of the order of.

Ans -: 10<sup>-15</sup> m

Q51) From the moon's surface, Astronauts see a Black Sky. This is because of .

Ans -: Absence of Atmosphere on Moon

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Q52) The specific resistance of a wire varies with its.

Ans -: Material

Q53) The speed of light will be decreased with the rise in the temperature of the medium. True or False.

Ans -: False. (It remains unchanged)

Q54) Which is the strongest force in the nature?

**Ans -: Nuclear Force** 

Q55) Which device is used to measure the temperature of the sun?

**Ans -: Pyrometer** 

Q56) Which phenomenon occurs when light passes from a denser to rarer medium?

Ans -: Total Internal reflection, Refraction

Q57) Which substances do not allow flow of charge through them?

Ans -: Insulators

Q58) The value of which quantity remains same in all system of units?

**Ans -: Specific Gravity** 

Q59) What is the speed of sound in air?

Ans -: 332m/sec

Q60) The working of the guartz crystal in the watch is based on which effect?

**Ans -: Piezoelectric Effect** 

Q61) Permanent magnets are made of .

Ans -: Steel

Q62) During a fog, the visibility is reduced. This is because of which phenomenon?

Ans -: Scattering of light

Q63) Weightlessness experienced in a spaceship is due to .

**Ans -: Absence of Gravity** 

Q64) Which device is used to find submerged objects?

**Ans -: SONAR** 

Q65) What converts the alternating current into direct current?

Ans -: Rectifier

Q66) Which element is used as a moderator in nuclear reactors?

**Ans -: Graphite** 

Q67) Which device converts light energy into electric energy?

Ans -: Photoelectric cell

Q68) The unit of power of lens is called.

Ans -: Dioptre

Q69) What is the unit of Radioactivity?

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Ans -: Curie

Q70) An object has to attain the velocity of to escape from earth's atmosphere?

Ans -: 11.2 km/sec

Q71) What is the measuring unit of length of light waves?

**Ans -: Angstrom** 

Q72) A short duration wave is known as -

Ans -: Pulse

Q73) When did Einstein propose that matter can be converted into energy?

Ans -: 1905

Q74) What is the SI unit of luminous intensity?

Ans -: Candela

Q75) What is the unit of magnetic flux?

Ans -: Maxwell

Q76) What is the unit of specific resistance?

Ans -: Ohm-metre

Q77) The wavelength of visible spectrum ranges from .

Ans -: 390-700 nanometres

Q78) A Washing machine works on the principle of –

Ans -: Centrifugation

Q79) When a ball is thrown upward, what happens to its Acceleration?

**Ans -: It remains Constant** 

Q80) Magnifying glass is made of which type of lens?

Ans -: Convex lens

Q81) What colour will a red glass appear if it is heated in dark room?

Ans -: Green

Q82) What happens to the surface tension of the water when a detergent is added to it?

Ans -: Decreases

Q83) The value of 'g' (acceleration due to gravity) is maximum at?

Ans -: at poles

Q84) Which instrument is used to measure altitudes in aircrafts?

Ans -: Altimeter

Q85) Which instrument is used to measure change in volume of substances?

**Ans -: Dilatometer** 

Q86) Which instrument is used to measure depth of ocean?

**Ans -: Fathometer** 



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Q87) The power of electric circuit is measured with a .

**Ans -: Wattmeter** 

Q88) Which instrument is used to measure the scattering of light by particles suspended in a liquid?

**Ans -: Nephelometer** 

Q89) Which is more elastic – Steel or Rubber?

Ans -: Steel

Q90) Which is the only natural magnet?

**Ans -: Magnetite** 

Q91) What Principle is used in the designing of ships and submarines?

**Ans -: Archimedes Principle** 

Q92) Nuclear Fissions are initiated by .

Ans -: Neutrons

Q93) The wire in an electric heater is made up of .

**Ans -: Nichrome** 

Q94) During Sonography which types of Waves are used?

**Ans -: Ultrasonic waves** 

Q95) Diode Bulb was discovered by .

Ans -: Sir J. S. Fleming

Q96) Who gave the first experimental value of G?

Ans -: Cavendish

Q97) Who had showed that the electric and magnetic waves are equal in vacuum?

**Ans -: James Clerk Maxwell** 

Q98) What is the escape velocity of Moon?

Ans -: 2.38 Km/s

Q99) Why does a liquid drop tend to assume a spherical shape?

**Ans -: To minimize surface tension** 

Q100) Resistance of a Conductor is inversely proportional to it's.

Ans -: Cross Sectional Area

