

1.

d and l are a pair of..... configuration

(A)

Relative

(B)

Absolute

(C)

E-Z

(D)

Optical isomers

Ans: (D) Optical isomers

2.

A bond in which atoms share a pair of electrons is

(A)

Ionic bond

(B)

Covalent bond

(C)

Electrovalent bond

(D)

Binary compound band

Ans: (B) Covalent bond

3.

.....is a heterocyclic compound with five membered ring.

(A)

Aziridine

(B)

Azoletine

(C)

Azole

(D)

Azoline

Ans: (C) Azole

4.

1,2-position with six members heterocyclic contain two nitrogen atom is called

(A)

Pyrimidine

(B)

Pyridine

(C)

Pyrazine

(D)

Pyridazine

Ans: (D) Pyridazine

5.

The number of optically active isomers of tartaric acid is

(A)

2

(B)

3

(C)

4

(D)

5

Ans: (A) 2

6.

Mixture of amino acid can be separated by

(A)

Sublimation

(B)

Chromatography

(C)

Distillation

(D)

None

Ans: (B) Chromatography

7.

Which form is more stable in confirmation of n-butane ?

(A)

Skew staggered

(B)

Skew eclipsed

(C)

Totally staggered (anti)

(D)

Fully eclipsed

Ans: (C) Totally staggered (anti)

8.

In a measurement, what is the term used to specify the closeness of two or more measurements

(A)

Precision

(B)

Accuracy

(C)

Fidelity

(D)

Threshold

Ans: (A) Precision

9.

Compound A is highly volatile and insoluble in water so bonding in A is

(A)

Coordinate bond

(B)

Ionic bond

(C)

Covalent bond

(D)

Polar covalent bond

Ans: (C) Covalent bond

10.

Which form is more stable in confirmation of cyclohexane?

(A)

Chair

(B)

Boat

(C)

Twist boat

(D)

Half chair

Ans: (A) Chair

11.

Higher ring strain is associated with

(A)

Cyclopropane

(B)

Cyclobutane

(C)

Cyclopentane

(D)

Cyclohexane

Ans: (A) Cyclopropane

12.

Staggered and eclipsed is a type of

(A)

Conformational isomer

(B)

Geometrical isomer

(C)

Enantiomer

(D)

Optical isomer

Ans: (A) Conformational isomer

13.

Which of the following statement is not correct for benzene?

(A)

Heat of hydrogenation and combustion are lower than expected value

(B)

Benzene undergoes addition reaction rather than substitution reaction

(C)

All C=C in benzene have an intermediate bond length between C-C and C=C

(D)

Benzene follows huckel's rule

Ans:(B) Benzene undergoes addition reaction rather than substitution reaction

14.

A rectal suppository is used to treat a fever. This would represent what type of drug delivery?

(A)

Parenteral and local

(B)

Parenteral and systemic

(C)

Enteral and local

(D)

Enteral and systemic

Ans: (D) Enteral and systemic

15.

Which one of the following medicines does not rely on topical drug delivery?

(A)

Nasal spray

(B)

Anti-dandruff shampoo

(C)

Insulin pen

(D)

Nicotine patch

Ans: (C) Insulin pen

16.

Which one of the following is not a common dosage form for fentanyl?

(A)

Vaporizer

(B)

Lollipop

(C)

Transdermal patch

(D)

IV infusion

Ans: (A) Vaporizer

17.

Which one of the following is NOT true?

(A)

Modified release formulations are most useful for drugs with a long half-life

(B)

Modified release formulations can often reduce side-effects

(C)

Modified release formulations can improve patient compliance

(D)

Modified release formulation can be used for local drug delivery

Ans: (A) Modified release formulations are most useful for drugs with a long half-life

18.

Select the answer that contains one example each of a diluent, disintegrant, binder and glidant.

