ST. LAWRENCE HIGH SCHOOL

27, BALLYGUNGE CIRCULAR ROAD

Class : 8 **Subject : PHYSICAL SCIENCE** **Term : FINAL TERM** **Max Marks : 80**

Q 1 : What is the speed of light in a medium of refractive index 1.5 if the speed of light in vacuum is 3 x 108 m/s? **Marks :** 1

1 . 7.5 x 108 m/s

2 . 4.5 x108 m/s

3 . 2 x 108 m/s (This Answer is Correct)

4 . 1.5 x108 m/s

Q 2 : The focal length of a spherical mirror is 8 cm. Find its radius of curvature. **Marks :** 1

1 . 4 cm

2 . 8 cm

3 . 12 cm

4 . 16 cm (This Answer is Correct)

Q 3 : When a concave mirror is used by placing a light source at thhe focus, it is used in a _____ **Marks :** 1

1 . shaving mirror

2 . reflector in torch light (This Answer is Correct)

3 . telescope

4 . dentist mirror

Q 4 : When a concave mirror is used by placing an object between pricipal focus and pole, it is used in a _____ **Marks :** 1

1 . shaving mirror (This Answer is Correct)

2 . reflector in torch light

3 . telescope

4 . floodlights

Q 5 : _____ means to move back and forth quickly. **Marks :** 1

1 . Pitch

2 . Amplitude

3 . Vibration (This Answer is Correct)

4 . Echo

Q 6 : If a sound has a high amplitude then it also has a _____!!! **Marks :** 1

1 . fast echo

2 . slow pitch

3 . high loudness ☑ (This Answer is Correct)

4 . low loudness

Q 7 : A sound with a high pitch would have **Marks :** 1

1 . a low frequency

2 . a high frequency ☑ (This Answer is Correct)

3 . a low amplitude

4 . a high amplitude

Q 8 : A sound with a high frequency has a _____ pitch. A sound with a ____ frequency has a low pitch. **Marks :** 1

1 . high, low ☑ (This Answer is Correct)

2 . low, high

3 . medium, high

4 . high, medium

Q 9 : the number of vibrations per second **Marks :** 1

1 . vibration

2 . loudness

3 . pitch

4 . frequency ☑ (This Answer is Correct)

Q 10 : Sound waves that are beyond the range of human ear are known as ---- **Marks :** 1

1 . Infrasonic waves

2 . Ultrasonic waves ☑ (This Answer is Correct)

3 . Catatonic waves

4 . Supersonic waves

Q 11 : As compared to air, sound travels fastest in **Marks :** 1

1 . liquids

2 . gases

3 . vacuum

4 . solids (This Answer is Correct)

Q 12 : In one wavelength, wave passes through **Marks :** 1

1 . one complete vibration (This Answer is Correct)

2 . two complete vibrations

3 . one and a half vibration

4 . two and a half vibration

Q 13 : The organs of a human that detect sounds are **Marks :** 1

1 . eyes

2 . ears (This Answer is Correct)

3 . feet

4 . hands

Q 14 : We cannot hear alarm of a clock if there is **Marks :** 1

1 . vacuum in the jar (This Answer is Correct)

2 . air in the jar

3 . liquid in the jar

4 . solid in the jar

Q 15 : In concert halls, soft materials and carpets are used to **Marks :** 1

1 . increase sound waves

2 . absorb sound waves (This Answer is Correct)

3 . retract sound waves

4 . refract sound waves

Q 16 : As compare to humans, bats can hear sounds only with **Marks :** 1

1 . low frequency

2 . low pitch

3 . low amplitude

4 . high pitch (This Answer is Correct)

Q 17 : Pitch of the sound is measured in **Marks :** 1

1 . Hertz (Hz) (This Answer is Correct)

2 . Decibels (dB)

3 . Meters (m)

4 . Pascal (Pa)

Q 18 : Loudness of Sound is measured by units that are called **Marks :** 1

1 . Hertz (Hz)

2 . Decibels (dB) ☑ (This Answer is Correct)

3 . Meters (m)

4 . Pascal (Pa)

