Sample Paper

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UG PCB (sections: Physics, Chemistry, Biology)

Q.No. 1

Given below are the two statements, one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: Concentration of methane in the atmosphere has been doubled in last 250 years

Reason R: Wetlands and rice-fields are the major sources of methane

In the light of the above statements, choose the most appropriate answer from the options given below

(A)

Both A and R are correct and R is the correct explanation of A

(B)

Both A and R are correct and R is NOT the correct explanation of A

(C)

A is correct but R is not correct

(D)

A is not correct but R is correct

Q.No. 2

For the substance of atomic mass 63.1u, X-ray diffraction studies determine the edge length that is $4 * 10^{-8}$ cm, have a density of 6.8 g/cm^3. What are the numbers of atom per unit cell?

(A)

1

(B)

2

(C)

3

(D)

4

Q.No. 3

Which of the following phenomena confirms that light is a transverse wave:

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(A)

Interference

(B)

Diffraction

(C)

Reflection

(D)

Polarization

Q.No. 4

Two charges $+10\mu C$ and $+20\mu C$ are placed at a distance of 2 cm. The electric potential due to the charges at the mid point of the line joining the two charges will be,

$$\left(1/4\pi E_0 = 9310^9 \text{ N m}^2/\text{c}\right)$$

(A)

0

(B)

9MV

(C)

18MV

(D)

27MV

Q.No. 5

Three particles: electron, proton, He^+ are projected with the same velocity perpendicular to a uniform magnetic field. Which of them will describe the smallest circle?

(A)

electron

(B)

proton

(C)

He^+

(D)

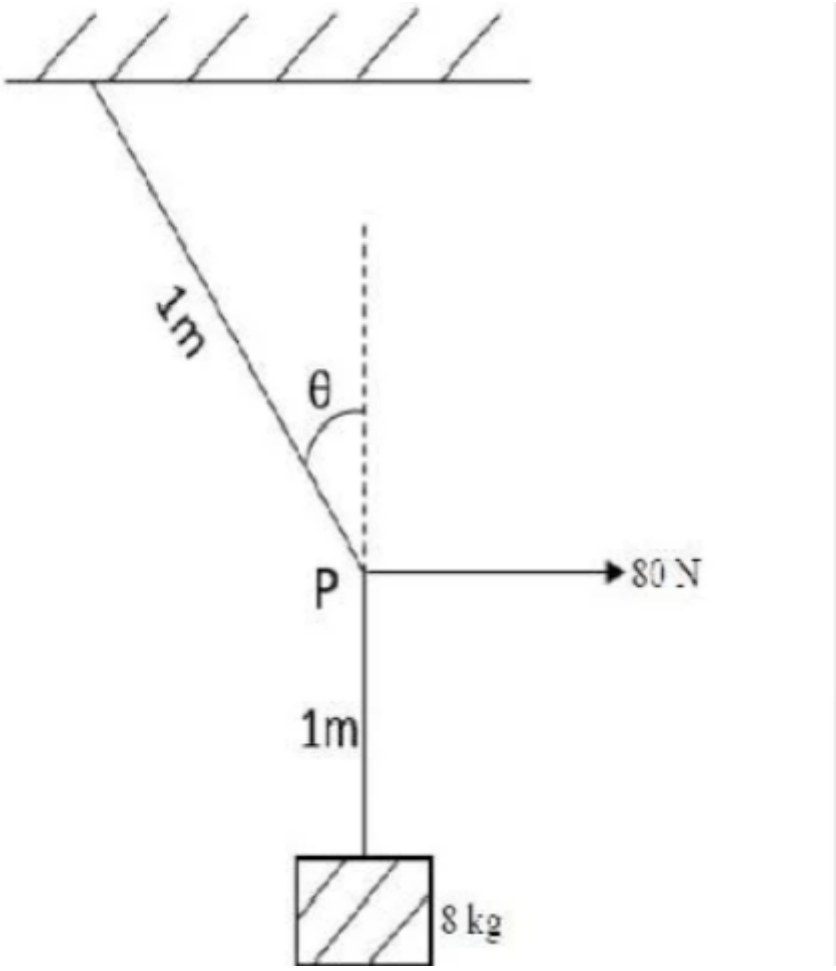
All will describe circle of same radius

Q.No. 6

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As shown in the figure, a mass of 8 kg is suspended by the light string of length 2 m from the ceiling, A force of 80 N in the horizontal direction is applied at P as shown in the figure. The angle θ the strings make with the vertical at equilibrium is : ($g=10m/s^2$)



(A)

60^o

(B)

45^o

(C)

30^o

(D)

15^o

Q.No. 7

The position of an object moves along x-axis is given by $x=a+bt^2$ where a=11 m, $b=3.5\ m/s^2$ and t is in seconds. The average velocity between t=3 s and t=5 s is

(A)

28m/s

(B)

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14m/s

(C)

21m/s

(D)

7m/s

Q.No. 8

Which of the following is not related to symbiotic biological nitrogen fixation?

(A)

Nitrogenous requires anaerobic condition and leghemoglobin

(B)

Sweet pea and lentils

(C)

Rhodospirillum

(D)

Nodule formation

Q.No. 9

The constant γ for oxygen as well as hydrogen is 1.4. If the speed of the sound in oxygen is v, what will be the speed of sound in hydrogen at the same temperature and pressure?

(A)

16 v

(B)

8 v

(C)

4 v

(D)

v

Q.No. 10

Lithium react with element "X" make an alloy (white metal)used in bearings for motor engines. "X" is.....

(A)

Al

(B)

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Mg

(C)

Pb

(D)

Cr

Q.No. 11

For what distance is ray optics a good approximation when the aperture is 2 mm width and wavelength is 500 mm?

(A)

80 m

(B)

8 m

(C)

40 m

(D)

4 m

Q.No. 12

Two source are called coherent if they produce waves:

(A)

of equal wavelength

(B)

of equal velocity

(C)

having same shape of wave front

(D)

having a constant phase difference

Q.No. 13

The figure given below represents:



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(A)

Network polymer

(B)

Linear polymer

(C)

Branched chain polymer

(D)

High density polythene

Q.No. 14

Which of the following species is/are Lewis acid?

A: BCl_3

B: BF_3

C: Mg^{2+}

D: OH^-

E:CO^{3+}

Choose the correct answer from the options given below:

(A)

A, B , C and E only

(B)

A and B only

(C)

B only

(D)

A, B and E only

Q.No. 15

Which of the following is not the feature of catalytic converter?

(A)

They are used in automobiles from reduction of poisonous gases

(B)

Vehicles equipped with catalytic converter should use leaded petrol

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(C)

Rhodium is used as one of the catalyst in catalytic converter

(D)

When the exhaust passes through these converters, unburnt hydrocarbons are changed into carbon dioxide and oxygen

Q.No. 16

In the evolution of man, several changes occur in the ancestral characters. Which of the following changes is irrelevant in this context?

(A)

Change of diet from fruits, hard nuts and roots to softer foods

(B)

Perfection in the structure and working of hand for tool making

(C)

Loss of tail from body

(D)

Increase in the ability to communicate with others

Q.No. 17

Disproportionate reaction of HNO2gives nitrogenous compound 'X' and 'Y'. Oxidation state of N in 'X' and 'Y' are:

(A)

+4, +1

(B)

+4, +2

(C)

+5, +2

(D)

+5, +1

Q.No. 18

What is the correct sequence of the plants in a hydrosere?

A: Lantana

B: Hydrilla

C:Volvox

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D: Oak

E: Pistia

Choose the correct answer from the options given below:

(A)

B>A>D>C>E

(B) C>B>A>E>D

(C)

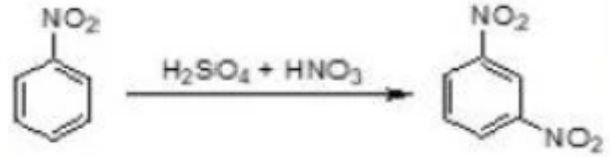
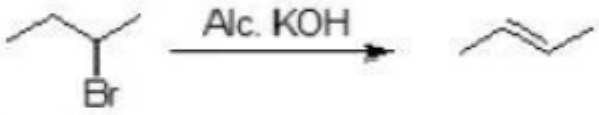
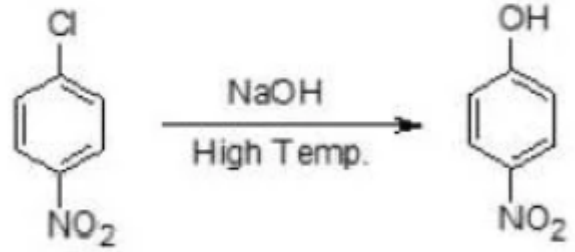
B>C>A>D>E

(D)

C>B>E>A>D

Q.No. 19

Match List I with List II:

List I	**List II**
Reaction	**Type of reaction**
A. 	I. Nucleophilic substitution
B. 	II. Saytzeff elimination
C. 	III. Electrophilic addition
D. 	IV. Electrophilic substitution

Choose the correct answer from the options given below:

(A)

A-II, B-IV, C-III, D-I

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(B)

A-IV, B-II, C-III,D-I

(C)

A-IV, B-II, C-I, D-III

(D)

A-II, B-IV, C-I, D-III

Q.No. 20

Rainbow occurs due to the fact that when sunlight passes through the water drops in the atmosphere, it undergoes,

(A)

Dispersion

(B)

Scaltering

(C)

Polarization

(D)

Diffraction

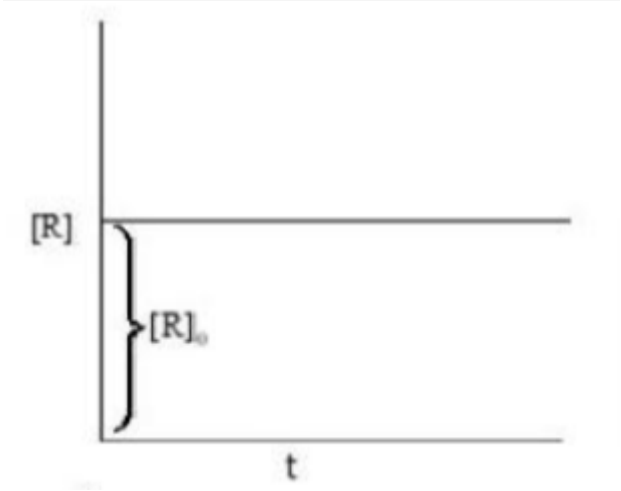
Q.No. 21

For a zero order reaction, the rate constant is

$$K = \frac{[R]_0 - [R]}{t}$$

Which of the following is correct graph for it?

