Physical and Chemical Changes

Question 1.
Neutralisation is a:
(a) physical change
(b) chemical change
(c) both (a) and (b)
(d) none of these

▼ Answer

(b) chemical change
Neutralisation is a chemical change.

Question 2.
Rusting can be prevented by:
(a) preventing iron from coming in contact with air and moisture by applying greese or paint
(b) deposit a layer of a metal like chromium or zinc on iron
(c) both (a) and (b)
(d) none of these

▼ Answer

(c) both (a) and (b)
Rusting can be prevented by applying grease or paint and by depositing a layer of zinc.

Question 3.
The process of forming substances in their pure state from their solution is known as:
(a) galvanisation
(b) neutralisation
(c) crystallisation
(d) all of these

▼ Answer

(c) crystallisation
The process of forming substances in their pure state from the solution is called crytalisation.

Question 4.
The process of depositing a layer of zinc on iron is called:
(a) galvanisation
(b) neutralisation
(c) crystallisation
(d) none of these

▼ Answer

(a) galvanisation
The process of depositing a layer of zine on iron is called galvanisation.

Question 5.
Ships suffer a lot of damage from rusting inspite of being painted because:
(a) sea water contains many salts
(b) sea water is bitter
(c) sea water is sour
(d) sea water is sweet

▼ Answer

(a) sea water contains many salts
Ship suffers a lot of damage due to the sea water which contains many salts.

Question 6.
Food items when kept carefully get spoiled is a:
(a) chemical change
(b) physical change
(c) both (a) and (b)
(d) none of these

▼ Answer

(a) chemical change
When food items get spoiled by keeping carelessly, is a chemical change.

Question 7.
When you leave a piece of iron in the open for some time, it acquires a film of brownish substance. The substance is called:
(a) acid
(b) base
(c) rust
(d) none of these

▼ Answer

(c) rust
When a film of brownish substance acquire on iron piece is called rust.

Question 8.
Burning the magnesium ribbon is a:
(a) physical change
(b) chemical change
(c) rusting
(d) all of these

▼ Answer

(b) chemical change
Burning of magnesium ribbon is a chemical change.

Question 9.
The gas we use in the kitchen is called liquified petroleum gas (LPG). In the cylinder it exists as a liquid. When it comes out from the cylinder it becomes a gas (Change-A) then it burns (Change-B). The following statements pertain to these changes. ChooSe the correct one.
(a) Process-A is a chemical change
(b) Process-B is-a chemical change
(c) Both proceses A and B are chemical changes.
(d) None of these processes are . chemical changes

▼ Answer

(b) Process-B is-a chemical change
Process-B is a chemical change as when gas burns, it is always a chemical change.

Question 10.
Which of the following is a reversible change ?
(a) Rusting
(b) Chemical
(c) Physical
(d) All of these

▼ Answer

(c) Physical
Physical change is reversible.

Question 11.
Anaerobic bacteria digests animal waste and produces biogas (Change-A). The biogas is then burnt as fuel (Change-B). The following statements pertain to these changes. Choose the correct one.
(a) Process-A is a chemical change
(b) Process-B is a chemical change
(c) Both processes A and B are .chemical changes
(d) None of these processes are chemical changes

▼ Answer

(c) Both processes A and B are .chemical changes
Both Changes-A and B are chemical changes as producing biogas and burning as fuel is chemical change.

Question 12.
Which of the following is an irreversible change ?
(a) Physical
(b) Rusting
(c) Chemical
(d) None of these

▼ Answer

(c) Chemical
Chemical change is irreversible change.

Question 13.
The chemical name of baking soda is:
(a) hydrogen carbonate
(b) calcium carbonate
(c) sodium hydrogen carbonate
(d) none of these

▼ Answer

(c) sodium hydrogen carbonate
The chemical name of baking soda is sodium hydrogen carbonates.

Question 14.
Condensation of steam is not a:
(a) chemical change
(b) physical change
(c) rusting
(d) both (a) and (c)

▼ Answer

(d) both (a) and (c)
Condensation of steam in not chemical change and rusting.

Question 15.
Beating the alluminium in the boil is a:
(a) chemical change
(b) rusting
(c) physical change
(d) none of these

▼ Answer

(c) physical change
Beating the alluminium into the foil is physical change.

Question 16.
When baking soda is mixed with lemon juice, bubbles are formed with evolution of a gas. A new substance carbon dioxide gas is formed, is a:
(a) physical change
(b) crystallisation
(c) galvanisation
(d) chemical change

▼ Answer

(a) physical change
When baking soda is mixed with lemon juice, bubbles are formed is a chemical change.

