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Class: VI
Subject: Science
No. of Questions:
Duration: Min
Maximum Marks:

Physics

1) Name the scientist who developed the theory of gravity after observing an apple falling from a tree.

(A) Isaac Newton
(B) Pierre Curie
(C) Blaise Pascal
(D) Benjamin Franklin

Sol.(A)

Isaac Newton worked out the theory of gravity.

2) A cricketer catches a ball. The force coming in action is:

(A) contact force
(B) gravitational force
(C) frictional force
(D) all of these

Sol.(D)

A cricketer catches a ball. The force coming in action is contact force, gravitational force and frictional force.

3) The force of friction?

(A) increases with the weight of the body
(B) decreases with the weight of the body
(C) is not affected by the weight of the body
(D) none of these

Sol.(A)

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The force of friction increases with the weight of the body.

4) Newton per meter square is also called?

(A) Planck
(B) Flux
(C) Current
(D) Pascal

Sol.(D)

Newton/metre^2 is also called Pascal.

5) What is another name for non-contact force?

(A) Action-at-a-distance force
(B) Force of nature
(C) Operator force
(D) All of the above

Sol.(A)

Non-contact force is also called action-at-a-distance force because such a force can act even without any actual contact between the two objects involved.

6) The S.I. unit of friction is?

(A) Dyne
(B) Kilogram
(C) Newton
(D) Pascal

Sol.(D)

As friction is a force and the S.I. unit of force is Newton, the S.I. unit of friction is also Newton.

7) If the area of contact is increased?

(A) Pressure increases
(B) Pressure decreases
(C) Pressure remains constant
(D) None of these

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Sol.(B)

If the area of contact is increased pressure decreases.

8) Which statement is true in case of multiple forces acting on an object in the same direction?

(A) Such forces add to one another
(B) The strongest force nullifies the effect of all other forces
(C) Such forces cancel in pairs
(D) None of the above

Sol.(A)

Forces applied in the same direction add to one another.

9) A boy pulling a cart by a force of 100N. The frictional force experienced by the cart is 20N. The force that causes the motion of the cart is?

(A) 5N
(B) 100 N
(C) 80 N
(D) 20 N

Sol. (C)

A boy pulling a cart by a force of 100N. The frictional force experienced by the cart is 20N. The force that causes the motion of the cart is 80N.

10) Which kind of friction mainly occurs between the surface of a wheel or other round objects and another surface?

(A) Sliding friction
(B) Static friction
(C) Fluid friction
(D) Rolling friction

Sol.(D)

Rolling friction mainly occurs between the surface of a wheel or other round objects and another surface.

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11) If a force is applied on an object in the direction of its motion, then what happens to the speed of the object?

(A) Speed becomes zero
(B) Speed increases
(C) Speed remains the same
(D) Speed decreases

Sol.(B)

Force applied in the direction of motion of an object increases its speed and force applied in the direction opposite to that of the motion of object decreases its speed.

12) When dough is kneaded, it changes its shape due to :

(A) Effect of chemical change
(B) Effect of force
(C) Effect of atmosphere
(D) None of the above

Sol.(B)

Pressing the dough with hands changes its shape. This is a result of the force applied through hands.

13) In the game of tug-of-war, the rope will _____ if the two teams pull at it with equal force.

(A) Get entangled
(B) Not move
(C) Move to right
(D) Move to left

Sol.(B)

If the two teams pull at the rope with equal force, the rope will not move.

14) The example of contact force is.

(A) magnets attracted to each other
(B) gravitational pull of the earth

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(C) electrostatic attraction
(D) pulling a rope

Sol.(D)

Pulling a rope requires muscular force which is a contact force. Forces involved in all other cases may work from a distance.

15) Which device is used to reduce friction in axles of cars and shafts of motors?

(A) Bolts
(B) Ball-bearings
(C) Screws
(D) Nuts

Sol.(B)

Ball-bearings are used to reduce friction in axles of cars and shafts of motors.

16) A block of weight 400 N is kept on the floor. The area of contact is 4 m^2. The pressure exerted by the box on the floor is?

(A) 400 Pa
(B) 300 Pa
(C) 200 Pa
(D) 100 Pa

Sol.(D)

The pressure exerted by the box on the floor is 100 Pa.

17) Electrostatic force is the phenomenon that results from slow moving or stationary _____.

(A) dust particles
(B) magnetic poles
(C) electrical charges
(D) air molecules

Sol(C)

Electrostatic force is the phenomenon that results from slow moving or stationary electrical

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charges.

18) In which direction does the force of friction act?

(A) Opposite to the direction of applied force
(B) Perpendicular to the direction of applied force
(C) In the direction of applied force
(D) In all directions

Sol.(A)

Force of friction always acts opposite to the direction of applied force.

19) Name the type of force: Fast moving wind driving a windmill.

(A) Muscular force
(B) Frictional force
(C) Mechanical force
(D) Gravitational force

Sol.(C)

Fast moving wind driving a windmill is a type of mechanical force.