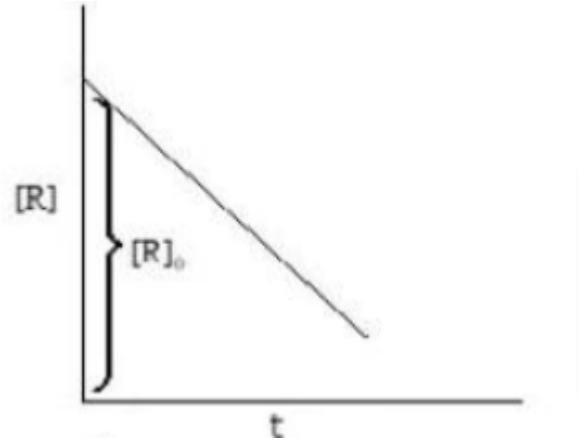
(A)



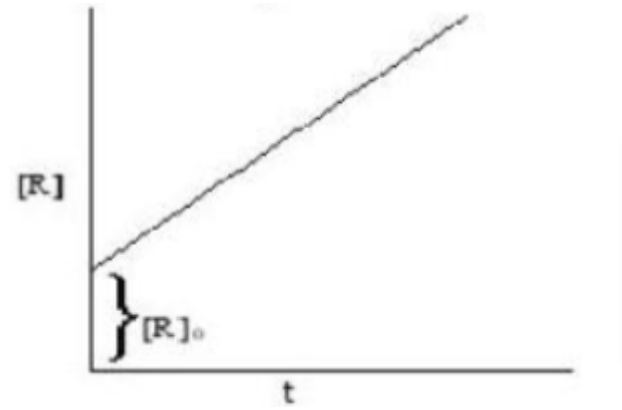
(B)

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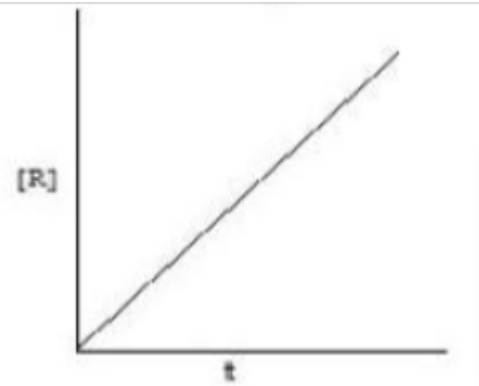
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(C)



(D)



Q.No. 22

When a wire is under a stress, the amount of elastic potential energy stored in the wire is:

(A)

1/2 stress * strain

(B)

1/2 stress * strain *volume of the wire

(C)

1/2 stress * young's modulus

(D)

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1/2 strain * young's modulus

Q.No. 23

Match List I with List II:

List I	List II
A. DNA polymerase-III	I. Relieves tasque
B. DNA gyrase	II. Synthesizes short stretches of DNA
C. DNA polymerase-I	III. Synthesizes DNA
D. DNA primase	IV. Removes primer and fills small gaps during DNA repair reactions

Choose the correct answer from the options given below:

(A)

A-IV, B-I, C-III, D-II

(B)

A-II, B-III, C-IV, D-I

(C)

A-III, B-II, C-I, D-IV

(D)

A-III, B-I, C-IV, D-II

Q.No. 24

Two conducting circular loops of radii R_1 and R_2 are placed in the same plane with their centres coinciding. The mutual inductance between them will be, ($R_2 << R_1$)

(A)

$$\frac{\mu_0 \pi R_1^2}{R_2}$$

(B)

$$\frac{\mu_0 \pi R_2^2}{R_1}$$

(C)

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$$\frac{\mu_0 \pi R_1^2}{2R_2}$$

(D)

$$\frac{\mu_0 \pi R_2^2}{2R_1}$$

Q.No. 25

A pendulum clock keeping correct time in the surface of earth is taken to high altitude. Then-

(A)

It will keep correct time

(B)

Its length should be increased to keep correct time

(C)

Its length should be decreased to keep correct time

(D)

It cannot keep correct time even if length is changed

Q.No. 26

The temperature at which the real gas obeys ideal gas law over an appreciable range of pressure is called

(A)

Absolute temperature

(B)

Boyle temperature

(C)

Critical temperature

(D)

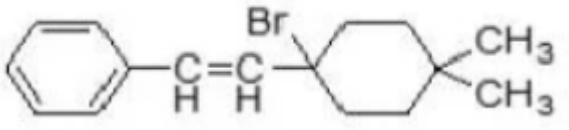
Kelvin temperature

Q.No. 27

The position of -Br classified in the given compound is:

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(A)

Benzyl

(B)

Allyl

(C)

Vinyl

(D)

Alkyl

Q.No. 28

A uniform electric field of magnitude E= 100N/C exists in the space in X-direction. Calculate the flux of this field through a plane square area of 10 cm^2 placed in Y-Z plane

(A)

1.0 Nm^2/C

(B)

$10^2 Nm^2/C$

(C)

$10^4 Nm^2/C$

(D)

0.01 Nm^2/C

Q.No. 29

For the detection of carbonic organic compounds, it is first treated with reagent 'X' on heating to get CO_2, X is:

(A)

Cu_2O

(B)

CuO

(C)

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$CuSO_4$

(D)

$CuSO_4.5H_2O$

Q.No. 30

The element with atomic number 55 belongs to

(A)

Group 1

(B)

Group 3

(C)

Group 15

(D)

Group 17

Q.No. 31

Benzoic acid and phenol can be distinguished in laboratory on the basis of:

A: Sodium bicarbonate test

B: Bromine water test

C: Tollens's test

D: Lucas test

Choose the correct answer from the options given below:

(A)

A only

(B)

A and B only

(C)

A and C only

(D)

B and C only

Q.No. 32

A box of mass m is lying on the floor of a train moving with the velocity v. The coefficient of static friction between the box and the the floor of the train is μ_s.The maximum acceleration of the train in which the box will remain stationary depends on-

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(A)

Mass of the box m

(B)

Velocity of the train v

(C)

Coefficient of static friction μ_s

(D)

Surface area of the box

Q.No. 33

Given below two statements, One is labelled as Assertion A and the other labelled as Reason R:

Assertion A: Among halogens, chlorine has highest negative electron gain enthalpy value.

Reason R: The ionic radius of Cl^- is 184pm.

In light of the above statements, Choose the most appropriate answer from the options given below:

(A)

Both A and R are correct but R is the correct explanation of A

(B)

Both A and R are correct but R is NOT the correct explanation of A

(C)

A is correct but R is not correct

(D)

A is not correct but R is correct

Q.No. 34

The radius of curvature of a Plano convex lens can be measured by a-

(A)

Vernier Caliper

(B)

Spherometer

(C)

Screw Guage

(D)

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Pyrometer

Q.No. 35

Organisms that do not enrich the nutrient quality of the soil

1. Bacteria
2. Fungi
3. Cyanobacteria
4. Mycorrhiza

(A)

1

(B)

2

(C)

3

(D)

4

Q.No. 36

Which of the following is used for commercial production of ethanol?

(A)

Saccharomyces cerevisiae

(B)

Aspergillus Niger

(C)

Penicillium notarium

(D)

Acetobacter aceti

Q.No. 37

Given below are two statements:

Statement I: Expansion of a gas against external pressure is called free expansion.

Statement II: No work is done during the expansion of an ideal gas when the process is reversible only.

Choose the correct answer from the options given below:

(A)

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Both Statement I and Statement II are true

(B)

Both Statement I and Statement II are false

(C)

Statement I is true but Statement II is false

(D)

Statement I is false but Statement II is true

Q.No. 38

Given below are two statements:

Statement I: The medullary zone of kidney is divided into a few conical masses called medullary pyramids which projects into calyces.
Statement II: Inside the kidney, the cortical region extends in between the medullary pyramids as renal pelvis.

In the light of the above statements, choose the most appropriate answer from the options given below

(A)

Both statement I and statement II are correct

(B)

Both statement I and statement II are incorrect

(C)

statement I is correct but statement II is incorrect

(D)

statement I is incorrect but statement II is correct

Q.No. 39

A cell of 2V and internal resistance 0.5Ω connected across a resistance of 9.5 Ω. How many electron cross through a cross section of the resistance in 1 second?

(A)

$1.25 * 10^{19}$

(B)

$1.25 * 10^{18}$

(C)

$1.25 * 10^{17}$

(D)

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$1.25 * 10^{20}$

Q.No. 40

Match List I and List II

List I	List II
A. Coelomates	I. Aschelminths
B. Pseudocoelomates	II. Platyhelminths
C. Acoelomates	III. Annelids
D. Diploblastic	IV. Coelenterates

Choose the correct answer from the options given below:

(A)

A-II, B-I, C-III, D-IV

(B)

A-III, B-I, C-II, D-IV

(C)

A-II, B-I, C-IV, D-III

(D)

A-I, B-II, C-III, D-IV

Q.No. 41

The resistance R=V/I, were V=(200±10)V and I=(10+1)A. The percentage error in R will be

(A)

15%

(B)

11%

(C)

10%

(D)

9%

Q.No. 42

The Biopolymer stored in animal body is:

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(A)

Amylose

(B)

Cellulose

(C)

Sucrose

(D)

Glycogen

Q.No. 43

Given below two statements, One is labelled as Assertion A and the other labelled as Reason R:

Assertion A: H^+ dose not exist freely.

Reason R: Loss of the electron from hydrogen atom leads to nucleus, H^+ of approx.1.5 *10^{-3} pm size.

In light of the above statements, Choose the most appropriate answer from the options given below:

(A)

Both A and R are correct but R is the correct explanation of A

(B)

Both A and R are correct but R is NOT the correct explanation of A

(C)

A is correct but R is not correct

(D)

A is not correct but R is correct

Q.No. 44

A body falling vertically downwards due to gravity, break into two equal parts of unequal masses. The centre of mass of the two masses taken together will-

(A)

shift towards heavier mass

(B)

shift towards lighter mass

(C)

does not shift horizontally

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(D)

depends on vertical velocity at the time of breaking

Q.No. 45

Formalin is particularly used to preserve biological specimens laboratory. It is a:

(A)

50% aqueous solution of formaldehyde

(B)

50% ethanolic solution of formaldehyde

(C)

60% aqueous solution of acetaldehyde

(D)

40% aqueous solution of methanal

Q.No. 46

Which one of the following is a correct combination of a disease, its causative organism and mode of infection?