Q 19 : Three main types of musical instruments are **Marks :** 1

1 . guitar, violin and piano

2 . drum, guitar and piano

3 . stringed instrument, wind instrument and percussion instrument ☑ (This Answer is Correct)

4 . stringed instrument, wind instrument and beat ‘n’ bass instrument

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Q 20 : The bending of light rays when they pass from one transparent medium to another is called_____ **Marks :** 1

1 . reflection

2 . refraction ☑ (This Answer is Correct)

3 . absorption

4 . transmission

Q 21 : The surface that separates the two mediums through which light passes is called _____ **Marks :** 1

1 . interface ☑ (This Answer is Correct)

2 . interlude

3 . normal

4 . edge

Q 22 : The angle between the incident ray and the refracted ray is called _____- **Marks :** 1

1 . angle of incidence

2 . angle of refraction

3 . angle of deviation ☑ (This Answer is Correct)

4 . glancing angle

Q 23 : If a ray of light moves from a denser to a rarer medium the ray of light moves_____ **Marks :** 1

1 . Along the normal

2 . towards the normal

3 . away from the normal (This Answer is Correct)

4 . along the interface

Q 24 : The second law of refraction was given by **Marks :** 1

1 . Willebrord Snellius (This Answer is Correct)

2 . William Snell

3 . Isaac Newton

4 . Snellius Linnaeus

Q 25 : The ratio of the speed of light in vacuum to the speed of light in that medium is called **Marks :** 1

1 . coefficient of refraction

2 . absolute refractive index (This Answer is Correct)

3 . refractibility

4 . relative optical density

Q 26 : In which medium is the speed of light of all colours (wavelength) the same? **Marks :** 1

1 . air

2 . flint glass

3 . crown glass

4 . vacuum (This Answer is Correct)

Q 27 : The geometric centre of a spherical mirror is called its _____ **Marks :** 1

1 . principal focus

2 . centre of curvature

3 . pole (This Answer is Correct)

4 . aperture

Q 28 : The image formed by actual intersection of two ir more light rays is called a _____- image **Marks :** 1

1 . real (This Answer is Correct)

2 . virtual

3 . magnified

4 . inverted

Q 29 : The wavelength of _____ light is maximum **Marks :** 1

1 . red (This Answer is Correct)

2 . blue

3 . yellow

4 . violet

Q 30 : Anything that has mass and occupies space is called **Marks :** 1

1 . matter (This Answer is Correct)

2 . antimatter

3 . plasma

4 . volume

Q 31 : Force of attraction between molecules of the same kind is called **Marks :** 1

1 . adhesion

2 . cohesion (This Answer is Correct)

3 . capillarity

4 . diffusion

Q 32 : How many states of matter has been discovered? **Marks :** 1

1 . 1

2 . 2

3 . 5 (This Answer is Correct)

4 . 7

Q 33 : Molecules of all substances possess **Marks :** 1

1 . kinetic energy (This Answer is Correct)

2 . potential energy

3 . elastic energy

4 . magnetic energy

Q 34 : Solidification of carbon dioxide is an example of **Marks :** 1

1 . condensation

2 . deposition (This Answer is Correct)

3 . freezing

4 . sublimation

Q 35 : Which of the following is an example of a sublimate? **Marks :** 1

1 . iodine
2 . napthalene
3 . ammonium chloride
4 . all of these ☑ (This Answer is Correct)

Q 36 : The temperature at which vapour turns to liquid is called _____ **Marks :** 1

1 . melting point
2 . freezing point
3 . boiling point
4 . liquefaction point ☑ (This Answer is Correct)

Q 37 : What is the freezing point of alcohol in oC? **Marks :** 1

1 . 114
2 . -114 ☑ (This Answer is Correct)
3 . 183
4 . -183

Q 38 : _____ is a surface phenomenon **Marks :** 1

1 . boiling
2 . freezing
3 . evaporation ☑ (This Answer is Correct)
4 . sublimation

Q 39 : The melting point of pure ice at normal atmospheric pressure is _____ oC **Marks :** 1