20) Why do trucks carrying heavy loads have eight tyres instead of four?

(A) To increase friction
(B) To decrease the area of contact
(C) To decrease friction
(D) To increase the area of contact

Sol.(D)

P = F / A ; increasing the area of contact decreases the pressure on the ground.

Chemistry

21) Elements occur naturally in _____.

(E) Earth's crust
(F) Atmosphere
(G) Living organisms
(H) All of these

Sol.(D)

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Elements occur naturally in the earth's crust, atmosphere and living organisms.

22) Who represented the element by its figurative symbols?

(E) Berzelius
(F) Albert Einstein
(G) John Dalton
(H) Fritz Haber

Sol.(C)

John Dalton represented the element by its figurative symbols.

23) _____ is the representation of a substance by means of symbols.

(E) Chemical formula
(F) Chemical structure
(G) Chemical equation
(H) Chemical reaction

Sol.(A)

Chemical formula is the representation of a substance by means of symbols.

24) 'C' symbol represents _____.

(E) Carbon
(F) Chlorine
(G) Copper
(H) Calcium

Sol.(C)

'C' symbol represents Carbon.

25) Pure substances?

(E) have fixed and exact boiling point
(F) have fixed and exact melting points
(G) form only one post on chromatogram
(H) all of these

Sol.(D)

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Pure substances have fixed and exact boiling point and melting point. It form only one post on chromatogram

26) Gun powder is a mixture of _____.

(E) Sulphur, carbon and potassium nitrate
(F) Carbon, sulphur and potassium nitrate
(G) Sulphur, oxygen and potassium nitrate
(H) Oxygen, carbon and potassium nitrate.

Sol.(A)

Gun powder is a mixture of sulphur, carbon and potassium nitrate.

27) Valency of aluminium is _____.

(E) +1
(F) +4
(G) +2
(H) +3

Sol.(D)

Valency of aluminium is +3.

28) Molecules of elements containing two or more atoms of different kinds-chemically combined together are called _____.

(E) Atoms of compounds
(F) Atoms of mixtures
(G) Molecules of compounds
(H) Molecules of mixtures

Sol.(C)

Molecules of elements containing two or more atoms of different kinds- chemically combined together are called molecules of compounds.

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29) Which of the following is not a physical property of matter?

(E) Density
(F) Solubility
(G) Colour
(H) Reaction

Sol. (D)

Reaction is a chemical property of matter.

30) Which of the following elements show the properties of both metals and non-metals?

(E) Noble gases
(F) Alkaline elements
(G) Metalloids
(H) Ideal gases

Sol(C)

Metalloids show the properties of both metals and non-metals.

31) Nucleus of an element contains the _____.

(E) electrons and neutrons
(F) protons and neutrons
(G) protons and electrons
(H) neutrons

Sol.(B)

Nucleus of an element contains the protons and the neutrons.

32) _____ is an impure substance made up of two or more elements or compounds mechanically mixed together in any proportion.

(E) Element
(F) Atom
(G) Compound
(H) Mixture

Sol.(D)

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A mixture is an impure substance made up of two or more elements or compounds mechanically mixed together in any proportion.

33) Fresh sea water is referred to as impure because

(E) it contains only oxygen
(F) it contains aquatic animals
(G) it contains aquatic plants
(H) it contains dissolved salts

Sol.(D)

Fresh sea water is referred to as impure because it contains dissolved salts.

34) Hydrogen molecule consists of _____ hydrogen atoms.

(E) 1
(F) 2
(G) 3
(H) 4

Sol.(B)

Hydrogen molecule consists of 2 hydrogen atoms.

35) _____ substances are further classified into elements and compounds.

(E) Pure
(F) Impure
(G) Matter
(H) Non-living

Sol.(A)

Pure substances are further classified into elements and compounds.

36) Pure stearic acid melts at exactly?

(E) 78 °C
(F) 70 °C
(G) below 70 °C
(H) above 80 °C

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Sol.(B)

Pure stearic acid melts at exactly 70 °C.

37) Sulphur is an example of _____.

(E) Element
(F) Compound
(G) Mixture
(H) Metalloid

Sol(A)

Sulphur is an example of an element.

38) Elements in the compounds are present in _____ and cannot be separated by _____.

(E) definite proportion and physical methods
(F) definite proportion and chemical methods
(G) indefinite proportion and physical methods
(H) indefinite proportion and chemical methods

Sol.(A)

Elements in the compounds are present in definite and cannot be separated by physical methods.

39) Which of the following is a metalloid?

(E) Iodine
(F) Bromine
(G) Helium
(H) Arsenic

Sol.(D)

Arsenic is a metalloid.

40) Formula for calcium chloride is _____.

(E) CaCl
(F) Ca_2Cl
(G) $CaCl_2$
(H) $CaCl_3$

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Sol.(C)

Formula for calcium chloride is $CaCl_2$.

Biology

41) Landfills are covered with soil to prevent all except ____.