(A)

Typhoid fever-salmonella typhi-sexual transmission

(B)

Pneumonia-Haemophilus influenzae-droplet infection

(C)

Malaria-plasmodium falciparium-contaminated food and water

(D)

Filariasis-wuchereria bancroftti-bite of female Anpoheles mosquito

Q.No. 47

For the following molecules/intermediates/species:

$$A - BH_3; \quad B - SiH_4; C - PCl_3; D - : CH_2; E - NH_3$$

Select the correct option for electrophile(s):

(A)

A. B, C and D only

(B)

A, B and C only

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(C)

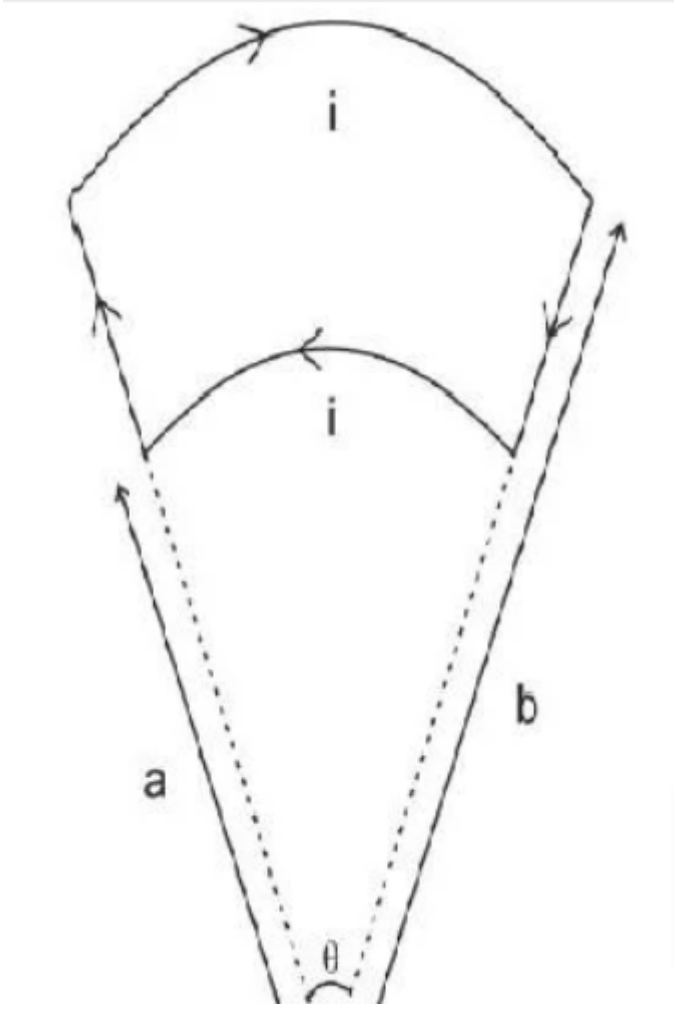
A only

(D)

A and D only

Q.No. 48

Figure shows a current loop having two section of circular loops joined by two radial lines. The net magnetic field at a centre O is:



(A)

$$\frac{\theta\mu_0 i(b-a)}{4\pi ab}$$

(B)

$$\frac{\theta\mu_0 i(b-a)}{2\pi ab}$$

(C)

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$$\frac{\theta \mu_0 l(b-a)}{\pi ab}$$

(D)

Zero

Q.No. 49

For the given equilibrium,

$$2\mathrm{NOCl(g)} \rightleftharpoons 2\mathrm{NO(g)} + \mathrm{Cl_2(\ g)}$$

The value of the equilibrium constant, K_c at 100 K is 3 * 10^{-4}, the value of K_p for the same reaction at 1000 K is.....

(A)

0.25

(B)

0.025

(C)

2.5

(D)

25

Q.No. 50

The ac voltage across the resistance can be measured using-

(A)

A potentiometer

(B)

Moving coil galvanometer

(C)

A hot wire voltmeter

(D)

A moving magnet galvanometer

Q.No. 51

Metaphosphoric acid $(HPO_3)_3$ contains:

(A)

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3 P-OH bonds, 3 P=O bonds, 3 P-O-P bonds

(B)

4 P-OH bonds, 2 P=O bonds, 1 P-O-P bonds

(C)

3 P-OH bonds, 1 P=O bonds

(D)

2 P-OH bonds, 2 P=O bonds, 2 P-H bonds

Q.No. 52

Select the correct option for elements in the increasing order of 1st ionization enthalpy:

Pb,Sn,Ge,Si

(A)

Pb<Sn<Ge<Si

(B)

Sn<Pb<Si<Ge

(C)

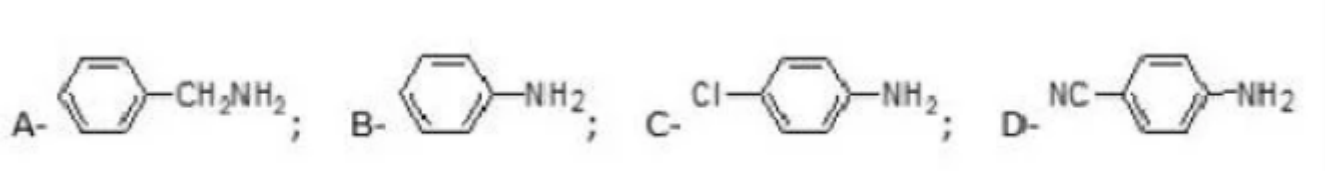
Sn<Pb<Ge<Si

(D)

Pb<Sn<Si<Ge

Q.No. 53

Consider the following amines:



The basic strength of these amines in increasing order is:

(A)

C<D<A<B

(B)

D<B<C<A

(C)

C<D<B<A

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(D)

D<C<B<A

Q.No. 54

In India, on the basis of numbers arrange the following in ascending order.

A: Biodiversity hotspots

B: Wildlife Sanctuaries

C: Biospheres Reserves

D: Botanical Gardens

E: Zoological Parks

Choose the correct answer from the options given below:

(A)

A>B>D>E>C

(B)

E>B>C>A>D

(C)

D>C>A>B>E

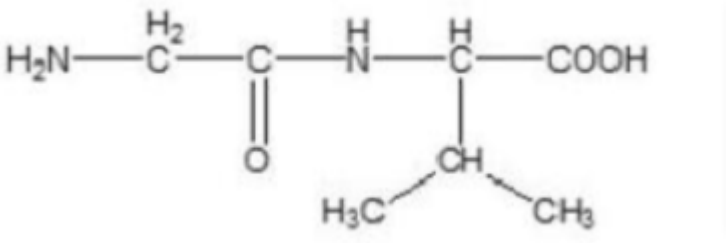
(D)

B>D>E>C>A

Q.No. 55

The correct structure of the dipeptide glycylvaline is:

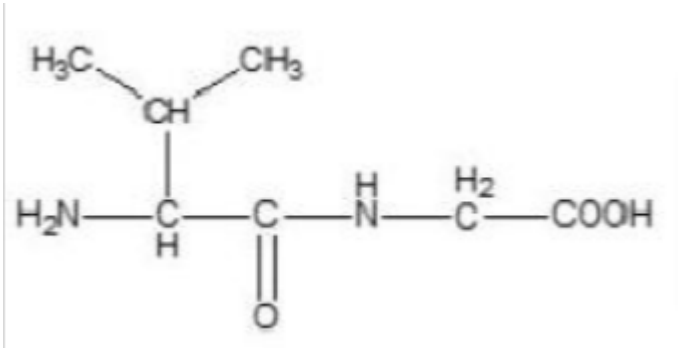
(A)



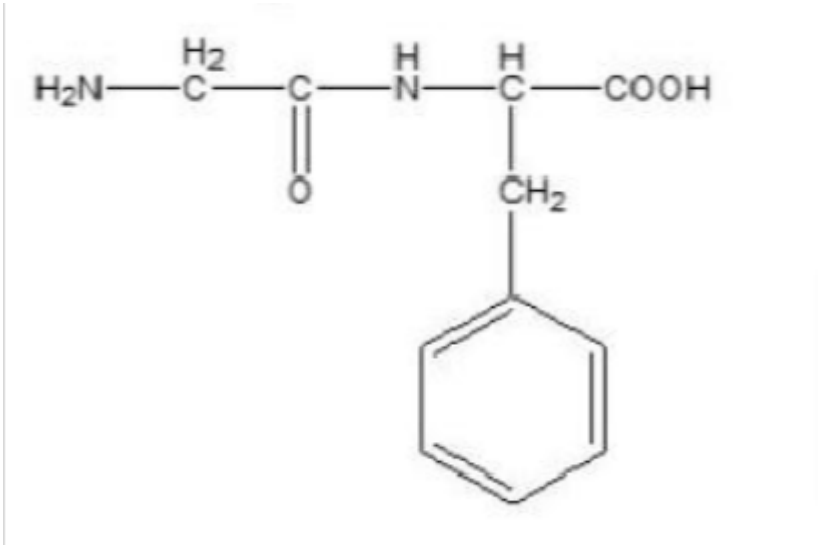
(B)

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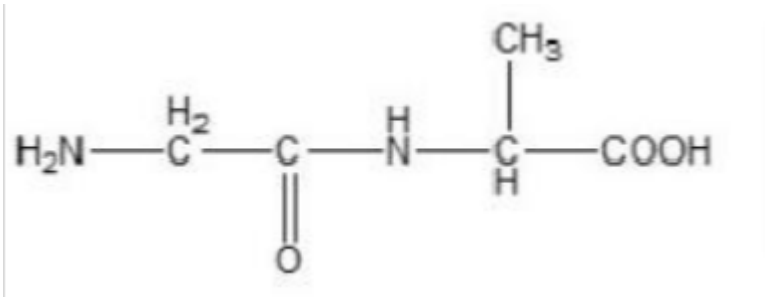
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(C)



(D)



Q.No. 56

Assume that in rabbits the allele for colored fur (C) is dominant to the allele for albinism (c).If the population of 480rabbits with 45 albino is in Hardy-Weinberg Equilibrium, then what is the percentage of heterozygotes?