1 . 0 ☑ (This Answer is Correct)
2 . 100
3 . 78
4 . 80

Q 40 : Which state of matter possesses the least kinetic energy **Marks :** 1

1 . Plasma
2 . solid ☑ (This Answer is Correct)
3 . liquid
4 . gas

Q 41 : The kinetic energy possessed by the molecules is dependent on **Marks :** 1

1 . temperature (This Answer is Correct)

2 . intermolecular space

3 . intermolecular force

4 . all of these

Q 42 : Which scientist gave the law od conservation of mass? **Marks :** 1

1 . Dalton

2 . Hooke

3 . Lavoisier (This Answer is Correct)

4 . Mendeleev

Q 43 : Which of the following helps in lowering the melting point of ice? **Marks :** 1

1 . sugar

2 . water

3 . milk

4 . salt (This Answer is Correct)

Q 44 : Which of the following statements is false? **Marks :** 1

1 . The kinetic energy of particles decreases with increasing temperature (This Answer is Correct)

2 . The law of conservation of mass is obeyed by chemical reactions

3 . Matter can be changed from one form to another

4 . Matter cannot be created

Q 45 : Which one of the following would you use to separate sand from iron filings? **Marks :** 1

1 . filter paper

2 . chromatography paper

3 . distillation apparatus

4 . bar magnet (This Answer is Correct)

Q 46 : In a coffee machine, the ground coffee is separated from the coffee solution by using **Marks :** 1

1 . sand paper

2 . filter paper (This Answer is Correct)

3 . tissue paper

4 . toilet paper

Q 47 : Liquids that do not mix may be separated by using **Marks :** 1

1 . filter paper
2 . evaporating dish
3 . separating funnel (This Answer is Correct)
4 . Liebig condenser

Q 48 : Miscible liquids that have different boiling points can be separated by **Marks :** 1

1 . decanting
2 . chromatography paper
3 . fractional distillation (This Answer is Correct)
4 . separating funnel

Q 49 : Which one of the following is a disadvantage of evaporation? **Marks :** 1

1 . It always requires heat
2 . all of the solute is recovered
3 . it cannot be used for insoluble solids
4 . the solvent is not recovered (This Answer is Correct)

Q 50 : Water and alcohol are easily separated by distillation because of their different_____ **Marks :** 1

1 . densities
2 . colour
3 . boiling point (This Answer is Correct)
4 . melting point

Q 51 : Dyes in water soluble markers may be separated by means of **Marks :** 1

1 . filter paper
2 . chromatography paper (This Answer is Correct)
3 . distillation apparatus
4 . evaporation

Q 52 : Which one of the following is NOT a mixture? **Marks :** 1

1 . crude oil
2 . air
3 . sugar (This Answer is Correct)
4 . paint

Q 53 : The formation of pure solid particles of a substance from a solution is called _____. **Marks :** 1

1 . filtration

2 . crystallization (This Answer is Correct)

3 . distillation

4 . chromatography

Q 54 : During filtration, an insoluble solid collects on the filter paper. What is this called? **Marks :** 1

1 . solute

2 . solvent

3 . filtrate

4 . residue (This Answer is Correct)

Q 55 : H2O and FeS represent _____ **Marks :** 1

1 . Element

2 . compound (This Answer is Correct)

3 . mixture

4 . alphabets

Q 56 : Which of the following is the smallest part of a compound, whose properties are the same as those of the compound? **Marks :** 1

1 . atoms

2 . molecules (This Answer is Correct)

3 . elements

4 . compounds

Q 57 : How many atoms are represented in the formula CaCO3? **Marks :** 1

1 . 3

2 . 4

3 . 5 (This Answer is Correct)

4 . 6

Q 58 : Name the scientist who laid the foundation for the language of Chemistry. **Marks :** 1

1 . JJ Thomson

2 . John Dalton

3 . JJ Berzelius (This Answer is Correct)

4 . Robert Hooke

Q 59 : What is the symbol for sodium? **Marks :** 1

1 . S

2 . Na (This Answer is Correct)

3 . Sm

4 . Sn

Q 60 : What is the Latin name of mercury? **Marks :** 1

1 . Stannum

2 . Argentum

3 . Plumbum

4 . Hydrargyrum (This Answer is Correct)

