

# FINAL ANSWER KEY

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Question1:-Who among the following was not a member of the constitution drafting committee?

- A:-B.R. Ambedkar
- B:-Jawaharlal Nehru
- C:-K.M. Munshi
- D:-Alladi Krishnaswami Ayyar

Correct Answer:- Option-B

Question2:-Article 368 of the Indian constitution deals with

- A:-Fundamental Duties
- B:-Fundamental Rights
- C:-Amendment of the constitution
- D:-Citizenship

Correct Answer:- Option-C

Question3:-'Kudumbasree' was launched in

- A:-1996
- B:-1998
- C:-2000
- D:-2002

Correct Answer:- Option-B

Question4:-'Pratheeksha Bhavan' under the Social Justice Department for the rehabilitation of mentally retarded men above the age of 18 is at

- A:-Poojapura
- B:-Kakkanad
- C:-Ramavarmapuram
- D:-Thavanur

Correct Answer:- Option-D

Question5:-Dr. Gundert,the champion of English education in Malabar was a

- A:-German
- B:-British
- C:-French
- D:-Portuguese

Correct Answer:- Option-A

Question6:-The FACT was started during the period of

- A:-Swathi Tirunal
- B:-Uthradam Tirunal
- C:-Sri Chithra Tirunal
- D:-Sri Mulam Tirunal

Correct Answer:- Option-C

Question7:-'Samathwa Samajam' was founded by

- A:-Ayyankali
- B:-K. Ayyappan
- C:-Vagbhatananda
- D:-Vaikunda Swamikal

Correct Answer:- Option-D

Question8:-'Sahodara Sangham' was founded in

- A:-1904
- B:-1908
- C:-1914
- D:-1917

Correct Answer:- Option-D

Question9:-The 'Ezhava Memorial' was submitted in

- A:-1809
- B:-1888
- C:-1891
- D:-1896

Correct Answer:- Option-D

Question10:-Which among the following was a post-independent event?

- A:-Kuttamkulam struggle
- B:-Paliyam Satyagraha
- C:-Punnapra-Vayalar struggle
- D:-Yachana Yathra

Correct Answer:- Option-B

Question11:-'Mitavadi' was published from

- A:-Kozhikode
- B:-Thalasseri
- C:-Mahe
- D:-Kannur

Correct Answer:- Option-A

Question12:-The Trivandrum Public Library was started by

- A:-Edward Cadogan
- B:-John Allan Brown
- C:-Thomas Munro
- D:-A.F. Sealy

Correct Answer:- Option-A

Question13:-A.R. Raja Raja Varma was the \_\_\_\_\_ of Kerala Varma Valiya Koyil Thampuran.

- A:-Father
- B:-Son
- C:-Nephew
- D:-Brother

Correct Answer:- Option-C

Question14:-'Vyazhavattasmaranakal' was written by

- A:-K. Ramakrishna Pillai
- B:-B. Kalyani Amma
- C:-E.V. Krishna Pillai
- D:-C. Kesavan

Correct Answer:- Option-B

Question15:-Who among the following was not a member of the Vadakkath family of Anakkara?

- A:-A.V. Kuttimalu Amma
- B:-Ammu Swaminathan
- C:-Captain Lakshmi
- D:-Lalitha Prabhu

Correct Answer:- Option-D

Question16:-The Volunteer captain of 'Guruvayur Satyagraha' was

- A:-K. Kelappan
- B:-A.K. Gopalan
- C:-T.K. Madhavan
- D:-Mannath Padmanabhan

Correct Answer:- Option-B

Question17:-The Grand Slam tennis tournament playing in grass court

- A:-US Open
- B:-Australian Open
- C:-Wimbledon Open
- D:-French Open

Correct Answer:- Option-C

Question18:-The opponent of P.V. Sindhu in the Final of Badminton World Championship 2017 was from

- A:-China
- B:-Korea
- C:-Japan
- D:-Malaysia

Correct Answer:- Option-C

Question19:-Dr. Babasaheb Ambedkar International Airport is at

- A:-Nagpur
- B:-Pune
- C:-Mumbai
- D:-Surat

Correct Answer:- Option-A

Question20:-The Winner of Jnanpith Award 2016

- A:-Shankha Ghosh
- B:-Raghuveer Chaudhary
- C:-B.V. Nemade
- D:-Kedarnath Singh