(A)

19

(B)

70

(C)

30

(D)

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Q.No. 57

Match List I and List II

List I	List II
A. Indole Acetic Acid	I. Increase length of grapes stalks
B. Zeatin	II. Hastens fruit ripening in tomatoes
C. Gibberellic acid	III. Overcome apical dominance
D. Ethephon	IV. Rooting in stem cuttings

Choose the correct answer from the options given below:

(A)

A-II, B-I, C-IV, D-III

(B)

A-IV, B-II, C-I, D-III

(C)

A-IV, B-III, C-I, D-II

(D)

A-III, B-IV, C-II, D-I

Q.No. 58

Two bullets are simultaneously , horizontally with different speeds and using two different guns from the same place. Which bullet will hit the ground first?

(A)

The faster one

(B)

The slower one

(C)

both will reach simultaneously

(D)

depends on the mass of bullets

Q.No. 59

Given below are two statements:

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Statement I: Both carbon and silicon atoms belong to group 14, both CO_2 and SiO_2 are gases and linear molecules.

Statement II: BCl_3 and $AlCl_3$ behave as Lewis acids, being electron deficient due to incomplete octet of central atom.

Choose the correct answer from the options given below:

(A)

Both Statement I and Statement II are true

(B)

Both Statement I and Statement II are false

(C)

Statement I is true but Statement II is false

(D)

Statement I is false but Statement II is true

Q.No. 60

Match List I with List II:

List I	List II
A. *Monoascus purpureus*	I. Streptokinase
B. *Trichoderma polysporum*	II. Black Pepper
C. *Aspergillus niger*	III. Cylcosporin A
D. *Streptococcus*	IV. Citric acid

Choose the correct answer from the options given below:

(A)

A-III, B-II, C-IV, D-I

(B)

A-II, B-III, C-IV, D-I

(C)

A-II, B-III, C-I, D-IV

(D)

A-IV, B-II, C-III, D-I

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Q.No. 61

Arrange the following in the descending order of covalent bond length:

C-C, C-N, C-H, O-H

(A)

C-C > C-N > C-H > O-H

(B)

C-C > C-H > C-N > O-H

(C)

O-H > C-H > C-C > C-N

(D)

C-N > C-C > O-H > C-H

Q.No. 62

Arrange the following periods in Chronical order:

A: Permian

B:Devonian

C: Cambrian

D: Ordovician

Choose the correct answer from the options given below:

(A)

C>E>B>D>A

(B)

B>E>C>A>D

(C)

A>C>E>D>B

(D)

D>B>E>A>C

Q.No. 63

Van de Graaf accelerator can not be used for accelerating

(A)

electron

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(B)

proton

(C)

α-particle

(D)

Neutron

Q.No. 64

Which of the following statements related to quantum mechanical model of atom is incorrect?

(A)

The Schrodinger equation cannot be solved exactly for multielectron atom

(B)

The quantum mechanics predicts all aspects for the hydrogen atom spectrum.

(C)

It obeys the Heisenberg uncertainty principle

(D)

The wave function is the mathematical function and has physical meaning.

Q.No. 65

Decomposoition

A. is favoured by warm and dry environment
B. gives rise to humus and inorganic nutrients
C. is dependent on oxygen availability
D. involves fragmentation, catabolism and leaching
E. is faster when detritus is low in nitrogen and sugars
Choose the correct answer from the options given below:

(A)

A, B, C, D only

(B) B, C, D, E only

(C)

B, C, D only

(D)

A, C, E only

Q.No. 66

Which of the following is NOT an anabolic process?

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A. Oxidative deamination of nuerotransmitter by monoamine oxidase
B. Glycerol reacts with fatty acids to make lipids
C. Increase in the muscle mass
D. Hydrogen peroxide decomposes into water and oxygen
E. Synthesis of glycogen from glucose
Choose the correct answer from the options given below:

(A)

A, B, E only

(B)

B, D only

(C)

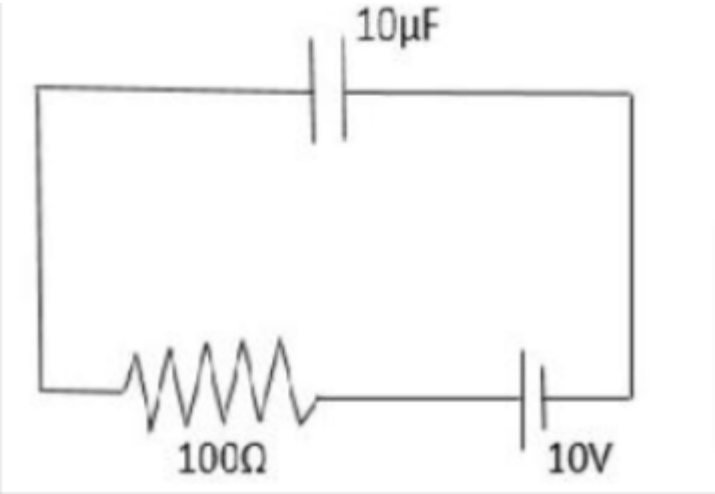
A, D only

(D)

B, D, E only

Q.No. 67

A 10μF capacitor is connected to the battery of 10 V through a 100Ω resistor as shown in figure. The charge accumulated in the capacitor will be



(A)

100μC

(B)

50μC

(C)

25μC

(D)

0

Q.No. 68

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Bt tonic gene cloned from bacterium Bacillus thuringiensis when expressed in plants provide

(A)

Nematode resistance

(B)

Insect resistance

(C)

Drought resistance

(D)

Cold resistance

Q.No. 69

A cricket ball of mass m is thrown at a certain period u_0 in a direction θ above the horizontal. During the entire journey the force acting on the ball is

(A)

mg $\sin\theta$

(B)

mg $\cos\theta$

(C)

mg

(D)

Zero

Q.No. 70

What would be the final volume of the gas, if pressure of 3L of H_2 tripled and temperature is raised from 300 K to 400 k?

(A)

0.67 L

(B)

1.33 L

(C)

2.5 L

(D)

3.0 L

Q.No. 71

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While walking on ice, one should take smaller steps to avoid slipping. This is because

(A)

friction is large

(B)

friction is small

(C)

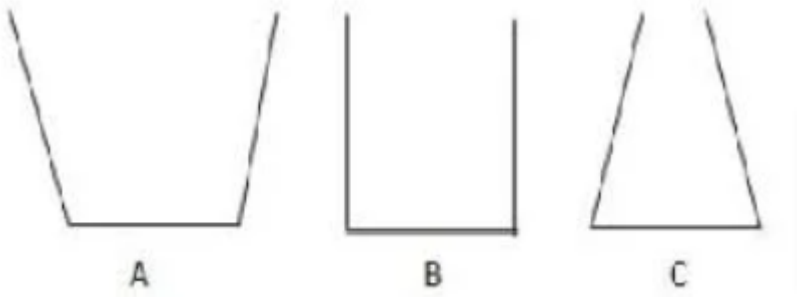
normal force is large

(D)

normal force is small

Q.No. 72

The three vessels shown in the figure have same base area. Equal volumes of water are poured in the vessels. The force of the base will be:



(A)

Maximum in A

(B)

Maximum in B

(C)

Maximum in C

(D)

Equal in all vessels

Q.No. 73

Arrange in correct sequence in respect of respiration

A. Breathing or pulmonary ventilation by which air is drawn in and CO_2 rich air is released out

B. Diffusion of O_2 and CO_2 between blood and tissue

C. Transport of gases by the blood

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D. Diffusion of O_2 and CO_2 across alveolar membrane

E. Utilization of O_2 by the cells for catabolic reactions and resultant release of CO_2

Choose the correct answer from the options given below:

(A)

A>B>C>D>E

(B)

A>C>D>B>E

(C)

D>B>C>E>A

(D)

A>D>C>B>E

Q.No. 74

Respiratory quotients is 1 when

(A)

Carbohydrates are used as respiratory substrates

(B)

Fats are used as respiratory substrates

(C)

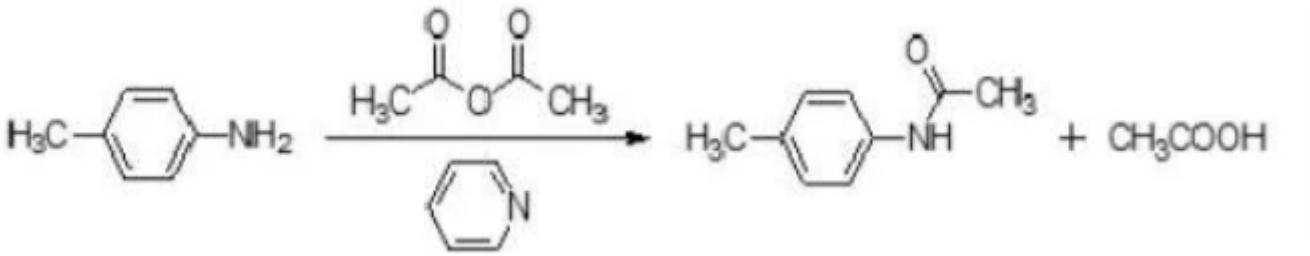
Proteins are used as respiratory substrates

(D)

Amino acids are used as respiratory substrates

Q.No. 75

The reaction given below is an example of:



(A)

Nucleophilic substitution reaction

(B)

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Elimination reaction

(C)

Electrophilic substitution reaction

(D)

Free radical substitution reaction

Q.No. 76

A bullet of mass m is fired with speed v_0 on soft plywood of thickness t. The bullet emerges with only half of the initial kinetic energy. What is the emergent speed of the bullet?

