POTENTIAL & CONCEPT EDUCATIONS

Most Trusted Institute of North-East

Academic Session : 2019 - 20

AITS FULL TEST (FT) : FT # 19
(NEET PATTERN)

Target : NEET - 2020

Date : 9th August, 2020 | Duration : 3 Hours | Max. Marks : 720

COURSE : Dropper, Target, DLP., AITS

Please read the last page of this booklet for the instructions.

Potential & Concept Educations

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Note : For Answer keys and accurate Solutions please log on to www.potentialconcept.com

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PHYSICS

1 An electron having kinetic energy $10\ \text{eV}$ is circulating in a path of radius $0.1\ \text{m}$ in an external magnetic field of intensity $10^{-4}\ \text{T}$. The speed of the electron will be (Single option correct)

a $1.76 \times (10^6)\ \text{ms}^{-1}$

b $4.8 \times (10^6)\ \text{ms}^{-1}$

c $2.0 \times (10^{12})\ \text{ms}^{-1}$

d $4.8 \times (10^{12})\ \text{ms}^{-1}$

2 If the velocity of a car is increased by 20%, then the minimum distance in which it can be stopped increase by (Single option correct)

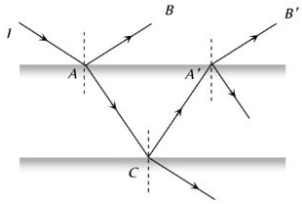
a 44%

b 55%

c 66%

d 88%

3 A ray of light of intensity I is incident on a parallel glass-slab at the point A and it undergoes partial reflection and refraction as shown in the figure. At each reflection, 25% of the incident energy is reflected and the rest is transmitted. If the rays AB and $A'B'$ undergo interference, then the ratio $\frac{I_{max}}{I_{min}}$ is



(Single option correct)

a $4:1$

b $8:1$

c $7:1$

d $49:1$

4 The time by a photoelectron to come out after the photon strikes is approximately (Single option correct)

a $10^{-1}\ \text{s}$

b $10^{-4}\ \text{s}$

c $10^{-10}\ \text{s}$

d $10^{-16}\ \text{s}$

5 Three capacitors each of $4\ \mu\text{F}$ are to be connected in such a way that the effective capacitance is $6\ \mu\text{F}$. This can be done by connecting them (Single option correct)

a all in series

b all in parallel

c two in parallel and one in series

d two in series and one in parallel

6 A particle is projected with velocity $2\sqrt{gh}$ so that it just clears two walls of equal height h, which are at a distance of $2h$ from each other. What is the time interval of passing between the two walls? (Single option correct)

a $\frac{2h}{g}$

b $\sqrt{\frac{2h}{g}}$

c $\sqrt{\frac{h}{g}}$

d $2\sqrt{\frac{h}{g}}$

7 A plano-concave lens is made up of glass of refractive index 1.5 and the radius of the curvature of its curved face is 100 cm. What is the power of the lens?

(Single option correct)

a $+0.5\ \text{D}$

b $-0.5\ \text{D}$

c $-2\ \text{D}$

d $+2\ \text{D}$

8 The half-life of $^{238}_{92}U$ against $\alpha-$ decay is 4.5×10^9 years. Calculate the activity of 1 g sample of $^{238}_{92}U$.

(Single option correct)

a $4.231 \times 10^4 dps$

b $1.721 \times 10^3 dps$

c $1.235 \times 10^4 dps$

d $5.167 \times 10^3 dps$

9 At a temperature of $30\ °C$, the susceptibility of a paramagnetic material is found to be X. Its susceptibility at $333\ °C$ is (Single option correct)

a $0.5\,X$

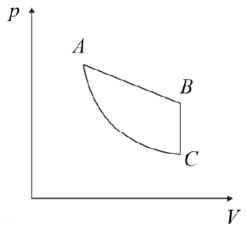
b $2\,X$

c $11.1\,X$

d $0.09\,X$

10 If AB is an isothermal, BC is an isochoric and AC is an adiabatic, which of the graphs correctly represents given in figure? (Single option correct)

a



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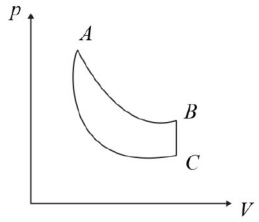

