Q1.Which of the following is NOT a mirror formula?

a) 1/f = 1/v + 1/u
b) m = v/u
c) m = –v/u
d) f = v + u
Ans:- d
Q2. The splitting of white light into seven colors on passing through a prism is called:
a) Scattering b) Dispersion c) Refraction d) Reflection
Q3.A person cannot see nearby objects clearly. The defect is:
a) Myopia b) Hypermetropia c) Presbyopia d) Astigmatism
Ans:
Q4. Which of the following is NOT a physical change?
a) Melting of ice
b) Rusting of iron
c) Boiling of water
d) Dissolution of salt
Ans:
Q5 Photosynthesis occurs in:
a) Mitochondria b) Chloroplast c) Ribosome d) Nucleus
Q6.Which organelle is called the powerhouse of the cell?
a) Nucleus b) Mitochondria c) Chloroplast d) Ribosome
Q7.The process of removal of undigested food is:
a) Excretion b) Egestion c) Respiration d) Assimilation
Q8Which blood vessel carries blood from lungs to heart?
a) Pulmonary artery b) Pulmonary vein c) Aorta d) Vena cava
Q9.Which of the following is NOT a plant hormone?
a) Auxin b) Insulin c) Gibberellin d) Cytokinin
Q10. Which part of the brain controls voluntary actions?
a) Medulla b) Cerebellum c) Cerebrum d) Pons

Q11. Which plant hormone promotes cell elongation?
a) Cytokinin b) Auxin c) Abscisic acid d) Ethylene
Q12. Reflex actions are controlled by:
a) Brain b) Spinal cord c) Cerebellum d) Medulla
Q13. The electrical impulse in nerves is carried by:
a) Hormones b) Neurotransmitters c) Dendrites d) Myelin sheath
Q13. Which hormone regulates sugar level in blood?
a) Thyroxine b) Adrenaline c) Insulin d) Testosterone
Q14. The basic functional unit of the kidney is:
a) Nephron b) Alveolus c) Neuron d) Glomerulus
Q15. Which enzyme is present in saliva?
a) Lipase b) Ptyalin c) Pepsin d) Trypsin
Q16.In photosynthesis, light energy is absorbed by:
a) Chlorophyll b) Mitochondria c) Cytoplasm d) Vacuole
Q17.The site of exchange of gases in human lungs is:
a) Trachea b) Bronchi c) Alveoli d) Diaphragm

Q18.A base which is soluble in water is called:
a) Alkali b) Salt c) Neutral base d) Strong base
Q19.Which acid is present in ant sting?
a) Acetic acid b) Methanoic acid c) Citric acid d) Lactic acid
Q20.When CO_2 is passed through lime water, it turns milky due to:
a) $CaSO_4$ b) $CaCO_3$ c) $CaCl_2$ d) $Ca(OH)_2$

Q21.Which gas is evolved when a metal carbonate reacts with an acid?
a) H_2 b) CO_2 c) O_2 d) Cl_2
Q22 .Tooth decay starts when pH of mouth falls below:
a) 7.4 b) 6.5 c) 5.5 d) 4.5
Q23.The pH of NaOH solution is around:
a) 1 b) 7 c) 10–12 d) 14
Q24 Which of the following salts is formed when hydrochloric acid reacts with sodium hydroxide?
a) Na_2CO_3 b) NaCl c) $NaNO_3$ d) Na_2SO_4
Q25.Rust is chemically:
a) FeO b) Fe_2O_3 c) $Fe_2O_3 \cdot xH_2O$ d) $Fe(OH)_2$
Q26.Which of the following prevents rusting of iron?
a) Painting b) Galvanisation c) Alloying d) All of these
Q27.Brass is an alloy of:
a) Cu + Sn b) Cu + Zn c) Fe + C d) Fe + Cr + Ni
Q28.Stainless steel contains:
a) Fe + Zn b) Fe + C + Ni + Cr c) Fe + Sn d) Fe + Cu
Q29.The phenomenon of depositing a layer of zinc on iron to prevent rusting is called:
a) Alloying b) Electroplating c) Galvanisation d) Annealing
Q30.Which method is used for refining of highly reactive metals like sodium?
a) Distillation b) Electrolysis c) Liquation d) Zone refining