(A)

$v_0/8$

(B)

$v_0/4$

(C)

$v_0/2$

(D)

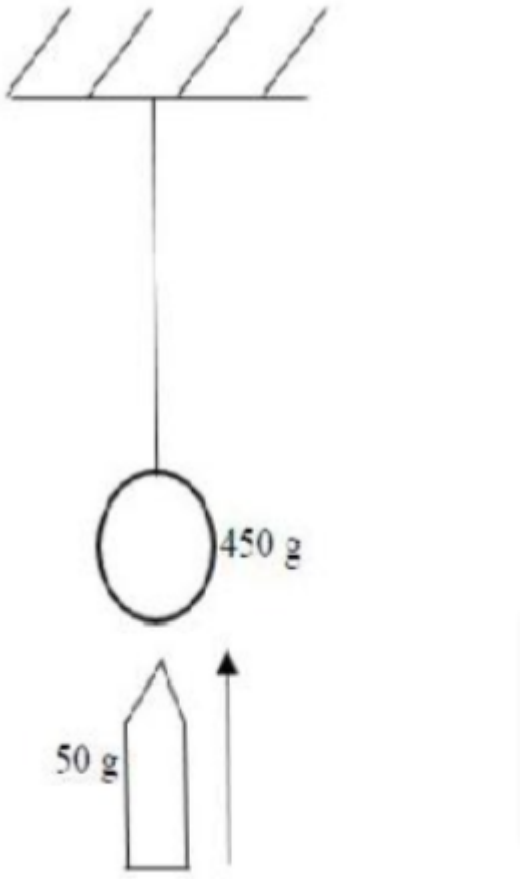
$v_0/\sqrt{2}$

Q.No. 77

A bullet of mass 50g is fired from below into a bob of mass 450 g of a simple pendulum as shown in figure. The bullets remain inside the bob and the bob rises a height of 1.8 m . The speed of the height is, ($g=10m/s^2$)

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(A)

6 m/s

(B)

60 m/s

(C)

54 m/s

(D)

5.4 m/s

Q.No. 78

Which of the following plastids store proteins?

(A)

Amyloplasts

(B)

Elaioplasts

(C)

Aleuroplasts

(D)

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Protoplasts

Q.No. 79

Characteristics of wind pollinated plants are
A. Well exposed stamens
B. Colorful flowers
C. Non sticky pollen
D. Fragrant flowers
E. Flowers rich in nectar
Choose the correct answer from the options given below:

(A)

A, B only

(B)

A, C only

(C)

A, B, C only

(D)

C, D, E only

Q.No. 80

Two strings A and B, made of same material, are streched by same tension. The radius of A is double of the radius of B, A transverse wave travels in A with speed velocity v_A and in B with speed v_B. The ratio v_A/v_B is:

(A)

1/4

(B)

1/2

(C)

2

(D)

4

Q.No. 81

Consider the following reaction:

$$B < \frac{H_2}{Na/\text{ Liq. } NH_3} H_3C - C \equiv C - CH_3 \frac{H_2}{Pd/C} \rightarrow A$$

The product 'A' and 'B' are:

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(A)

Identical compounds

(B)

Optical isomers

(C)

Geometrical isomers

(D)

Structural isomers

Q.No. 82

4p and 5d orbitals have X and Y angular nods, respectively. X and Y are respectively,

(A)

0 and 1

(B)

1 and 2

(C)

2 and 3

(D)

3 and 4

Q.No. 83

$$2\mathrm{PbO} + 4\mathrm{HNO_3} \rightarrow 2\ \mathrm{Pb(NO_3)_2} + 2\mathrm{H_2O}$$

Which type of reaction is taking place?

(A)

Combination reaction

(B)

Redox reaction

(C)

Acid-base reaction

(D)

Disproportion reaction

Q.No. 84

Given below are two statements:

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Statement I: Sex link traits can be seen only in human males since they are outcome of genes located on the X-Chromosome.

Statement II: Cystic fibrosis, which is characterized by an excessive secretion of mucus that can increase susceptibility to infection, is a life threatening genetic disorder caused by a dominants allele.

In light of above statement, Choose the correct answer from the options given below:

(A)

Both Statement I and statement II are correct

(B)

Both Statement I and statement II are incorrect

(C)

Statement I is correct but statement II is not correct

(D)

Statement I is not correct but statement II is correct

Q.No. 85

Given below two statements, One is labelled as Assertion A and the other labelled as Reason R:

Assertion A:

Complex		Color
1. $[Ni(H_2O)_4(en)]^{2+}(aq)$	-	Pale blue
2. $[Ni(H_2O)_2(en)_2]^{2+}(aq)$	-	Blue/purple
3. $[Ni(en)]^{2+}(aq)$	-	Violet

Reason R: One of the most distinctive properties of transition metal complexes in their wide range of colours.

In light of the above statements, Choose the most appropriate answer from the options given below:

(A)

Both A and R are correct but R is the correct explanation of A

(B)

Both A and R are correct but R is NOT the correct explanation of A

(C)

A is correct but R is not correct

(D)

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A is not correct but R is correct

Q.No. 86

The edge length of the unit cells constituting simple cubic lattice, bcc and fcc unit cells in terms of the radius of sphere (r) are respectively,

(A)

0.5r, 043r, 0.35r

(B)

0.35r, 043r, 0.5r

(C)

2r, 2.31r, 2.83r

(D)

2.83r, 2.31r, 2r

Q.No. 87

Considering the pK_a of acetic acid and pk_b of ammonium hydroxide are 4.5 and 4.4 respectively. The pH of ammonium acetate is:

(A)

7.005

(B)

8.9

(C)

4.45

(D)

7.5

Q.No. 88

The molarity of sucrose in the solution prepared by dissolving its 114 gm in water to form 300 ml of solution is:

(A)

$1.11 * 10^{-3}$ molcm^{-3}

(B)

$1.11 * 10^{-2}$ moldm^{-3}

(C)

$1.11 * 10^{3}$ moldm^{-3}

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(D)

$1.11 * 10^{2}\ molcm^{-3}$

Q.No. 89

An alternating current having peak value of 14 A is used to heat a meter wire. To produce the same heating effect , if we use constant current i, then it will be nearly-

(A)

14A

(B)

20 A

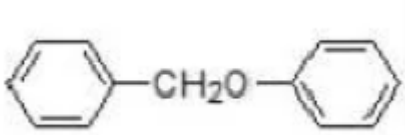
(C)

7 A

(D)

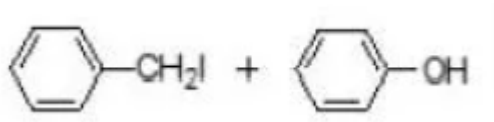
10 A

Q.No. 90

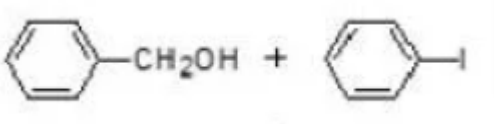


, undergoes cleavage in the presence of HI/△ to give:

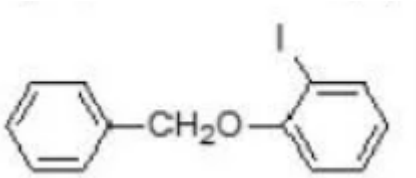
(A)



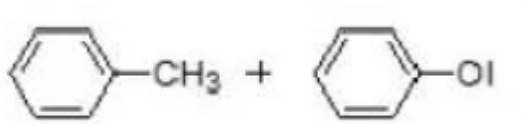
(B)



(C)



(D)



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Q.No. 91

Which of the following is incorrect?

(A)

Vessel is a long cylindrical tube like structure

(B)

Vessels contain protoplasm

(C)

Gymnosperm lack vessels in their xylem

(D)

Presence of vessel is a characteristic feature of angiosperms

Q.No. 92

In communication system, the device which is used to convert one form of energy into another is known as-

(A)

transducer

(B)

transmitter

(C)

modulator

(D)

repeater

Q.No. 93

A mass m is rotated in a vertical circle by connecting it to a light string of length l and keeping the other end of the string fixed. The minimum speed of the particle when the string is horizontal for which the mass will complete the circle is-

(A)

$\sqrt{gl}$

(B)

$\sqrt{2gl}$

(C)

$\sqrt{3gl}$

(D)

$\sqrt{5gl}$

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Q.No. 94

Species A has 2n=12 and species B has 2n=18. What are the possible chromosome numbers that may be found in an allotetraploid formed from species A and species B?

1. 27, 30, 33
2. 12, 18, 6
3. 9, 18, 27
4. 12, 18, 30

(A)

1

(B)

2

(C)

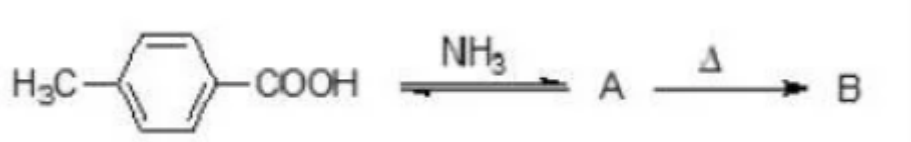
3

(D)

4

Q.No. 95

Consider the following reaction:



The number of sp^2 hybridized carbons in 'B' is:

(A)

6

(B)

7

(C)

8

(D)

5

Q.No. 96

A room heater is rated 500 W, 200 V. If the supply voltage drops to 100 V, what will be the power consumed?

(A)

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500 W

(B)

250 W

(C)

125 W

(D)

0

Q.No. 97

Given below two statements, One is labelled as Assertion A and the other labelled as Reason R:

Assertion A: Nitration of chlorobenzene occurs at ortho and para positions.

Reason R: Chlorine is the ring deactivator.

In light of the above statements, Choose the most appropriate answer from the options given below:

(A)

Both A and R are correct but R is the correct explanation of A

(B)

Both A and R are correct but R is NOT the correct explanation of A

(C)

A is correct but R is not correct

(D)

A is not correct but R is correct

Q.No. 98

Assuming Bohr's Model, the radius of Li^{+} ions in its ground state will be (ground state radius of hydrogen atom is $5.2 * 10^{-11}$m)

(A)

$5.2 * 10^{-11}$m

(B)

$10.4 * 10^{-11}$m

(C)

$15.6* 10^{-11}$m

(D)

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$1.8 * 10^{-11}$m

Q.No. 99

Match List I with List II:

List I	List II
Law	**Formula**
A. Charle's Law	I. P/T = Constant
B. Gay Lussac's Law	II. PV = Constant
C. Boyle's Law	III. V/n = Constant
D. Avagadro's Law	IV. V/T = Constant

Choose the correct answer from the options given below:

(A)

A-II, B-I, C-IV, D-III

(B)

A-II, B-IV, C-III, D-I

(C)

A-IV, B-I, C-II, D-III

(D)

A-Iv, B-III, C-II, D-I

Q.No. 100

Which of the following statements are correct?

A: Frequency of radiation emitted by a body goes from lower frequency with an increase in temperature.

B: Chromatography involves a mobile phase and stationary phase.

C: Optically isomerism is a very rare phenomenon in octahedral complex involving bidentate ligands,

D: In NH_3 and H_2O molecules, both the central metal atoms are sp^3 hybridize and bond angle H-N-H is lesser than that of H-O-H.