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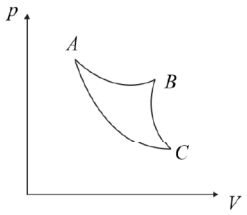
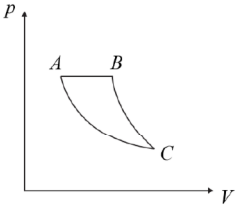
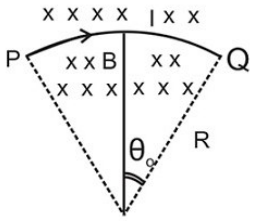


d



11 A wire carrying current I is tied between points P and Q and is in the shape of a circular arc of radius R due to a uniform magnetic field B (perpendicular to the plane of the paper, as shown in figure) in the vicinity of wire. If the wire subtends an angle $2\theta_0$ at the centre of the circle (of which it forms an arch) then the tension in the wire is:



(Single option correct)

a IBR

b $\frac{IBR}{\sin\theta_0}$

c $\frac{IBR}{2\sin\theta_0}$

d $\frac{IBR\theta_0}{\sin\theta_0}$

12 A boat is sent across a river with a velocity of $8\ \text{km}\ hr^{-1}$. If the resultant velocity of boat is $10\ \text{km}\ hr^{-1}$, then the velocity of the river is

(Single option correct)

a $12.8\ \text{km}\ hr^{-1}$

b $6\ \text{km}\ hr^{-1}$

c $8\ \text{km}\ hr^{-1}$

d $10\ \text{km}\ hr^{-1}$

13 A body is vibrating in simple harmonic motion with an amplitude of $0.06\ \mathrm{m}$ and frequency of $15\ \mathrm{Hz}$. The maximum velocity and acceleration of the body is

(Single option correct)

a $9.80\ \mathrm{m\ s^{-1}}$ and $9.03 \times 10^2\ \mathrm{m\ s^{-2}}$

b $8.90\ \mathrm{m\ s^{-1}}$ and $8.21 \times 10^2\ \mathrm{m\ s^{-2}}$

c $6.82\ \mathrm{m\ s^{-1}}$ and $7.62 \times 10^2\ \mathrm{m\ s^{-2}}$

d $5.65\ \mathrm{m\ s^{-1}}$ and $5.32 \times 10^2\ \mathrm{m\ s^{-2}}$

14 Let ω be the angular velocity of the earth's rotation about its axis. Assume that the acceleration due to gravity on the earth's surface has the same value at the equator and the poles. An object weighed at the equator gives the same reading as a reading taken at a depth d below earth's surface at a pole $(d << R)$. The value of d is (Single option correct)

a $\frac{\omega^2 R^2}{g}$

b $\frac{\omega^2 R^2}{2g}$

c $\frac{2\omega^2 R^2}{g}$

d $\frac{\omega^2 R^2}{4g}$

15 Assertion: The emf of the driver cell in potentiometer experiment should be greater than the emf of the cell to be determined.

Reason: A shorter potentiometer wire gives larger potential gradient for a given source of emf. (Single option correct)

a If both Assertion and Reason are true and the Reason is correct explanation of the Assertion.

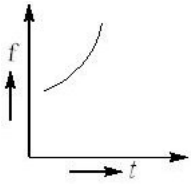
b If both Assertion and Reason are true but Reason is not explanation of the Assertion.

c If Assertion is true but the Reason is false.

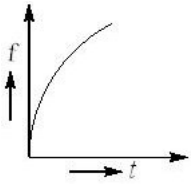
d If Assertion is false but Reason is true.