Question 17.
Blooming of flower is a:
(a) chemical change
(b) physical change
(c) rusting
(d) galvanisation

▼ Answer

(a) chemical change
Blooming of flower is a chemical change.

Question 18.
A change that affects iron articles and slowly destroys them is:
(a) Rusting
(b) Galvanisation
(c) Chemical change
(d) Crystallisation

▼ Answer

(a) Rusting
A change that affect iron articles and destroys them is rusting.

Question 19.
Photosynthesis is a:
(a) chemical change
(b) physical change
(c) rusting
(d) crystallisation

▼ Answer

(a) chemical change
Photosynthesis is a chemical change.

Question 20.
Stainless steel, which doesn't rust, is made by mixing iron with carbon and metals like:
(a) chromium
(b) nickel
(c) manganese
(d) all of these

▼ Answer

(d) all of these
All metals like chromium, nickel and manganese are mixed with iron and carbon.

Question 21.
Rusting of iron objects is faster in:
(a) deserts
(b) coastal areas
(c) both (a) and (b)
(d) none of these

▼ Answer

(b) coastal areas
Rusting of iron object is faster in coastal areas because the presence of moisture, is higher.

Question 22.
Lighting of torch bulb using dry cell is:
(a) Chemical change
(b) Physical change
(c) Physical and chemical changes
(d) None of these

▼ Answer

(c) Physical and chemical changes
Lighting of torch using dry cells is a physical and chemical change.

Question 23.
Which of the following is not a chemical change ?
(a) Digestion of food
(b) Formation of milk
(c) Burning of coal
(d) Melting of ice

▼ Answer

(d) Melting of ice
Melting of ice is a chemical change.

Question 24.
Which of the following is true for physical change ?
(a) No new substances are formed
(b) New substances are formed
(c) Sometimes new substances are formed
(d) None of these

▼ Answer

(a) No new substances are formed
No new substance is formed is the true statement.

Question 25.
In a chemical change:
(a) Gas may be formed
(b) Heat may be given off or absorbed
(c) Sound may be produced
(d) All of these

▼ Answer

(d) All of these
In chemical changes all heat, gas and sound may be produced.

Question 26.
For rusting:
(a) Only moisture is required
(b) Only air is required
(c) Both air and moistured are required
(d) None of these

▼ Answer

(c) Both air and moistured are required
For rusting both air and moisture are required.

Question 27.
When carbon dioxide is passed through lime water, it turns milky due to the formation:
(a) calcium oxide
(b) calcium carbonate
(c) magnesium carbonate
(d) magnesium oxide

▼ Answer

(b) calcium carbonate
When carbofi dioxide is passed through lime water it turns milky due to calcium carbonate

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Question 28.
When a candle burns, then first the wax melts. Melting of wax is :
(a) physical change
(b) chemical change
(c) both (a) and (b)
(d) none of these

▼ Answer

(a) physical change
Melting of wax is a physical change because it doesn’t change in its properties

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Question 29.
When wax vapours burns then smoke and carbon dioxide are formed which are new

substances, is a:
(a) physical change
(b) chemical change
(c) both (a) and (b)
(d) none of these

▼ Answer

(b) chemical change
When wax vapours burn, gas is produced, it is a chemical change.

Question 30.
Curd can not be converted into milk again so it is a:
(a) chemical change
(b) physical change
(c) both (a) and (b)
(d) none of these

▼ Answer

(a) chemical change
As curd cannot become milk again, so it is a chemical change.

Question 31.
Burning of wood is a:
(a) physical change
(b) chemical change
(c) both (a) and (b)
(d) none of these

▼ Answer

(b) chemical change
Burning of wood is a chemical change because it produces many gases.

Question 32.
Properties such as shape, size, colour and state of substances are called:
(a) chemical properties
(b) physical properties
(c) physical change
(d) chemical change

▼ Answer

(b) physical properties
Properties such as shape, size, colour and state of substance are called physical changes.

Question 33.
A change in which one or more new substances are formed is called:
(a) physical change

(b) chemical change
(c) chemical properties
(d) none of these

▼ Answer

(b) chemical change
A change in which one or more new substance is formed is called chemical change.

Question 34.
A change in which no new substance is formed is called:
(a) physical change
(b) chemical change
(c) both (a) and (b)
(d) none of these

▼ Answer

(a) physical change
A change in which no new substance is formed is called physical change.