Correct Answer:- Option-A

Question21:-A pressure cooker reduces cooking time because

- A:-Heat is more evenly distributed
- B:-The boiling point of water inside the cooker is elevated
- C:-The higher pressure tenderises the food
- D:-The boiling point of water inside the cooker is depressed

Correct Answer:- Option-B

Question22:-The galvanic cell which convert energy of combustion directly to electrical energy is called

- A:-Fuel cell
- B:-Primary cell
- C:-Secondary cell
- D:-Voltaic cell

Correct Answer:- Option-A

Question23:-Haber process is used for the manufacture of

- A:-Sulphuric acid
- B:-Nitric acid
- C:-Nitrogen
- D:-Ammonia

Correct Answer:- Option-D

Question24:-The group 13 element which is liquid during summer is

- A:-Al
- B:-In
- C:-Ga
- D:-Tl

Correct Answer:- Option-C

Question25:-Intra molecular hydrogen bond exist in

- A:-HF
- B:-`H\_(2)O`
- C:-o-nitro phenol
- D:-ethyl alcohol

Correct Answer:- Option-C

Question26:-Which of the following shows both Schottky and Frenkel defect ?

- A:-AgBr
- B:-CsCl
- C:-AgCl
- D:-ZnS

Correct Answer:- Option-A

Question27:-Bauxite is the ore of

- A:-Iron
- B:-Aluminium
- C:-Copper
- D:-Zinc

Correct Answer:- Option-B

Question28:-How many kinds of space lattice are possible in a crystal?

- A:-7
- B:-23
- C:-14

D:-21

Correct Answer:- Option-C

Question29:-The law stating that "the partial pressure of the gas in vapour phase is proportional to the mole fraction of the gas in the solution" is known as

A:-Raoult's law

B:-Dalton's law of partial pressure

C:-Ostwald's dilution law

D:-Henry's law

Correct Answer:- Option-D

Question30:-The excess pressure that is applied to the solution to prevent the passage of solvent in to it through a semi permeable membrane is referred to as

A:-Partial pressure

B:-Critical pressure

C:-Osmotic pressure

D:-None of these

Correct Answer:- Option-C

Question31:-The hybridisation of carbon in Graphite is

A:- $sp^2$

B:- $sp$

C:- $sp^3$

D:- $sp^2$

Correct Answer:- Option-D

Question32:-Isotonic solutions have

A:-Same osmotic pressure

B:-same freezing point

C:-same melting point

D:-same boiling point

Correct Answer:- Option-A

Question33:-Best method to prevent corrosion of iron is

A:-making iron cathode

B:-making iron anode

C:-put it in saline water

D:-make it in contact with atmosphere

Correct Answer:- Option-A

Question34:-The half life of first order reaction with rate constant 'K' is given by

A:- $\frac{[R_0]}{2K}$

B:- $\frac{[R_0]}{K}$

C:- $\frac{0.693}{2K}$

D:- $\frac{0.693}{K}$

Correct Answer:- Option-D

Question35:-Unit of first order reaction is

A:- $S^{-1}$

B:- $\text{mol L}^{-1}S^{-1}$

C:- $\text{mol}^{-1}LS^{-1}$

D:-dimensionless

Correct Answer:- Option-A

Question36:-Which of the following constitute Daniel cell?

A:-Zn-Hg cell

B:-Zn-Cu cell

C:-Zn-Ag cell

D:-Cu-Hg cell

Correct Answer:- Option-B

Question37:-The correct formula for plaster of paris is

A:- $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$

B:- $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$

C:- $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$

D:- $\text{Ca}_2\text{SO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$

Correct Answer:- Option-C

Question38:-Permanent hardness of water is due to the presence of

- A:-Bicarbonates of Na and K
  - B:-Bicarbonates of Ca and Mg
  - C:-Chlorides and sulphates of Ca and Mg
  - D:-Chlorides and sulphates of Na and K
- Correct Answer:- Option-C

Question39:-Role of a catalyst in a chemical reaction is

- A:-To decrease activation energy
  - B:-To increase activation energy
  - C:-To increase heat of reaction
  - D:-To decrease heat of reaction
- Correct Answer:- Option-A

Question40:-Characteristics of transition element

- A:-Show variable oxidation state
  - B:-Forms alloys
  - C:-Form coloured compounds
  - D:-All the above
- Correct Answer:- Option-D