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Q31.Which gas is evolved when zinc reacts with dilute HCl?
a) Oxygen b) Hydrogen c) Nitrogen d) Carbon dioxide
Q32.The amphoteric oxide among the following is:
a) Na_2O b) Al_2O_3 c) CO_2 d) MgO
Q33.Which metal does not react with cold or hot water but reacts with steam?
a) Na b) K c) Zn d) Ca
Q34.Non-metal oxides are generally:
a) Acidic b) Basic c) Amphoteric d) Neutral
Q35.The blood vessel that carries oxygenated blood from lungs to heart is:
a) Pulmonary artery b) Pulmonary vein c) Vena cava d) Aorta
Q36.The universal donor blood group is:
a) A b) B c) AB d) O
Q37.Xylem transports:
a) Water and minerals b) Food c) Hormones d) Enzymes
Q38.Phloem transports food in plants by:
a) Transpiration pull b) Active transport c) Osmosis d) Diffusion
Q39.Functional unit of kidney is:
a) Nephron b) Alveolus c) Glomerulus d) Tubule

Q40.In plants, the main excretory product is:
a) Oxygen b) Carbon dioxide c) Water d) All of these
Q41.Which part of nephron filters blood?
a) Collecting duct b) Tubule c) Bowman's capsule d) Loop of Henle
Q42.Which of the following is not a life process?
a) Nutrition b) Respiration c) Excretion d) Thinking
Q43.Which defect of vision is corrected by a concave lens?
a) Myopia
b) Hypermetropia
c) Presbyopia
d) Cataract
Q44.Which defect of vision is corrected using a convex lens?
a) Myopia
b) Hypermetropia
c) Both myopia and hypermetropia
d) None
Q45.Which phenomenon is responsible for twinkling of stars?
a) Reflection
b) Refraction
c) Dispersion
d) Diffraction
Q46.The splitting of white light into seven colours by a prism is called:
a) Refraction
b) Dispersion
c) Scattering
d) Interference
Q47.The sky appears blue due to:
a) Dispersion
b) Scattering of light
c) Reflection
d) Refraction
Q48.The danger signal lights are red because:
a) Red is most attractive
b) Red light is least scattered
c) Red light has shortest wavelength
d) Red is a primary colour
Q49.Myopia can be corrected by:
a) Convex lens
b) Concave lens
c) Cylindrical lens
d) Bifocal lens
50.Which of the following is a decomposition reaction?
a) $Zn + CuSO_4 \rightarrow ZnSO_4 + Cu$
b) $2HgO \rightarrow 2Hg + O_2$
c) $HCl + NaOH \rightarrow NaCl + H_2O$
d) $CH_4 + O_2 \rightarrow CO_2 + H_2O$

TRY yourself

The brown coating formed on iron on long exposure to moisture is:
a) $Fe_2O_3 \cdot xH_2O$
b) FeO
c) Fe_2O_3
d) $Fe(OH)_2$
Which of the following is NOT a physical change?
a) Evaporation of water
b) Melting of ice
c) Rusting of iron
d) Dissolution of sugar
The reaction: $2KClO_3 \rightarrow 2KCl + 3O_2$ is:
a) Combination
b) Decomposition
c) Displacement
d) Neutralisation
Which of the following shows both oxidation and reduction?
a) $2Mg + O_2 \rightarrow 2MgO$
b) $Zn + CuSO_4 \rightarrow ZnSO_4 + Cu$
c) $Fe + S \rightarrow FeS$
d) $CaO + H_2O \rightarrow Ca(OH)_2$
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