16 An observer starts moving with uniform acceleration, towards a stationary sound source of frequency f_0. As the observer approaches the source, the apparent frequency(f)heard by the observer varies with time (t) is (Single option correct)

a



b



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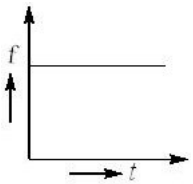
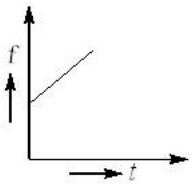
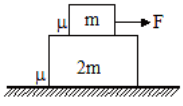


d



17 The system of two blocks is at rest as shown in the figure. A variable horizontal force is applied on the upper block. The maximum possible contact force exerted by the horizontal ground surface on the lower block is (co-efficient of friction for both the contacts is μ)



(Single option correct)

a $3\mathrm{mg}\sqrt{1+\mu^2}$

b $3\mu\mathrm{mg}$

c $\mu\mathrm{mg}$

d $\mathrm{mg}\sqrt{9+\mu^2}$

18 A small piece of metal wire is dragged across the gap between the poles of a magnet in 0.4 s. If change in magnetic flux in the wire is 8×10^{-4} Wb, then emf induced in the wire is (Single option correct)

a 8×10^{-3} V

b 6×10^{-3} V

c 4×10^{-3} V

d 2×10^{-3} V

19 When a ceiling fan is switched off, its angular velocity reduces to 50% of its initial value while it makes 36 rotations. If angular retardation of the fan is uniform, then how many more rotations will it make before coming to rest? (Single option correct)

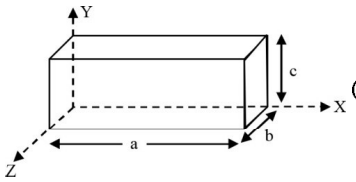
a 18

b 12

c 36

d 48

20 A solid metallic cuboid of homogeneous material having geometrical dimension as shown in the figure will have a ratio of resistances for the sense of current along x, y and z directions respectively, equal to



(Single option correct)

a $a : b : c$

b $a : c : b$

c $a^2 : b^2 : c^2$

d $a^2 : c^2 : b^2$

21 Calculate the real angle of dip, if a magnet is suspended at an angle of $30°$ to the magnetic meridian, the dip needle makes an angle of $45°$ with horizontal.

(Single option correct)

a $\tan^{-1}\left(\frac{\sqrt{3}}{2}\right)$

b $\tan^{-1}\left(\sqrt{3}\right)$

c $\tan^{-1}\left(\frac{\sqrt{3}}{\sqrt{2}}\right)$

d $\tan^{-1}\left(\frac{2}{\sqrt{3}}\right)$

22 Which of the following physical quantities has neither dimensions nor unit? (Single option correct)

a Angle

b Luminous intensity

c Coefficient of friction

d Current

23 Evaluate $\cos^2 30 + \tan^2 45 + \sin^2 30$ (Single option correct)

a 1

b 2

c 3

d 4

24 A monoatomic ideal gas, initially at temperature T_1, is enclosed in a cylinder fitted with a frictionless piston. The gas is allowed to expand adiabatically to a temperature T_2 by releasing the piston suddenly. If L_1 and L_2 are the lengths of the gas column before and after expansion respectively, then T_1/T_2 is given by (Single option correct)

a $(L_1/L_2)^{2/3}$

b (L_1/L_2)

c (L_2/L_1)

d $(L_2/L_1)^{2/3}$

25 A load of 1 kg weight is attached to one end of a steel wire of area of cross-section 3 mm^2 and Young's modulus $10^{11}\ Nm^{-2}$. The other end is suspended vertically from a hook on a wall, then the load is pulled horizontally and released. When the load passes through its lowest position the fractional change in length is $(g = 10\ ms^{-2})$ (Single option correct)

a 0.1×10^{-4}

b 0.1×10^{-3}

c 0.1×10^{3}

d 0.1×10^{4}

26 Refractive index of glass with respect to turpentine is $\frac{15}{14}$ and that with respect to glycerine is $\frac{15}{16}$. The refractive index of turpentine with respect to glycerine is (Single option correct)