Question41:-In [  $\text{Ni}(\text{CO})_4$  ], the oxidation number of Nickel is

- A:-+3
  - B:-+2
  - C:-+4
  - D:-Zero
- Correct Answer:- Option-D

Question42:-Primary, secondary and tertiary amines can be distinguished by Hinsberg reagent, which is

- A:-Benzoyl chloride
  - B:-Benzene sulphonyl chloride
  - C:-Acetic anhydride
  - D:-Benzyl chloride
- Correct Answer:- Option-B

Question43:-The monomer of PVC is

- A:-Ethene
  - B:-Vinyl chloride
  - C:-Styrene
  - D:-Tetra Fluoro ethane
- Correct Answer:- Option-B

Question44:-Tyndall effect is

- A:-Scattering of light by colloidal particle
  - B:-Refraction of light by colloidal particle
  - C:-Absorption of light by colloidal particle
  - D:-Reflection of light by colloidal particle
- Correct Answer:- Option-A

Question45:-Which of the following battery is used in automobiles?

- A:-Nickel-cadmium cell
  - B:- $\text{H}_2\text{-O}_2$  fuel cell
  - C:-Lead storage battery
  - D:-Mercury cell
- Correct Answer:- Option-C

Question46:-Emulsion is an example of colloidal system of

- A:-Liquid dispersed in gas
  - B:-Solid dispersed in gas
  - C:-Liquid dispersed in liquid
  - D:-Liquid dispersed in solid
- Correct Answer:- Option-C

Question47:-The volume of 1 mol of gas at STP is

- A:-22.4 ml
  - B:-22.4 L
  - C:-2.24 ml
  - D:-2.24 L
- Correct Answer:- Option-B

Question48:-The oxidation number of sulphur in " $\text{H}_2\text{SO}_4$ " is

A:-+5

B:-+4

C:-+6

D:-+2

Correct Answer:- Option-C

Question49:- $n = 3, l = 2$  represent which orbital

A:-3s

B:-3d

C:-3p

D:-3f

Correct Answer:- Option-B

Question50:-The protective action of colloids are expressed in terms of

A:-Gold Number

B:-Octane number

C:-Atomic number

D:-Cetane number

Correct Answer:- Option-A

Question51:-Bronze is an alloy of

A:-Cu with Zn

B:-Cu with Ni

C:-Fe with Ni

D:-Cu with Sn

Correct Answer:- Option-D

Question52:-Vitamin C is

A:-Cobalamine

B:-Riboflavin

C:-Calciferol

D:-Ascorbic acid

Correct Answer:- Option-D

Question53:-Atoms of different elements having same number of neutrons are called

A:-Isotopes

B:-Isobars

C:-Isotones

D:-Isomers

Correct Answer:- Option-C

Question54:-Sulphide ores are concentrated by

A:-Froth floatation method

B:-Magnetic separation

C:-Hydraulic washing

D:-Leaching

Correct Answer:- Option-A

Question55:-The thermal decomposition of HI on gold surface is a reaction of

A:-First order

B:-Zero order

C:-Fractional order

D:-Second order

Correct Answer:- Option-B

Question56:-Among the following which is used as dehydrating reagent

A:-Alcoholic KOH

B:-Acidified " $\text{KMnO}_4$ "

C:- " $\text{LiAlH}_4$ "

D:- " $\text{Conc.H}_2\text{SO}_4$ "

Correct Answer:- Option-D

Question57:-General outer electronic configuration of group 15 elements are

A:- " $ns^2np^3$ "

B:- " $ns^2np^4$ "

C:- " $ns^2np^6$ "

D:- " $ns^2np^5$ "

Correct Answer:- Option-A

Question58:-The process of accumulation of molecular species at the surface rather than in the bulk is called

- A:-Absorption
- B:-Adsorption
- C:-Sorption
- D:-Desorption

Correct Answer:- Option-B

Question59:-Schottky defect is characterised by

- A:-Increase in density
- B:-Decrease in density
- C:-No change in density
- D:-None of the above

Correct Answer:- Option-B

Question60:-Caustic soda is

- A:-NaCl
- B:- $\text{NaHCO}_3$
- C:- $\text{Na}_2\text{CO}_3$
- D:-NaOH

Correct Answer:- Option-D

Question61:-Number of moles of solute dissolved in 1 kg of solvent is

- A:-Molarity
- B:-Mole fraction
- C:-Molality
- D:-Mass percentage

Correct Answer:- Option-C

Question62:-Williamson's synthesis is used for the preparation of

- A:-Aldehydes
- B:-Ketones
- C:-Alcohols
- D:-Ethers

Correct Answer:- Option-D

Question63:-Which of the following is isoelectronic species?