Choose the correct answer from the options given below:

(A)

A and B only

(B)

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A and D only

(C)

C and D only

(D)

B and C only

Q.No. 101

Given below are the two statements

Statement I: A color blind girl is rare because she will inherit the trait only when her father and maternal grandfather were color blind.

Statement II: A color blind mother and normal father would have color blind sons and daughters.

In the light of above statements, choose the most appropriate answer from the options given below:

(A)

Both statement I and statement II are correct

(B)

Both statement I and statement II are incorrect

(C)

statement I is correct but statement II is incorrect

(D)

statement I is incorrect but statement II is correct

Q.No. 102

Match List I with List II:

List I	List II
A. Perisperm	I. Pea
B. Exalbuminous	II. Black Pepper
C. Parthenocarpic fruit	III. Apple
D. False fruit	IV. Banana

Choose the correct answer from the options given below:

(A)

A-II, B-I, C-IV, D-III

(B)

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A-I, B-III, C-IV, D-II

(C)

A-II, B-I, C-III, D-IV

(D)

A-IV, B-I, C-II, D-III

Q.No. 103

Which of the following oxide is used to estimate CO?

(A)

Br_2O

(B)

BrO_3

(C)

I_2O_4

(D)

I_2O_5

Q.No. 104

Given below are the two Statements, one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: A morphology based approach to taxonomy is called alpha taxonomy and it is old fashioned.

Reason R: A multidisciplinary approach to taxonomy called omega taxonomy is favored in recent years as it excludes morphological features.

In the light of the above statements, choose the most appropriate answer from the options given below

(A)

Both A and R are correct and R is the correct explanation of A

(B)

Both A and R are correct and R is the NOT correct explanation of A

(C)

A is correct but R is not correct

(D)

A is not correct but R is correct

Q.No. 105

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Which of the following is not the characteristics differentiate bryophytes from algae
A. Attachment to a substratum by unicellular rhizoids
B. Haploid condition
C. Filamentous body
D. Unicellularity and colonial habitat
E. Lack of true roots and stems
Choose the correct answer from the options given below:

(A)

A, C, D only

(B)

A, B, C, D only

(C)

A, B, E only

(D)

B, C, D, E only

Q.No. 106

Which of the following is not related to the purification of colloidal solutions?

(A)

Dialysis

(B)

Ultrafiltration

(C)

Tyndall effect

(D)

Electro-dialysis

Q.No. 107

The dimensional formula for binding energy of a nucleus is

(A)

$[ML^2T^2]$

(B)

$[ML^2T^{-2}]$

(C)

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$[ML^{-2}T^{-2}]$

(D)

$[ML^{-2}T^{2}]$

Q.No. 108

Two resistors R and 2R are connected in parallel in an electric circuit. The thermal energy developed in R and 2R are in the ratio :

(A)

1:4

(B)

4:1

(C)

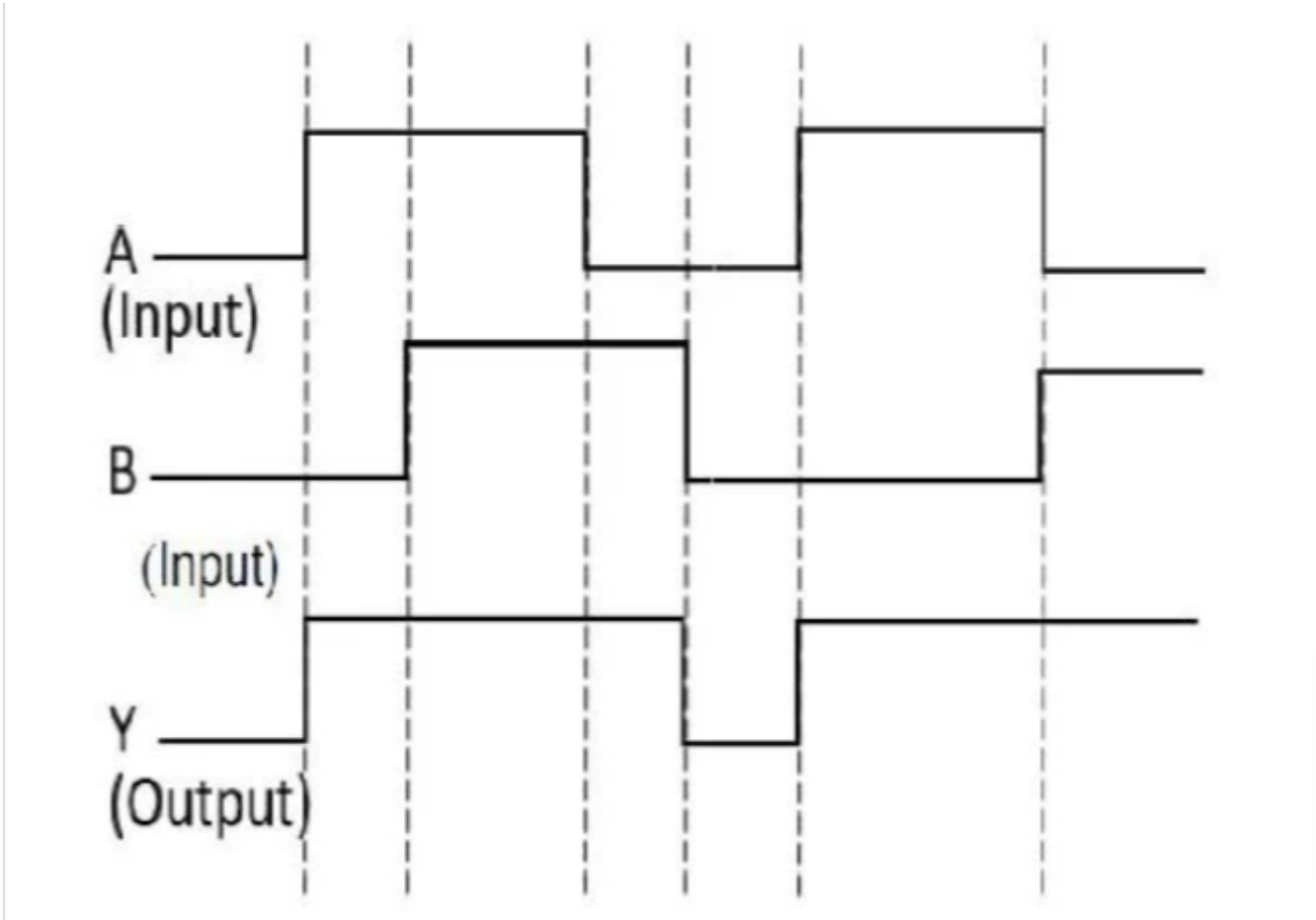
2:1

(D)

1:1

Q.No. 109

Figure given below shown A and B input waveforms Y, the output waveform for a logic gate. The gate is



(A)

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AND gate

(B)

OR gate

(C)

NOT gate

(D)

NOR gate

Q.No. 110

Mutation in which of the following would affect the functionality of Eukaryotic flagella?
A. Dynein
B. Kinesin
C. Myosin
D. Flagellin
E. F-Protein
Choose the correct answer from the options given below:

(A)

A only

(B)

A, D, E only

(C)

D, E only

(D)

B, D, E only

Q.No. 111

Which of the organelle does not contain genetic material?

(A)

Chloroplast

(B)

Nucleus

(C)

Vacuole

(D)

Mitochondria

Q.No. 112

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Given below two statements, One is labelled as Assertion A and the other labelled as Reason R:

Assertion A: Catalyst provide an alternate pathway or reaction mechanism by reducing the activation energy between reactants and products.

Reason R: Arrhenius equation confirms that the higher the value of activation energy faster will be the rate of the reaction.

In light of the above statements, Choose the most appropriate answer from the options given below:

(A)

Both A and R are correct but R is the correct explanation of A

(B)

Both A and R are correct but R is NOT the correct explanation of A

(C)

A is correct but R is not correct

(D)

A is not correct but R is correct

Q.No. 113

Which of the following compounds are secondary metabolites?
A. Morphine
B. Abrin
C. Lecithin
D. Uridine
E. Curcumin
Choose the correct answer from the options given below:

(A)

A, E only

(B)

A, B, E only

(C)

C, D only

(D)

A, C only

Q.No. 114

Match List I and List II

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List I	List II
A. Aposematic Coloration	I. Cuckoo bee
B. Batesian Mimicry	II. Hawkmoth larva
C. Mullerian Mimicry	III. Poison dart frog
D. Cryptic Coloration	IV. Canyon tree frog

Choose the correct answer from the options given below:

(A)

A-IV, B-I, C-III, D-II

(B)

A-II, B-III, C-IV, D-I

(C)

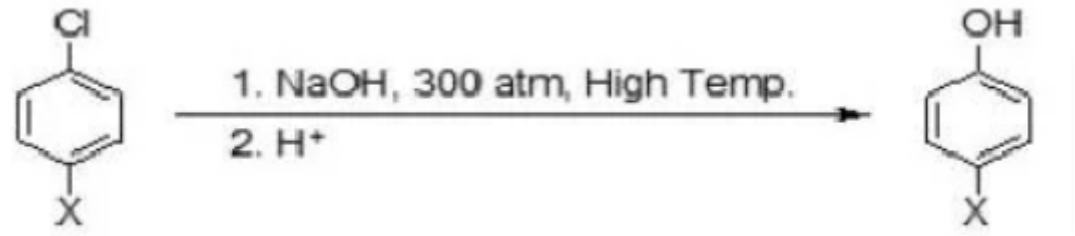
A-III, B-II, C-I, D-IV

(D)

A-III, B-I, C-IV, D-II

Q.No. 115

For the given reaction:



The rate of the reaction will be maximum, when 'X' is:

(A)

H

(B)

NO_2

(C)

CN

(D)

COOH

Q.No. 116

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Carbon monoxide is considered as a pollutant because it

1. Reacts with O_2 and converts it to CO_2
2. Inhibits glycolysis
3. Forms a stable compound with haemoglobin
4. Destroys the haemoglobin

(A)

1

(B)

2

(C)

3

(D)

4

Q.No. 117

Match List I and List II

List I	List II
A. Haemophilus influenzae	I. Common cold
B. Rhino virus	II. Elephantiasis
C. Wuchereria malayi	III. Pneumonia
D. Plasmodium falciparum	IV. Malignant malaria

Choose the correct answer from the options given below:

(A)

A-III, B-I, C-II, D-IV

(B)