(A)

Lactose, microcrystalline cellulose, sodium starch glycollate and magnesium stearate

(B)

Lactose, sodium starch glycollate, PVP and colloidal silica

(C)

Calcium carbonate, colloidal silica, talc and magnesium stearate

(D)

Calcium carbonate, sodium starch glycollate, talc, microcrystalline cellulose

Ans: (B) Lactose, sodium starch glycollate, PVP and colloidal silica

19.

"Which one of the following is NOT true?

Tablets are often coated:"

(A)

to protect the drug from the external environment

(B)

to mask bitter tastes

(C)

to increase friability

(D)

to make swallowing easier

Ans: (C) to increase friability

20.

Which of the following excipients may be used to limit the presence of microorganisms in a liquid formulation?

(A)

Purified water

(B)

Sodium lauryl sulphate

(C)

Benzalkonium chloride

(D)

Ascorbic acid

Ans: (C) Benzalkonium chloride

21.

What is the role of xanthan gum within some liquid formulations?

(A)

Regulate pH

(B)

Control viscosity

(C)

Enhance solubility

(D)

Enhance stability

Ans: (B) Control viscosity

22.

Which of the following liquid dosage forms requires a sterile formulation?

(A)

Eye drops

(B)

Spray applied to skin

(C)

Shampoo

(D)

Oral syrup

Ans: (A) Eye drops

23.

Under the ideal gas laws, which of the following is NOT a correct assumption?

(A)

Molecules occupy a negligible volume

(B)

Gas volume are insensitive to changes in pressure

(C)

No energy is lost when molecules collide

(D)

Forces between molecules are insignificant

Ans: (B) Gas volume are insensitive to changes in pressure

24.

Boyle's law describes:

(A)

The relationship between pressure and temperature for ideal gases

(B)

The determinants of the universal gas constant

(C)

The relationship between pressure and volume for ideal gases

(D)

The relationship between temperature and volume for ideal gases

Ans: (C) The relationship between pressure and volume for ideal gases

25.

Which of the following is NOT true of Raoult's law

(A)

Raoult's law applies to miscible solvents in a closed system

(B)

The toluene-benzene mixtures obey Raoult's law

(C)

A pharmaceutical application of Raoult's law is the formulation of pressurised metered dose inhalers

(D)

The behaviour predicted by Raoult's law is independent of inter-molecular forces

Ans: (D) The behaviour predicted by Raoult's law is independent of inter-molecular forces

26.

Which one of the following definitions best describes the concept of work?

(A)

the flow of energy from one object or substance to another due to a difference in temperature

(B)

the flow of energy from one body to another through uniform molecular motion

(C)

the force associated with molecular motion

(D)

the random motion of molecules in a gas at low pressure

Ans: (B) the flow of energy from one body to another through uniform molecular motion

27.

Capsules in which powders are enclosed are made up of

(A)

Gelatine

(B)

Rice flour

(C)

Fructose

(D)

Dextrose

Ans: (A) Gelatine

28.

Which ONE of the following is the best description of a protogenic solvent?

(A)

A protogenic solvent accepts electron lone pairs

(B)

A protogenic solvent neither accepts or donates protons

(C)

A protogenic solvent donates protons

(D)

A protogenic solvent donates or accepts electron lone pairs

Ans: (C) A protogenic solvent donates protons

29.

What is the pH of a 0.015 M solution of potassium hydroxide (KOH)?

(A)

1.8

(B)

12.2

(C)

5.6

(D)

8.8

Ans: (B) 12.2

30.

Melatonin is produced by which of the following:

(A)

Pituitary gland

(B)

Pineal gland

(C)

Lymph node

(D)

Parathyroid body

Ans: (B) Pineal gland

31.

Echocardiogram helps a doctor to see images of the:

(A)

Liver

(B)

Kidney

(C)

Pancreas

(D)

Heart

Ans: (D) Heart

32.

Kupffer cells are present in

(A)

Liver

(B)

Brain

(C)

Bone

(D)

Lungs

Ans: (A) Liver

33.