1.  $\text{Na}^+$
2.  $\text{Ca}^{2+}$
3.  $\text{F}^-$
4.  $\text{O}^{2-}$

- A:-1, 2 and 4
- B:-1, 3 and 4
- C:-2, 3 and 4
- D:-1, 2 and 3

Correct Answer:- Option-B

Question64:-Oleum is

- A:- $\text{H}_2\text{S}_2\text{O}_7$
- B:- $\text{H}_2\text{SO}_4$
- C:- $\text{H}_2\text{SO}_3$
- D:- $\text{SO}_3$

Correct Answer:- Option-A

Question65:-The +8 oxidation state is shown by

- A:-Os
- B:-Fe
- C:-Mn
- D:-Th

Correct Answer:- Option-A

Question66:-Which of the following is a natural polymer?

- A:-Polyethene
- B:-Teflon

C:-Cellulose

D:-Glyptal

Correct Answer:- Option-C

Question67:-On heating an aldehyde with Fehling solution, we get a precipitate whose colour is

A:-White

B:-Yellow

C:-Red

D:-Black

Correct Answer:- Option-C

Question68:-Nitric acid is prepared by

A:-Contact process

B:-Ostwald's process

C:-Haber process

D:-Oxidation process

Correct Answer:- Option-B

Question69:-Which of the following substance on dissolving in water will give an acidic solution?

A:-NaCl

B:- $\text{Na}_2\text{CO}_3$

C:- $\text{CH}_3\text{COONa}$

D:- $\text{NH}_4\text{Cl}$

Correct Answer:- Option-D

Question70:-Zeigler-Natta catalyst is

A:- $(\text{CH}_3)_3\text{Al}$  and  $\text{TiCl}_4$

B:- $(\text{C}_2\text{H}_5)_3\text{Al}$  and  $\text{TiCl}_4$

C:- $\text{V}_2\text{O}_5$

D:- $\text{KMnO}_4$

Correct Answer:- Option-B

Question71:-Which of the following has magnesium?

A:-Chlorophyll

B:-Haemoglobin

C:- $\text{Vit. B}_{12}$

D:-Haemocyanin

Correct Answer:- Option-A

Question72:-Natural rubber is a polymer of

A:-Styrene

B:-Chloroprene

C:-Acrylonitrile

D:-Isoprene

Correct Answer:- Option-D

Question73:-2, 4, 6-trinitrophenol is also known as

A:-Salicylic acid

B:-Resorcinol

C:-Picric acid

D:-Cinnamic acid

Correct Answer:- Option-C

Question74:-EDTA is an example of

A:-Monodentate ligand

B:-Hexadentate ligand

C:-Ambidentate ligand

D:-Chelate ligand

Correct Answer:- Option-B

Question75:-Chloroform is

A:- $\text{CH}_3\text{Cl}$

B:- $\text{CHCl}_3$

C:- $\text{CH}_2\text{Cl}_2$

D:- $\text{CCl}_4$

Correct Answer:- Option-B

Question76:-The total number of orbital possible for principal quantum number 'n' is

A:-n



B:-2n

C:- $2n^2$

D:- $n^2$

Correct Answer:- Option-D

Question77:-Which of the following is an ambidentate ligand?

A:- $H_2O$

B:- $NH_3$

C:-CN

D:-CO

Correct Answer:- Option-C

Question78:-Oxygen shows +2 oxidation state in the compound

A:- $H_2O$

B:- $H_2O_2$

C:- $OF_2$

D:-CaO

Correct Answer:- Option-C

Question79:- $R - X + NaI \rightarrow R-I + NaX$ . This reaction is

A:-Finkelstein reaction

B:-Swarts reaction

C:-Wurtz reaction

D:-Fittig reaction

Correct Answer:- Option-A

Question80:-Primary, Secondary and tertiary alcohols are distinguished by

A:-Lucas test

B:-Tollens test

C:-Fehling test

D:-Borsche's test

Correct Answer:- Option-A

Question81:-Which of the following has the highest electron gain enthalpy?