(I) open rotting of garbage
(J) pollution of land
(K) spreading of diseases
(L) prevent scattering by scavengers

Sol.(D)

Landfills are covered with soil to prevent open rotting of garbage, pollution of land and spreading of diseases. Landfills prevent scattering by scavengers.

42) ____ should be disposed by incineration.

(I) Agriculture waste
(J) Hospital waste
(K) Farm waste
(L) Domestic waste

Sol.(B)

Farm waste, agriculture waste and domestic waste should not be incinerated for two seasons. This kind of garbage is mostly biodegradable and can be used to produce compost, also burning garbage in the open producers polluting gases. However, hospital waste should be disposed by incineration

43) Converting plant and animal waste including that from kitchen, into manure, is called ____.

(I) incineration
(J) recycling
(K) segregation
(L) composting

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Sol.(D)

Converting plant and animal waste including those from kitchen, into manure is called composting.

44) Which of the following method is not used to conserve energy?

(I) Planting trees
(J) Turning off unnecessary lights
(K) Using public transport
(L) Using bicycles instead of cars

Sol. (A)

Planting trees is good for the environment, but it is not used to conserve energy.

45) Many sugar mills use ____, the left over after juice is extracted, from sugar cane, to produce electricity.

(I) manure
(J) micro organism
(K) leachate
(L) bagasse

Sol.(D)

Many sugar mills use bagasse, the left over after juice is extracted, from sugar cane to produce electricity.

46) Plastic is non-biodegradable as it ____.

(I) does not decompose
(J) is recycled
(K) decomposes
(L) can be reused

Sol.(A)

Plastic is non-biodegradable as it does not decompose.

47) Contaminants are?

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(I) Biological impurities only
(J) Physical impurities
(K) Dissolved and suspended impurities
(L) Chemical impurities only

Sol.(C)

Contaminants are dissolved and suspended impurities.

48) Biogas is obtained by decomposition of?

(I) Wood and coal
(J) Cow dung and other animal wastes
(K) Polythene and polyester
(L) All of these

Sol.(B)

Biogas is obtained by decomposition of Cow dung and other animal wastes.

49) Sewage contains bacteria that may cause disease like?

(I) Cholera and typhoid
(J) Skin disease and heart disease
(K) Cancer and cholera
(L) Jaundice and tuberculosis

Sol.(A)

Sewage contain bacteria that may cause disease like Cholera and typhoid

50) Accumulation of harmful non-biodegradable chemicals in food chain is called?

(I) Bio-fertilization
(J) Fertilization
(K) Expedition
(L) Bio magnifications

Sol. (D)

Accumulation of harmful non-biodegradable chemicals in food chain is called Bio magnifications

51) Composting method in which earthworm is used?

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(I) Manuring
(J) Decomposing
(K) Vermicomposting
(L) Composting

Sol.(C)

Composting method in which earthworm is used vermicomposting.

52) The process of wastewater treatment is called

(I) Sewage treatment
(J) Water treatment
(K) Chlorination
(L) Disinfection

Sol.(A)

The process of wastewater treatment is called sewage treatment.

53) ____ is making use of old things instead of throwing them away.

(I) Recycling
(J) Segregation
(K) Reducing
(L) Reusing

Sol.(D)

Reuse is making use of old things instead of throwing them away.

54) ____ should not be dumped into landfills.

(I) Solid waste
(J) Domestic waste
(K) Toxic waste
(L) Agricultural waste

Sol.(C)

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Toxic waste should not be dumped into landfills.

55) Polythene and plastics

(I) Do not generate any bad odour
(J) Degrade in the environment very easily
(K) Are not harmful
(L) Are non-biodegradable and very harmful

Sol.(D)

Polythene and plastics are non-biodegradable and very harmful.

56) Reuse is better than recycling because?

(I) Reuse is unhygienic habit
(J) Reuse contain impurities
(K) In recycling energy is used
(L) Recycling require human labour

Sol.(C)

Reuse is better than recycling because in recycling energy is used.

57) Algal bloom is caused due to addition of

(I) Chemical substance in water bodies
(J) Inorganic matters in water bodies
(K) Organic matters in water bodies
(L) Any one of the following

Sol(D)

Algal bloom is caused due to addition of organic matters in water bodies.

58) Garbage must be segregated into _____ before composting.

(I) Natural and artificial
(J) Solid and liquid
(K) Biodegradable and non-biodegradable
(L) Red and green

Sol.(C)

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Garbage must be segregated into Biodegradable and non-biodegradable before composting.

59) Sustainable development is necessary to?

(I) Protect the natural resources
(J) Protect the water bodies
(K) Best utilization of resources
(L) Best utilization of resources

Sol.(A)

Sustainable development is necessary to protect the natural resources.

60) While going to vegetable market we should?

(I) Plastic bag
(J) Carry a cotton bag
(K) Polythene bag
(L) Paper bag

Sol.(B)

While going to vegetable market we should carry a cotton bag.