The only movable bone of the skull is:

(A)

Maxilla

(B)

Ethmoid

(C)

Mandible

(D)

Sphenoid

Ans: (C) Mandible

34.

Which bone forms back of the head is:

(A)

Parietal bone

(B)

Temporal bone

(C)

Frontal bone

(D)

Occipital bone

Ans: (D) Occipital bone

35.

Muscular contractions require energy, in the form of

(A)

Pharma MCQ ADP

(B)

AMP

(C)

ATP

(D)

All

Ans: (C) ATP

36.

The first cervical vertebra is:

(A)

Atlas(C1)

(B)

Axis(C2)

(C)

Lumbar

(D)

Thoracic

Ans: (A) Atlas(C1)

37.

Which is not include in Extraction techniques for aromatic plants

(A)

Headspace trapping

(B)

Microdistillation

(C)

Phytonic extraction

(D)

Hydrodistillation techniques

Ans: (D) Hydrodistillation techniques

38.

Which method is best suitable for use in case of the thermolabile drugs

(A)

Decoction

(B)

Maceration

(C)

Digestion

(D)

Hot Continuous extraction

Ans: (B) Maceration

39.

Chromatography cannot be classified according to mechanism of separation as

(A)

Absorption chromatography

(B)

Partition chromatography

(C)

Ion exchange chromatography

(D)

All of these

Ans: (D) All of these

40.

Which drug is used in hepatoprotective drug?

(A)

Garcenia

(B)

Amla

(C)

Vinca

(D)

Lobelia

Ans: (B) Amla

41.

Which qualitative methods used for alkaloids?

(A)

Mayer's test

(B)

Wagner's test

(C)

Dragendorff's test

(D)

All of these

Ans: (D) All of these

42.

Which method are used for Qualitative analysis?

(A)

HPLC

(B)

HPTLC

(C)

Column chromatography

(D)

all of these

Ans: (D) all of these

43.

In biological systems, what is the primary function of minerals?

(A)

Energy storage

(B)

Structural support

(C)

Enzyme cofactors

(D)

Genetic information storage

Ans: (C) Enzyme cofactors

44.

In biophysical and biochemical techniques, what does the term "spectroscopy" refer to?

(A)

Study of ecosystems

(B)

Measurement of enzyme kinetics

(C)

Study of light absorption and emission

(D)

Analysis of metabolic pathways

Ans: (C) Study of light absorption and emission

45.

The receptors for pain are called:

(A)

Baroreceptors

(B)

Aloceptors

(C)

Nociceptors

(D)

Trauma receptors

Ans: (C) Nociceptors

46.

Which are the organs directly involved in the elimination of protons from the organism regarding the maintenance of the acid base balance?

(A)

Liver and heart

(B)

Kidney and heart

(C)

Lungs and kidneys

(D)

Liver and kidneys

Ans: (C) Lungs and kidneys

47.

A researcher consistently measures blood pressure inaccurately in the same way. This is an example of:

(A)

Random error

(B)

Observer bias

(C)

Instrument calibration

(D)

Systematic error

Ans:(D) Systematic error

48.

More technicians and pharmacists are employed in _____ than any other type of pharmacy.

(A)

Community pharmacy

(B)

Hospital pharmacy

(C)

Mail order pharmacy

(D)

Long-term care

Ans: (A) Community pharmacy

49.

The President Pharmacy Council of India is elected by:

(A)

Elected members of PCI

(B)

Nominated members of PCI

(C)

Ex-Officio members of PCI

(D)

Pharmacy council members

Ans: (D) Pharmacy council members

50.

The written procedures for activities conducted in a laboratory

(A)

Standard operating Procedures (SOPs)

(B)

Records

(C)

Operating procedures

(D)

None

Ans: (A) Standard operating Procedures (SOPs)

51.

Permission to import finished formulation of a new drug is given in form no:

(A)

45

(B)

45A

(C)

46

(D)

46A

Ans: (A) 45

52.