Q 61 : A non- metal showing variable valency is ___ **Marks :** 1

1 . chlorine

2 . fluorine

3 . phosphorous (This Answer is Correct)

4 . argon

Q 62 : The combining capacity of an element with other elements is known as its_____ **Marks :** 1

1 . atomicity

2 . valency (This Answer is Correct)

3 . periodicity

4 . electronegativity

Q 63 : Balancing of an equation ensures that the principle of conservation of _____ is maintained. **Marks :** 1

1 . mass (This Answer is Correct)

2 . energy

3 . charge

4 . volume

Q 64 : Which of the following element is trivalent? **Marks :** 1

1 . Lithium

2 . Magnesium

3 . Aluminium (This Answer is Correct)

4 . Chlorine

Q 65 : Which of the following elements are known to display variable valency? **Marks :** 1

1 . iron (This Answer is Correct)

2 . zinc

3 . magnesium

4 . sodium

Q 66 : An entity that can be a group of atom behaving as a single atom with a charge on the group is called a _____ **Marks :** 1

1 . ion

2 . radical (This Answer is Correct)

3 . cation

4 . anion

Q 67 : The formula (NH4)2SO4 represents a molecule of **Marks :** 1

1 . Diammonium sulphate

2 . Ammonium monsulphite

3 . Ammonium bisulphite

4 . Ammonium sulphate (This Answer is Correct)

Q 68 : Name the catalyst used when potassium chlorate breaks down into potassium chloride while releasing oxygen. **Marks :** 1

1 . Magnesium dioxide

2 . Manganese dioxide (This Answer is Correct)

3 . Chromium oxide

4 . Cupric oxide

Q 69 : What is the value of x in the following reaction: $H_2 + Cl_2 \rightarrow xHCl$ **Marks :** 1

1 . 4

2 . 3

3 . 2 (This Answer is Correct)

4 . 1

Q 70 : The reaction in which an acid reacts with an alkali to form salt and water is called_____- **Marks :** 1

1 . exothermic reaction

2 . neutralization reaction (This Answer is Correct)

3 . displacement reaction

4 . synthesis reaction

Q 71 : The breaking down of substances into simpler substances on being heated is called **Marks :** 1

1 . explosion

2 . thermal decomposition (This Answer is Correct)

3 . oxidation

4 . respiration

Q 72 : When nitrogen reacts with oxygen in the presence of an electric spark the reaction is _____ **Marks :** 1

1 . reversible

2 . endothermic (This Answer is Correct)

3 . exothermic

4 . slow

Q 73 : C4H10 is named as _____ **Marks :** 1

1 . CNG

2 . LPG (This Answer is Correct)

3 . RBG

4 . Carbohydrate

Q 74 : Two atoms in a molecule are held together by____ **Marks :** 1

1 . nuclear forces

2 . chemical bond (This Answer is Correct)

3 . gravitation

4 . magnetism

Q 75 : Reaction of calcium oxide with water is called____ **Marks :** 1

1 . slaking of lime (This Answer is Correct)

2 . liming of slate

3 . fermentation

4 . fumigation

Q 76 : Phosphorous when burnt in chlorine yields **Marks :** 1

1 . PCl3

2 . PCl5 (This Answer is Correct)

3 . P2Cl5

4 . H3PO4

Q 77 : The colour of the flame when magnesium burns in air is ___ **Marks :** 1

1 . orange

2 . lavender

3 . dazzling white ☑ (This Answer is Correct)

4 . brick red

Q 78 : When an iron nail is placed in a copper sulphate solution the colour of the solution changes _____ **Marks :** 1

1 . blue to green ☑ (This Answer is Correct)

2 . green to blue

3 . green to brown

4 . blue to black

Q 79 : What is the colour change observed when copper (II) carbonate is strongly heated? **Marks :** 1

1 . blue to black

2 . green to black ☑ (This Answer is Correct)

3 . white to yellow

4 . yellow to brown

Q 80 : Arrange the following in the increasing order of their optical density **Marks :** 1

1 . glass < water < air

2 . air < water < glass ☑ (This Answer is Correct)

3 . air < glass < water

4 . water < air < glass
