

1. 'Sports' is related to 'Logo' in the same way as 'Nation' is related to-
- (A) Emblem
(B) Animal
(C) Ruler
(D) Anthem
(E) None of these
2. Car: Petrol: :Television:?:
- (A) Electricity
(B) Transmission
(C) Entertainment
(D) Antenna
3. The pair of linear equations $3x + 5y = 3$, $6x + ky = 8$ do not have any solution if
- (A) $k = 5$
(B) $k = 10$
(C) $k \neq 10$
(D) $k \neq 5$
4. The pair of linear equations $7x + ky = k$, $14x + 2y = k + 1$ has infinitely many solutions if
- (A) $k = 1$
(B) $k \neq 1$
(C) $k = 2$
(D) $k = 4$
5. If $x = 2$ and $x = 3$ are zeros of the quadratic polynomial $x^2 + ax + b$, the values of a and b respectively are:
- (A) 5, 6
(B) -5, -6
(C) -5, 6
(D) 5, -6
6. If sum of zeros = $\sqrt{2}$, product of its zeros = $\frac{1}{3}$.
The quadratic polynomial is-
- (A) $3x^2 - 3\sqrt{2}x + 1$
(B) $\sqrt{2}x^2 + 3x + 1$
(C) $3x^2 - 2\sqrt{3}x + 1$
(D) $\sqrt{2}x^2 + x + 3$
7. If α and β are the zeros of the polynomial $f(x) = 6x^2 - 3 - 7x$ then $(\alpha + 1)(\beta + 1)$ is equal to -
- (A) $\frac{5}{2}$
(B) $\frac{5}{3}$
(C) $\frac{2}{5}$
(D) $\frac{3}{5}$
8. The space around a charge in which its effect can be felt is called its
- (A) potential
(B) field
(C) field intensity
(D) potential difference
9. Time rate of flow of electric charge measures electric:
- (A) circuit
(B) current
(C) potential difference
(D) cell
10. The device which measures electric potential difference between two points is called:
- (A) Ammeter
(B) voltmeter
(C) manometer
(D) water meter
11. The device which measures electric current through a conductor is called:
- (A) Ammeter
(B) voltmeter
(C) manometer
(D) water meter
12. The unit of electrical energy is:
- (A) watt (W)
(B) ampere (A)
(C) joule (J)
(D) ohm (Ω).
13. Which of the following is a redox reaction?
- (A) $\text{CaCO}_3 \longrightarrow \text{CaO} + \text{CO}_2$
(B) $\text{H}_2 + \text{Cl}_2 \longrightarrow 2\text{HCl}$
(C) $\text{CaO} + 2\text{HCl} \longrightarrow \text{CaCl}_2 + \text{H}_2\text{O}$
(D) $\text{NaOH} + \text{HCl} \longrightarrow \text{NaCl} + \text{H}_2\text{O}$
14. $\text{Fe}_2\text{O}_3 + 2\text{Al} \longrightarrow \text{Al}_2\text{O}_3 + 2\text{Fe}$ this reaction is an example of -
- (A) Combination reaction
(B) Double displacement reaction
(C) Decomposition reaction
(D) Displacement reaction
15. Which of the following statement is incorrect?
- (A) In oxidation, oxygen is added to a substance.

- (B) In reduction, Hydrogen is added to a substance.
- (C) Oxidizing agent in oxidized.
- (D) Reducing agent is oxidized.
16. Conversion of CaCO_3 in to CaO as per following reaction is an example of -
- $$\text{CaCO}_3 \longrightarrow \text{CaO} + \text{CO}_2$$
- (A) Decomposition reaction
- (B) Reduction reaction
- (C) Oxidation reaction
- (D) none of these
17. What happens when dil hydrochloric acid is added to iron fillings?
- (A) Hydrogen gas and Iron chloride are produced.
- (B) Chlorine gas and Iron hydroxide are produced.
- (C) NO reaction takes place
- (D) Iron salt and water are produced.
18. Heterotrophic nutrition means -
- (A) Various types of nutrition taken by an animal
- (B) Preperation of nutrients by a plant with the help of chlorophyll
- (C) Utilization of food by animals prepared by plants
- (D) All of the above
19. Liver secretes -
- (A) Acids only
- (B) Bile
- (C) Hormones
- (D) Digestive enzymes only
20. Trypsin act in a medium which is -
- (A) Acidic
- (B) Slightly alkaline
- (C) Neutral
- (D) Highly alkaline

Answers

Q. No.	Answer
1	A
2	A
3	B
4	A
5	C
6	A
7	B
8	B
9	B
10	B
11	A
12	C
13	B
14	D
15	C
16	A
17	A
18	C
19	B
20	B

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