In a clinical trial, what is the role of a p-value in hypothesis testing?

(A)

Indicates effect size

(B)

Determines statistical power

(C)

Measures the strength of evidence against a null hypothesis

(D)

Represents sample size

Ans: (C) Measures the strength of evidence against a null hypothesis

53.

In biophysical chemistry, what does the term "cooperativity" refer to in protein binding?

(A)

Independence of binding sites

(B)

Synergistic binding behavior

(C)

Non-specific binding

(D)

Competitive binding

Ans: (B) Synergistic binding behavior

54.

In cell biology, what is the significance of the Golgi apparatus?

(A)

Lipid synthesis

(B)

Protein modification and packaging

(C)

DNA replication

(D)

Energy production

Ans: (B) Protein modification and packaging

55.

What is the function of the endoplasmic reticulum in a cell?

(A)

Energy storage

(B)

Structural support

(C)

Synthesis of proteins and lipids

(D)

Genetic information storage

Ans: (C) Synthesis of proteins and lipids

56.

What is the function of thyroid hormones in metabolic regulation?

(A)

Stimulate metabolic rate

(B)

Inhibit metabolic rate

(C)

Increase insulin secretion

(D)

Promote fat storage

Ans: (A) Stimulate metabolic rate

57.

What is the main source of energy in human nutrition?

(A)

Proteins

(B)

Fats

(C)

Carbohydrates

(D)

Vitamins

Ans: (C) Carbohydrates

58.

What is the primary marker for liver function in clinical biochemistry?

(A)

Creatinine

(B)

Alanine aminotransferase (ALT)

(C)

Creatine kinase

(D)

Alkaline phosphatase

Ans: (B) Alanine aminotransferase (ALT)

59.

What is the primary role of the cytochrome P450 enzyme family in drug metabolism?

(A)

Drug excretion

(B)

Drug absorption

(C)

Drug biotransformation

(D)

Drug distribution

Ans: (C) Drug biotransformation

60.

What is the purpose of a blood urea nitrogen (BUN) test in Clinical Biochemistry?

(A)

Assess kidney function

(B)

Evaluate liver function

(C)

Monitor cardiac function

(D)

Analyze lung function

Ans: (A) Assess kidney function

61.

How are drugs sourced from plant tissues evaluated for quality and efficacy?

(A)

Quality control

(B)

Biological sources

(C)

Chemical sources

(D)

Random sampling

Ans: (A) Quality control

62.

How can chemical methods be employed to detect adulteration in crude drugs?

(A)

Assess Color and Odor

(B)

Measure Particle Size

(C)

Analyze Chemical Composition

(D)

Evaluate Texture

Ans: (C) Analyze Chemical Composition

63.

How can fire hazards be minimized in a pharmaceutical facility?

(A)

Increase Flammable Materials

(B)

Provide Adequate Ventilation

(C)

Ignore Emergency Exits

(D)

Use Open Flames

Ans: (B) Provide Adequate Ventilation

64.

What does a 95% confidence interval represent?

(A)

The range within which the true population parameter is estimated to lie with 95% probability

(B)

The exact range of values of the population parameter

(C)

The probability that the sample mean falls within a specific range

(D)

The interval where the null hypothesis is likely to be true

Ans: (A) The range within which the true population parameter is estimated to lie with 95% probability

65.

What information does Nuclear Magnetic Resonance (NMR) spectroscopy provide about organic compounds?

(A)

Mass Distribution

(B)

Isotopic Composition

(C)

Electronic Configuration

(D)

Structural Details

Ans: (D) Structural Details

66.

What is the basic instrumentation used in spectroscopic analysis?

(A)

Chromatographic methods

(B)

Basic instrumentation

(C)

Spectroscopic analysis

(D)

Filtration

Ans: (B) Basic instrumentation

67.

What is the primary application of Ultraviolet and visible spectrophotometry in the analysis of organic compounds?