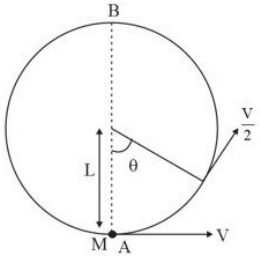
a $\frac{8}{7}$

b $\frac{7}{8}$

c $\frac{225}{224}$

d $\frac{224}{225}$

27 A bob of mass M is suspended by a massless string of length L. The horizontal velocity v at position A is just sufficient to make it reach point B. The angle θ at which the speed of the bob is half of that at A satisfies



(Single option correct)

a $\theta = \frac{\pi}{4}$

b $\frac{\pi}{4} < \theta < \frac{\pi}{2}$

c $\frac{\pi}{2} < \theta < \frac{3\pi}{4}$

d $\frac{3\pi}{4} < \theta < \pi$

28 A body constrained to move in Y direction, is subjected to a force given by $\vec{F} = (-2\hat{i} + 15\hat{j} + 6\hat{k})$ N work done by this force in moving the body through a distance of 10m along Y axis? (Single option correct)

a 190 J

b 160 J

c 150 J

d 20 J

29 The end A of a rod AB of length 1 m is maintained at 100 ℃ and the end B at 10 ℃. The temperature at a distance of 60 cm from the end B is (Single option correct)

a 64 ℃

b 36 ℃

c 46 ℃

d 72 ℃

30 A child is standing with folded hands at the centre of a platform rotating about its central axis. The kinetic energy of the system is K. The child stretches his arms so that the moment of inertia of the system doubles. The kinetic energy of the system now is (Single option correct)

a $2K$

b $\frac{K}{2}$

c $\frac{K}{4}$

d $4K$

31 The surface area of a black body is $5 \times 10^{-4}\ m^2$ and its temperature is 727 °C. Energy radiated by it per minute is (Take $\sigma = 5.67 \times 10^{-8}\ J\ m^{-2}\ s^{-1}\ K^{-4}$) (Single option correct)

a $1.7 \times 10^3\ J$

b $2.5 \times 10^2\ J$

c $3 \times 10^4\ J$

d $2.7 \times 10^4\ J$

32 If A is the amplitude of the wave coming from a point source at distance r then (Single option correct)

a $A \propto r^{-2}$

b $A \propto r^{-1}$

c $A \propto r^2$

d $A \propto r^1$

33 A laser light of wavelength 660 nm is used to weld Retina detachment. If a laser pulse of width 60 ms and power 0.5 kW is used, the approximate number of photons in the pulse are (Take Planck's Constant, $h = 6.62 \times 10^{-34}$ J s) (Single option correct)

a 10^{22}

b 10^{19}

c 10^{20}

d 10^{18}

34 Four charges of $6\mu C, 2\mu C, -12\mu C$ and $4\mu C$ are placed at the corners of a square of side $1m$. The square is in $x - y$ plane and its center at its origin. Electric potential due to these charges is zero everywhere on the line - (Single option correct)

a $x = y, z = 0$

b $x = 0 = z$

c $x = 0 = y$

d None of these

35 The position coordinates of a particle moving in $X - Y$ as a function of time t are

$x = 2t^2 + 6t + 25$

$y = t^2 + 2t + 1$

The speed of the object at $t = 10$ s is approximately (Single option correct)

a 31 units

b 51 units

c 71 units

d 81 units

36 At room temperature, copper has free electron density of $8.4 \times 10^{28}\ m^{-3}$. The electron drift velocity in a copper conductor of cross-sectional area $10^{-6}\ m^2$ and carrying a current of 5.4 A, will be - (Single option correct)