A:-O

B:-S

C:-F

D:-Cl

Correct Answer:- Option-D

Question82:-Shape of  $SF_6$  molecule is

A:-Tetrahedral

B:-Square planar

C:-Pyramidal

D:-Octahedral

Correct Answer:- Option-D

Question83:-Which of the following compound is added to rectified spirit to make it unfit for drinking purpose?

A:-Acetic acid

B:-Methanol

C:-Chloroform

D:-Acetone

Correct Answer:- Option-B

Question84:-Benzene diazonium chloride on reaction with warm water gives

A:-Phenol

B:-Benzene

C:-Toluene

D:-Benzaldehyde

Correct Answer:- Option-A

Question85:-The catalyst used in contact process for the manufacture of  $H_2SO_4$  is

A:-Fe

B:-Ni

C:- $V_2O_5$

D:-Peroxides

Correct Answer:- Option-C

Question86:-A carbohydrate which cannot be hydrolysed to simpler compound is called

A:-Mono saccharides

B:-Poly saccharides

C:-Disaccharides

D:-Oligo saccharides

Correct Answer:- Option-A

Question87:-The Zig-Zag motion of colloid particle is known as

A:-Electro phoresis

B:-Electro-osmosis

C:-Coagulation

D:-Brownian movement

Correct Answer:- Option-D

Question88:-Liquation is used for the refining of

A:-Low boiling metals

B:-High boiling metals

C:-Low melting metals

D:-High melting metals

Correct Answer:- Option-C

Question89:-A process is said to be spontaneous if

A:- $\Delta H$  is -ve

B:- $\Delta S$  is +ve

C:- $\Delta G$  is -ve

D:-all the above

Correct Answer:- Option-D

Question90:-Neutron was discovered by

A:-Chadwick

B:-Rutherford

C:-J.J. Thomson

D:-Neils Bohr

Correct Answer:- Option-A

Question91:- $^{22}\text{Na}$  contains

A:-11 electron

B:-22 electron

C:-22 protons

D:-22 neutrons

Correct Answer:- Option-A

Question92:-Which of the following molecule has zero dipole moment?

A:- $\text{H}_2\text{O}$

B:- $\text{CO}_2$

C:- $\text{NH}_3$

D:- $\text{NF}_3$

Correct Answer:- Option-B

Question93:-In an isothermal process which of the following is true?

A:- $\Delta V = 0$

B:- $\Delta q = 0$

C:- $\Delta T = 0$

D:- $\Delta P = 0$

Correct Answer:- Option-C

Question94:-Which of the following is water gas?

A:- $\text{CO} + \text{N}_2$

B:- $\text{N}_2 + \text{H}_2$

C:- $\text{O}_2 + \text{H}_2$

D:- $\text{CO} + \text{H}_2$

Correct Answer:- Option-D

Question95:-Bond order is given by

A:- $\frac{1}{2} (N_b - N_a)$

B:- $\frac{1}{2} (N_a - N_b)$

C:- $2 (N_a - N_b)$

D:- $2 (N_b - N_a)$

Correct Answer:- Option-A

Question96:-At absolute zero of temperature

- A:-temperature of gas is zero
  - B:-Volume of gas is zero
  - C:-Pressure of gas is zero
  - D:-Number of moles of gas is zero
- Correct Answer:- Option-B

Question97:-Hot tea in a thermo flask is an example of

- A:-Closed system
  - B:-Isolated system
  - C:-Open system
  - D:-Cyclic system
- Correct Answer:- Option-B

Question98:-`"P^H"` of pure water at 298 K is

- A:-6.9
- B:-7.2
- C:-7
- D:-7.5

Correct Answer:- Option-C

Question99:-Avogadro number is

- A:- $6.022 \times 10^{(22)}$
- B:- $0.6022 \times 10^{(22)}$
- C:- $0.6022 \times 10^{(23)}$
- D:- $6.022 \times 10^{(23)}$

Correct Answer:- Option-D

Question100:-Azeotropes are

- A:-Mixture having same composition in solid and liquid phase
- B:-Mixture having same composition in liquid and vapour phase
- C:-Mixture having same composition in solid and vapour phase
- D:-All the above

Correct Answer:- Option-B