(A)

Determine Molecular Weight

(B)

Identify Functional Groups

(C)

Measure Refractive Index

(D)

Analyze Crystal Structure

Ans: (B) Identify Functional Groups

68.

In the context of toxicology, what does the acronym "PPE" stand for?

(A)

Personal Protection Equipment

(B)

Potential Pathogen Exposure

(C)

Primary Pathway Elimination

(D)

Public Policy Enforcement

Ans: (A) Personal Protection Equipment

69.

Regulatory toxicology aims at guarding the public from dangerous chemical exposures, and depends primarily on which form of study:

(A)

observational human studies.

(B)

controlled laboratory animal studies.

(C)

controlled human studies.

(D)

environmental studies.

Ans: (B) controlled laboratory animal studies.

70.

Skin absorption is an example of which exposure pathway?

(A)

Inhalation

(B)

Ingestion

(C)

Dermal

(D)

Injection

Ans: (C) Dermal

71.

What does the "M" in ADME stand for?

(A)

Metabolism

(B)

Monitoring

(C)

Maintenance

(D)

Membrane

Ans: (A) Metabolism

72.

What is a common route of exposure for occupational toxicants in industrial settings?

(A)

Inhalation

(B)

Ingestion

(C)

Dermal

(D)

Ocular

Ans: (A) Inhalation

73.

What is the primary focus of safety assessment in regulatory toxicology?

(A)

Economic considerations

(B)

Human health risk assessment

(C)

Marketing strategies

(D)

Industrial production

Ans: (B) Human health risk assessment

74.

Which exposure pathway is associated with the intake of contaminated food or water?

(A)

Inhalation

(B)

Ingestion

(C)

Dermal

(D)

Ocular

Ans: (B) Ingestion

75.

In which Ayurvedic formulation preservative is not required?

(A)

Lepa

(B)

Vatika

(C)

Asava

(D)

Pisti

Ans: (C) Asava

76.

Candelabra trichomes are present in

(A)

Verbascum thapsus

(B)

Digitalis purpurea

(C)

Senna angustifolia

(D)

Helicteris isora

Ans: (A) Verbascum thapsus

77.

Adaptogen are substances which

(A)

Improve physical endurance

(B)

Maintain stamina in adverse and difficult environment

(C)

Increase the tolerance to change in environment

(D)

All of the these

And: (D) All of the these

78.

Which one is essential vitamin in culture media?

(A)

Thiamine

(B)

Ascorbic acid

(C)

Pantothenic acid

(D)

Biotin

Ans: (A) Thiamine

79.

Which one is not an intermediate in shikimic acid pathway?

(A)

Erythrose 4 phosphate

(B)

Chrosmic acid

(C)

Shikimic acid

(D)

Prephenic acid

Ans: (A) Erythrose 4 phosphate

80.

Aril is present in

(A)

Nutmeg

(B)

Cardamom

(C)

Strophanthus

(D)

Castor

Ans: (A) Nutmeg

81.

What is the process by which plants release water vapor into the atmosphere?

(A)

Transpiration

(B)

Photosynthesis

(C)

Respiration

(D)

Evaporation

Ans: (A) Transpiration

82.

What is the significance of the Kesavananda Bharati case in Indian constitutional law?

(A)

It established the doctrine of basic structure of the Constitution

(B)

It upheld the 42nd Amendment

(C)

It established the supremacy of Parliament

(D)

It introduced the concept of judicial review

Ans: (A) It established the doctrine of basic structure of the Constitution

83.

Which country was the first to grant women the right to vote?

(A)

New Zealand

(B)

United States of America

(C)

Canada

(D)

Sweden

Ans: (A) New Zealand

84.

Who composed the famous Indian patriotic song "Vande Mataram"?

(A)

Bankim Chandra Chattopadhyay

(B)

Rabindranath Tagore

(C)

Subramania Bharati

(D)

Sarojini Naidu

Ans: (B) Rabindranath Tagore

85.