A-I, B-II, C-III, D-IV

(C)

A-III, B-IV, C-II, D-I

(D)

A-I, B-III, C-II, D-IV

Q.No. 118

The length and width of a rectangular plate are

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$$(16.30 = 0.05)\text{cm}$$

and

$$(13.80 \pm 0.05)\text{cm}$$

. respectively. Area of the plate and uncertainty in the area will be :

(A)

$$(224.9 \pm 15.05)\text{cm}^2$$

(B)

$$(224.9 \pm 1.50)\text{cm}^2$$

(C)

$$(224.9 \pm 0.15)\text{cm}^2$$

(D)

$$(224.9 \pm 0.67)\text{cm}^2$$

Q.No. 119

A person travelling on a straight road moves with uniform velocity v_1 for some time and with uniform velocity v_2 for next equal time. His average velocity v will be:

(A)

$$\frac{2}{v} = \frac{1}{v_1} + \frac{1}{v_2}$$

(B)

$$v = \sqrt{v_1 + v_2}$$

(C)

$$v = \frac{v_1 + v_2}{2}$$

(D)

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$$\frac{1}{v} = \frac{1}{v_1} + \frac{1}{v_2}$$

Q.No. 120

Match List I and List II

List I	List II
A. Fast Muscle Fibres	I. Myoglobin
B. Slow Muscle Fibres	II. Lactic Acid
C. Actin filament	III. Contractile Unit
D. Sarcomere	IV. I-Band

Choose the correct answer from the options given below:

(A)

A-I, B-II, C-IV, D-III

(B)

A-II, B-I, C-III, D-IV

(C)

A-II, B-I, C-IV, D-III

(D)

A-III, B-II, C-IV, D-I

Q.No. 121

Which of the following parameters is same for molecules of all gases at a given temperature?

(A)

density

(B)

speed

(C)

momentum

(D)

kinetic energy

Q.No. 122

Which of the following compounds dose not react with sodium metal?

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(A)

Ethyne

(B)

1-Pentyne

(C)

2-Pentyne

(D) 1-Propyne

Q.No. 123

Ninhydrin reacts with amino acid to form colored complex. The equivalent ratio of ninhydrin and amino acid used in the reaction is respectively:

(A)

1:1

(B)

1:2

(C)

2:1

(D)

1:3

Q.No. 124

A thin lens of focal length +10cm is immerse in a transparent liquid (μ=1.2). Its new focal length will be (for glass μ=1.6)

(A)

10 cm

(B)

12 cm

(C)

18 cm

(D)

20 cm

Q.No. 125

In mammals, which of the following mechanism helps to produce concentrated urine?

(A)

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Exchange of NaCl between the ascending limp of Henle's loop and the descending limb of vasa recta

(B)

NaCl returns to the interstitium by the ascending portion vasa recta

(C)

Small amount of Urea enters the ascending limb of Henle's loop and transport back to the interstitium

(D)

All of the above

Q.No. 126

Given below are two statements:

Statement I: Chlorophyceae store food in the form of oil droplets and have a rigid cell wall made up of an inner layer of cellulose and inner layer of pectose.

Statement II: Phaeophyceae store food in the form of mannitol and cells have a cellular wall usually covered by the outside by algin.

In light of above statement, Choose the correct answer from the options given below:

(A)

Both Statement I and statement II are correct

(B)

Both Statement I and statement II are incorrect

(C)

Statement I is correct but statement II is not correct

(D)

Statement I is not correct but statement II is correct

Q.No. 127

Given below are the two statements

Statement I: In the animal husbandry, inbreeding is one of the preferred methods to increase the yield of animals and improve the productivity.

Statement II: Continued close inbreeding will lead to the enhancement of fertility and productivity.

In the light of the above statements, choose the most appropriate answer from the options given below

(A)

Both statement I and statement II are correct

(B)

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Both statement I and statement II are incorrect

(C)

statement I is correct but statement II is incorrect

(D)

statement I is incorrect but statement II is correct

Q.No. 128

Arrange 1st ionization enthalpy of group 13 elements in the increasing order:

(TI, In, Ga, Al)

(A)

TI<In<Ga<Al

(B)

In<Ga<Al<TI

(C)

In<Al<Ga<TI

(D)

TI<In<Al<Ga

Q.No. 129

Thermal decomposition of Cl_2O_7 at 400 K in the gaseous phase to Cl_2 and O_2 is the first order reaction with rate constant 6.932 * 10^{-3} s^{-1}. How much minutes are required for 90% decomposition of Cl_2O_7 at 400K?

(A)

5.54

(B)

16.61

(C)

33.32

(D)

332.2

Q.No. 130

Consider the following reaction sequence:

$$\mathrm{H_3C-H=CH_2}\frac{1\cdot \mathrm{B_2H_8}}{2\cdot \mathrm{H_2O/H_2O_2/^{\theta}OH}}\rightarrow \mathrm{A}\frac{\mathrm{H_2SO_4}}{413\ \mathrm{K}\rightarrow}\rightarrow \mathrm{B}$$

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The number of π bond in product B is:

(A)

0

(B)

1

(C)

2

(D)

3

Q.No. 131

Match List I with List II:

List I	List II
Enzyme	Source
A. Zymase	I. Soyabean
B. Urease	II. Yeast
C. Pepsin	III. Malt
D. Diastase	IV. Stomach

Choose the correct answer from the options given below:

(A)

A-II, B-I, C-III, D-IV

(B)

A-II, B-I, C-IV, D-III

(C)

A-I, B-II, C-IV, D-III

(D)

A-I, B-II, C-III, D-IV

Q.No. 132

A person, experiences sweating and increased heartbeat before an interview. Which of the following hormones are responsible for this restlessness?

1. Estrogen and vasopressin
2. Progesterone and oxytocin

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3. Adrenaline and noradrenaline
4. Insulin and Glycogen1

(A)

1

(B)

2

(C)

3

(D)

4

Q.No. 133

When a transistor is used as amplifier, the circuit is designed in such a way that the transistor operate in:

(A)

cut off and saturation region

(B)

cut-off and active region

(C)

saturation and active region

(D)

active region only

Q.No. 134

Which of the following compounds is most reactive towards sodium metal?

(A)

1-Propyne

(B)

Methane

(C)

Ethyne

(D)

1-Butyne

Q.No. 135

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The density of air at sea level is 1.0kg/m3 and assume that it does not change with the altitude. Then how high would the atmosphere extend? (g=10m/s^2 , P_{atm}=1.0 *10^5 Pa)

(A)

10^2m

(B)

10^3m

(C)

10^4m

(D)

10^5m

Q.No. 136

In the given reaction,

$$\underset{\text{A}}{2Cu_2O(s)} + \underset{\text{B}}{Cu_2S(s)} \longrightarrow \underset{\text{C}}{6Cu(s)} + SO_2(g)$$

The oxidation number of Cu are A, B and C. A, B and C are respectively

(A)

+1,+2,0

(B)

+1,+1,0

(C)

+2,+1,0

(D)

+1,+2,+1

Q.No. 137

A single stranded DNA molecule contain 80 nucleotides with equal number of A. C, G, T and this molecule can replicate and form double stranded DNA molecule. Which of the following double stranded DNA molecule would denature at a lower temperature than 80 base pair double stranded DNA?

(A)

80 base pair molecule with 25% of Adenine

(B)

60 base pair molecule with 40% of Guanine

(C)

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40 base pair molecule with 10% of Thymine

(D)

20 base pair molecule with 20% of Cytosine

Q.No. 138

As compared to ^{12}C atom ^{14}C atom has

(A)

two extra protons and two extra electrons

(B)

two extra protons and no extra electrons

(C)

two extra neutron and no extra electrons

(D)

two extra neutron and two extra electrons

Q.No. 139

The polymerase chain reaction is the technique that

(A)

Is used for in vivo replication of DNA

(B)

Is used for in vitro synthesis of mRNA

(C)

Is used for in vivo synthesis of mRNA

(D)

Is used for in vitro replication of specific DNA sequence using thermos stable DNA polymerase

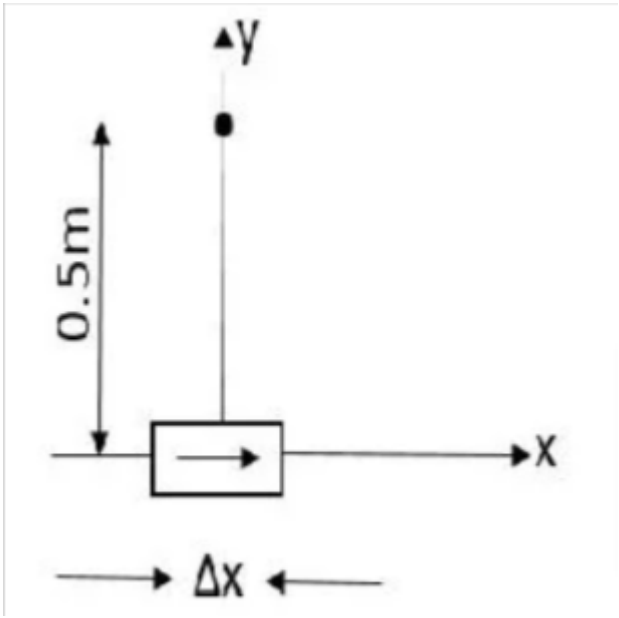
Q.No. 140

An element of length $\triangle$x=1 cm is placed at the origin and carrier current I=4A as shown in the figure. The magnitude of the magnetic field on the y-axis at a distance of 0.5 m is,

$$\left(\mu_0/4\pi = 10^{-7}\ \mathrm{T\ m'A}\right)$$

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(A)

$1.6 * 10^{-7}$ T

(B)

$1.6 * 10^{-8}$ T

(C)

$1.6 * 10^{-9}$ T

(D)

0

Q.No. 141

Which of the following empirical relationship is given by Freundlich?