Question 35.
During a chemical change:
(a) one or more new substances are produced
(b) a colour change may take place
(c) both (a) and (b)
(d) none of these

▼ Answer

(c) both (a) and (b)
During chemical change one or more new substance and colour change may take place.

Question 36.
Few example of chemical changes are:
(a) burning of coal
(b) food getting spoiled
(c) formation of curd
(d) all of these

▼ Answer

(d) all of these
All burning of coal, food getting spoiled and formation of curd are examples of chemical change.

Question 37.
An example of physical change is:
(a) melting of ice
(b) a gas may be formed

(c) both (a) and (b)
(d) none of these

▼ Answer

(a) melting of ice
Melting of ice is an example of physical change.

Match Column A with Column B:

Question 1.

Column- A	Column- B
(a) Dissolving sugar in water	(i) chemical change
(b) Burning of coal	(ii) physical change
(c) Melting of wax	(iii) chemical change
(d) Photosynthesis	(iv) physical change

▼ Answer

Column- A	Column- B
(a) Dissolving sugar in water	(iii) chemical change , (iv) physical change
(b) Burning of coal	(i) chemical change , (iii) chemical change
(c) Melting of wax	(iii) chemical change , (ii) physical change
(d) Photosynthesis	(i) chemical change , (iii) chemical change

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Question 2.

Column- A	Column- B
(a) No new substance is formed	(i) galvanisation
(b) One or more new substance are formed	(ii) rusting
(c) Affects the iron articles	(iii) physical change
(d) A layer of zinc on iron	(iv) chemical change

▼ Answer

Column- A	Column- B
(a) No new substance is formed	(iii) physical change
(b) One or more new substance are formed	(iv) chemical change
(c) Affects the iron articles	(ii) rusting
(d) A layer of zinc on iron	(i) galvanisation

Question 3.

Column- A	Column- B
(a) Chemical name of baking soda	(i) coastal areas
(b) Rusting can be prevented by	(ii) chemical changes

(c) A gas may be formed	(iii) galvanisation
(d) Rusting is faster in	(iv) sodium hydrogen carbonate

▼ Answer

Column- A	Column- B
(a) Chemical name of baking soda	(iv) sodium hydrogen carbonate
(b) Rusting can be prevented by	(iii) galvanisation
(c) A gas may be formed	(ii) chemical changes
(d) Rusting is faster in	(i) coastal areas

State whether the following statements are 'True' or 'False':

Question 1.
New substances are formed in a chemical change.

▼ Answer

True

Question 2.
The chemical properties of a substance are its shape, size, colour and state.

▼ Answer

False

Question 3.
Sound produced is a physical change.

▼ Answer

False

Question 4.
Physical change is a temporary change.

▼ Answer

True

Question 5.
Neutralisation is a physical change.

▼ Answer

False

Question 6.
The water of sea contains many salts.

▼ Answer

True

Question 7.
Chemical changes is irreversible.

▼ Answer

True

Question 8.
Changing of day and night is a chemical change.

▼ Answer

False

Question 9.
Cutting a log of wood into pieces is a physical change.

▼ Answer

False

Question 10.
Formation of manure from leaves is a physical change.

▼ Answer

False

Question 11.
Iron and rust are same substances.

▼ Answer

False

Question 12.
Condensation of steam is not a chemical change.

▼ Answer

True

Fill in the blanks:

Question 1.
When carbon dioxide is passed through lime water, it turns milky due to the formation of ……

▼ Answer

calcium carbonate

Question 2.
Two methods by which rusting can be prevented are …… and galvanisation.

▼ Answer

painting

Question 3.
Melting of wax is a …… change.

▼ Answer

physical

Question 4.
Changes in which only …… properties of a substance change are called physical change.

▼ Answer

physical

Question 5.
The gas we use in kitchen is ……

▼ Answer

L.P.G

Question 6.
Some substances can be obtained in pure state from their solutions by …….

▼ Answer

crystallisation

Question 7.
The process of depositing a layer of zinc on iron is called …….

▼ Answer

galvanisation

Question 8.
The presence of oxygen and water is essential for …….

▼ Answer

rusting

Question 9.
Ships suffer a lot of damage from rusting, inspite of being …….

▼ Answer

painted

Question 10.
…… can be prevented by,applying grease or paint.

▼ Answer

Rusting

Question 11.
The …… water makes the process of rust formation faster.

▼ Answer

salty

Question 12.
Changing of size of baby dog is a …… change.

▼ Answer

chemical

Question 13.
The chemical name of baking soda is …….

▼ Answer

sodium hydrogen carbonate