Who developed the first successful polio vaccine?

(A)

Jonas Salk

(B)

Albert Sabin

(C)

Louis Pasteur

(D)

Alexander Fleming

Ans: (A) Jonas Salk

86.

What is the process of blood clotting called?

(A)

Coagulation

(B)

Hematopoiesis

(C)

Hemostasis

(D)

Phagocytosis

Ans: (C) Hemostasis

87.

What is the term of office of the Vice President of India?

(A)

4 years

(B)

5 years

(C)

6 years

(D)

3 years

Ans: (B) 5 years

88.

Which article of the Indian Constitution deals with the Right to Education?

(A)

Article 21-A

(B)

Article 45

(C)

Article 51

(D)

Article 29

Ans: (A) Article 21-A

89.

Who administers the oath of office to the President of India?

(A)

Prime Minister

(B)

Vice President

(C)

Chief Justice of India

(D)

Speaker of Lok Sabha

Ans: (C) Chief Justice of India

90.

Who appoints the Chief Justice of India?

(A)

Prime Minister

(B)

President

(C)

Parliament

(D)

Vice President

Ans: (B) President

91.

During blood transfusion the most important nursing responsibility is :

(A)

Draw a sample from the patient before each unit is transfused(D)

(B)

Run the blood at a slower rate during the first few minutes of transfusion.

(C)

Warm the blood to body temperature to prevent chilling.

(D)

Maintain patency of the IV catheter with dextrose solution.

Ans: (B) Run the blood at a slower rate during the first few minutes of transfusion.

92.

During DNA replication the synthesis of the leading strand of DNA results in fragments known as

(A)

Okazaki fragments

(B)

Satellite segments

(C)

Kornberg segment

(D)

Double-helix segment

Ans: (A) Okazaki fragments

93.

Foetus is more vulnerable to Carbon monoxide poisoning than adult because.....

(A)

Greater content of haemoglobin

(B)

lower partial pressure of oxygen

(C)

Tendency to cause greater tissue hypoxia

(D)

All of these

Ans: (D) All off these

94.

The core of an electromagnet is made of soft iron because soft iron has

(A)

small susceptibility and small retentivity

(B)

large susceptibility and small retentivity

(C)

large density and large retentivity

(D)

small density and large retentivity

Ans: (B) large susceptibility and small retentivity

95.

The greatest resolution in light microscopy can be obtained with _____

(A)

Shortest wavelength of visible light used

(B)

Longest wavelength of visible light used

(C)

An objective with minimum numerical aperture

(D)

Shortest wavelength of visible light used and an objective with the maximum numerical aperture

Ans: (D) Shortest wavelength of visible light used and an objective with the maximum numerical aperture

96.

The heme portion of the hemoglobin molecule consists of:

(A)

Porphyrin ring with a molecule of Fe in the center.

(B)

A polypeptide chain containing Fe

(C)

A pyrole ring with four molecules of Fe in the center.

(D)

Four porphyrin rings, each containing a molecule of Fe in the center

Ans: (D) Four porphyrin rings, each containing a molecule of Fe in the center

97.

Which of the following is a halogen?

(A)

Radon

(B)

Astatine

(C)

Cesium

(D)

Ruthenium

Ans:(B) Astatine

98.

Which of the following is not the stage of development of clinical feature of rabies?

(A)

Premonitory stage

(B)

Stage of irritability or Excitement

(C)

Stage of Paralysis

(D)

Stage of Narcosis

Ans:(D) Stage of Narcosis

99.

Which of the following is used in electron microscope?

(A)

Electron beams and magnetic fields

(B)

Light waves

(C)

Magnetic fields

(D)

Electron beams

Ans:(A) Electron beams and magnetic fields

100.

Which of the following method can be used to determine the number of bacteria quantitatively?

(A)

Spread-plate

(B)

Streak-plate

(C)

Pour-plate and spread plate

(D)

Pour plate

Ans:(C) Pour-plate and spread plate