(A)

$$x/m = k \cdot p^{1/n} (n > 1)$$

(B)

$$x/m = k \cdot p^{1/n} (n < 1)$$

(C)

$$m/x = k \cdot p^{1/n} (\mathbf{n} > 1)$$

(D)

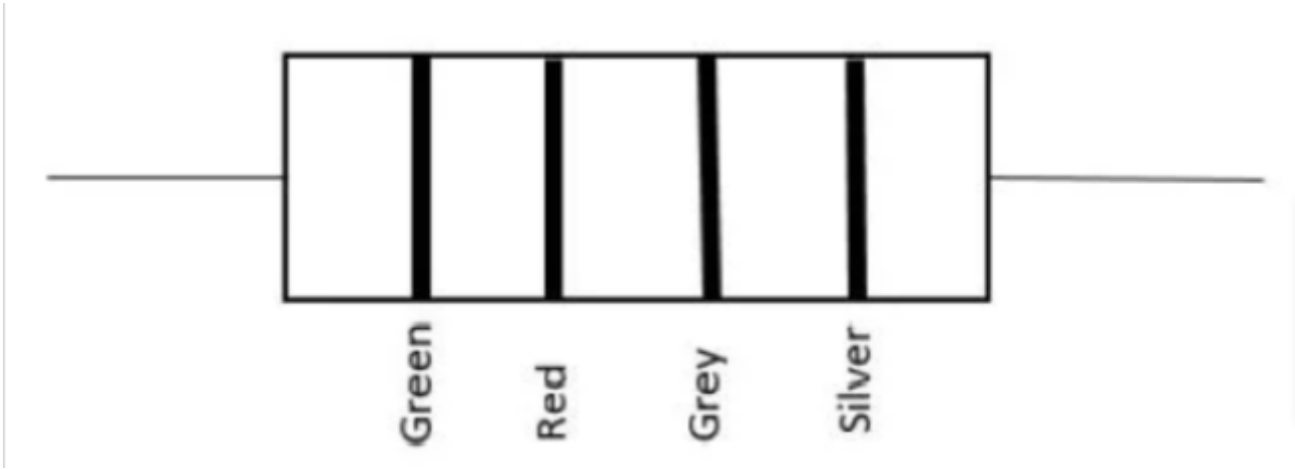
$$m/x = k \cdot p^{1/n} (\mathbf{n} < 1)$$

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Q.No. 142

Value of resistor shown below is:



(A)

$$5.2 \times 10^8 \Omega \pm 10\%$$

(B)

$$5.2 \times 10^7 \Omega \pm 5\%$$

(C)

$$52 \times 10^8 \Omega \pm 10\%$$

(D)

$$52 \times 10^7 \Omega \pm 5\%$$

Q.No. 143

Reaction of quick lime slaked with soda gives compound 'X'. 'X' is.....

(A)

NaOH+CaO

(B)

NaOH+$Ca(OH)_2$

(C)

Na_2O+CaO

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(D)

$Na_2O+Ca(OH)_2$

Q.No. 144

Which of the following are incorrect about sexual reproduction?

A: Bamboo species flower only once in their life time

B: In some species of fungi, both the gametes are motile

C: Transfer of pollen grain from another to the stigma of another flower of the same plant is called Xenogamy.

D: Primary oocyte surrounded by many layers and granulosa cells is called primary follicle.

E: Release of oxytocin hormone during parturition is an example of positive feedback of hormone secretion.

Choose the correct answer from the options given below:

(A)

B, D and E only

(B)

C and D only

(C)

B, C and D only

(D)

D and E only

Q.No. 145

Given below are the two statements:

Statement I: Species confined to a particular region and are not found anywhere else are called endemic species

Statement II: Keystone species are usually abundant in an ecosystem

In the light of the above statements, choose the most appropriate answer from the options given below

(A)

Both statement I and statement II are correct

(B)

Both statement I and statement II are incorrect

(C)

statement I is correct but statement II is incorrect

(D)

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statement I is incorrect but statement II is correct

Q.No. 146

Find out the incorrect match with respect to Mollusca

1. Bivalva - No head, foot wedge shaped, shell of two valve hinged
2. Gastropoda - Rudimentary head, foot conical and shell tubular
3. Amphineura. - Head reduced, foot large or reduced, shell comprises a row of plates
4. Monoplacophora - Distinct head, flat foot, visceral mass segmented

(A)

1

(B)

2

(C)

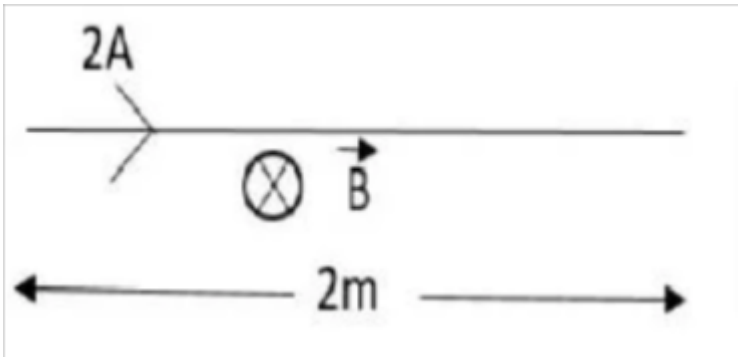
3

(D)

4

Q.No. 147

A straight wire of mass 100 g and length 2.0 m carries a current of 2A. It is suspended in mid-air by a uniform horizontal magnetic field B as shown in figure. The magnitude of the magnetic field is , ($g=10m/s^2$)



(A)

250T

(B)

25T

(C)

2.5T

(D)

0.25T

Q.No. 148

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Given below are two statements, one labelled as Assertion A and Other labelled as Reason R:

Assertion A: Somaclonal variations may be present in plants produced from callus.

Reason R: Somaclonal variations are caused due to recombination during meiosis.

In light of the above statements, Choose the correct answer from the options given below:

(A)

Both A and R is correct But R is the correct explanation of A

(B)

Both A and R is correct But R is not the correct explanation of A

(C)

A is correct but R is not correct

(D)

A is not correct but R is correct

Q.No. 149

6.241 g of a substance occupies 2.3cm^3, The density of the substance keeping the significant figures in view will be-

(A)

2.7134

(B)

2.713

(C)

2.71

(D)

2.7

Q.No. 150

Which one of the following option differentiates Sorghum from rice

(A)

Photorespiration

(B)

Kranz anatomy

(C)

Primary carbon dioxide is phosphoenol pyruvate

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(D)

Sorghum is a C4 plant

Answer Sheet

Q.No	Answer
Q.No. 1	(B)
Q.No. 2	(D)
Q.No. 3	(D)
Q.No. 4	(D)
Q.No. 5	(A)
Q.No. 6	(B)
Q.No. 7	(A)
Q.No. 8	(C)
Q.No. 9	(C)
Q.No. 10	(C)
Q.No. 11	(B)
Q.No. 12	(D)
Q.No. 13	(A)
Q.No. 14	(A)
Q.No. 15	(B)
Q.No. 16	(C)
Q.No. 17	(C)
Q.No. 18	(D)
Q.No. 19	(C)
Q.No. 20	(A)
Q.No. 21	(B)
Q.No. 22	(B)
Q.No. 23	(D)
Q.No. 24	(D)
Q.No. 25	(C)
Q.No. 26	(B)
Q.No. 27	(B)
Q.No. 28	(A)
Q.No. 29	(B)
Q.No. 30	(A)
Q.No. 31	(B)
Q.No. 32	(C)

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Q.No. 33	(B)
Q.No. 34	(B)
Q.No. 35	(D)
Q.No. 36	(A)
Q.No. 37	(B)
Q.No. 38	(B)
Q.No. 39	(B)
Q.No. 40	(B)
Q.No. 41	(A)
Q.No. 42	(D)
Q.No. 43	(A)
Q.No. 44	(C)
Q.No. 45	(D)
Q.No. 46	(B)
Q.No. 47	(A)
Q.No. 48	(A)
Q.No. 49	(B)
Q.No. 50	(C)
Q.No. 51	(A)
Q.No. 52	(C)
Q.No. 53	(D)
Q.No. 54	(D)
Q.No. 55	(A)
Q.No. 56	(D)
Q.No. 57	(C)
Q.No. 58	(C)
Q.No. 59	(D)
Q.No. 60	(B)
Q.No. 61	(A)
Q.No. 62	(A)
Q.No. 63	(D)
Q.No. 64	(D)
Q.No. 65	(C)
Q.No. 66	(C)
Q.No. 67	(A)
Q.No. 68	(B)
Q.No. 69	(C)
Q.No. 70	(B)

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Q.No. 71	(B)
Q.No. 72	(C)
Q.No. 73	(D)
Q.No. 74	(A)
Q.No. 75	(A)
Q.No. 76	(D)
Q.No. 77	(B)
Q.No. 78	(C)
Q.No. 79	(B)
Q.No. 80	(B)
Q.No. 81	(C)
Q.No. 82	(B)
Q.No. 83	(C)
Q.No. 84	(B)
Q.No. 85	(B)
Q.No. 86	(C)
Q.No. 87	(A)
Q.No. 88	(A)
Q.No. 89	(D)
Q.No. 90	(A)
Q.No. 91	(B)
Q.No. 92	(A)
Q.No. 93	(C)
Q.No. 94	(A)
Q.No. 95	(B)
Q.No. 96	(C)
Q.No. 97	(B)
Q.No. 98	(D)
Q.No. 99	(C)
Q.No. 100	(C)
Q.No. 101	(C)
Q.No. 102	(A)
Q.No. 103	(D)
Q.No. 104	(C)
Q.No. 105	(C)
Q.No. 106	(C)
Q.No. 107	(B)
Q.No. 108	(D)

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Q.No. 109	(B)
Q.No. 110	(A)
Q.No. 111	(C)
Q.No. 112	(C)
Q.No. 113	(B)
Q.No. 114	(C)
Q.No. 115	(B)
Q.No. 116	(C)
Q.No. 117	(A)
Q.No. 118	(B)
Q.No. 119	(C)
Q.No. 120	(C)
Q.No. 121	(D)
Q.No. 122	(C)
Q.No. 123	(C)
Q.No. 124	(C)
Q.No. 125	(D)
Q.No. 126	(A)
Q.No. 127	(C)
Q.No. 128	(C)
Q.No. 129	(A)
Q.No. 130	(A)
Q.No. 131	(B)
Q.No. 132	(C)
Q.No. 133	(D)
Q.No. 134	(C)
Q.No. 135	(C)
Q.No. 136	(B)
Q.No. 137	(D)
Q.No. 138	(C)
Q.No. 139	(D)
Q.No. 140	(B)
Q.No. 141	(A)
Q.No. 142	(C)
Q.No. 143	(A)
Q.No. 144	(B)
Q.No. 145	(C)
Q.No. 146	(B)

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Q.No. 147	(D)
Q.No. 148	(C)
Q.No. 149	(D)
Q.No. 150	(A)

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