a $4\ m\ s^{-1}$

b $0.4\ m\ s^{-1}$

c $4\ cm\ s^{-1}$

d $0.4\ mm\ s^{-1}$

37 A stationary particle explodes into two particles of masses m_1 and m_2 which move in opposite directions with velocities v_1 and v_2. The ratio of their kinetic energies $\frac{E_1}{E_2}$ is (Single option correct)

a $\frac{m_1 v_2}{m_2 v_1}$

b $\frac{m_2}{m_1}$

c $\frac{m_1}{m_2}$

d 1

38 The temperature dependence of resistance of Cu and undoped Si in the temperature range $300 - 400$ K is best described by (Single option correct)

a linear increase for Cu, exponential decrease for Si

b linear decrease for Cu, linear decrease for Si

c linear increase for Cu, linear increase for Si

d linear increase for Cu, exponential increase for Si

39 If C be the capacitance and V be the electric potential, then the dimensional formula of CV^2 is (Single option correct)

a $[ML^{-3}TA]$

b $[K^0LT^{-2}A^0]$

c $[ML^1T^{-2}A^{-1}]$

d $[ML^2T^{-2}A^0]$

40 A body is thrown vertically up with certain intial velocity, the potential and kinetic energies of the body are equal at a point P in its path. If the same body is thrown with double the velocity upwards, the ratio of potential and kinetic energies of the body when it crosses the same point, is (Single option correct)

a $1:1$

b $1:4$

c $1:7$

d $1:8$

41 Two masses 8 kg and 12 kg are connected at the ends of a light inextensible string that goes over a frictionless pulley. Find the acceleration of the masses, and the tension in the string when the masses are released. (Single option correct)

a , 144 N

b , 112 N

c , 128 N

d 96 N

42 The instantaneous current and voltage of an AC circuit are given by $\mathbf{i = 10 \sin\ (314t)\ A}$ and $\mathbf{V = 100 \sin (314t)\ V}$. What is the power dissipation in the circuit?

(Single option correct)

a $100\ W$

b $500\ W$

c $300\ W$

d $200\ W$

43 One-litre of oxygen at a pressure of 1 atm and two-litre of nitrogen at a pressure of 0.5 atm, are introduced into a vessel of volume one-litre. If there is no change in temperature, the final pressure of the mixture of the gases [in $\mathbf{atm}$] is (Single option correct)

a 1.5

b 2.5

c 2

d 4

44 Electromagnetic radiations having electric field variation is as $E = E_0 \cos^2 \frac{\omega t}{2} \cos \omega_0 t$ is incident on metal plate having work function $\frac{h(\omega+\omega_0)}{4\pi}$, h is plank's constant. The maximum kinetic energy of emitted photo electrons is (Single option correct)

a $\frac{h\omega_0}{4\pi}$

b $\frac{h\omega}{4\pi}$

c $\frac{h(\omega+\omega_0)}{4\pi}$

d $\frac{h(\omega-\omega_0)}{4\pi}$

45 One mole of ideal gas goes through process $P = \frac{2V^2}{(1+V^2)}$ then change in temperature of gas when volume changes from $V = 1\ m^3$ to $2m^3$ is: (Single option correct)

a $\frac{4}{-5R} K$

b $\left(\frac{11}{5R}\right) K$

c $\frac{5}{-2R}\ K$

d $2K$

CHEMISTRY

1 In the dehydration reaction $CH_3CONH_2 \xrightarrow{P_2O_5}$ Product , the change in hybridization state of carbon in reactant to product respectively is? (Single option correct)

a sp^3 to sp^2

b sp to sp

c sp^2 to sp

d sp to sp^3

2 Amine is not formed in the reaction

(A) Hydrolysis of RCN

(B) Reduction of R$CH=NOH$

(C) Hydrolysis of RNC

(D) Hydrolysis of R$CONH_2$

The correct option is (Single option correct)

a A, B, D

b A, D

c B, C

d A, B, C

3 In the equilibrium which one of the following options is correct?

$CH_3COOH + HF \rightleftharpoons CH_3COOH_2^+ + F^-$ (Single option correct)

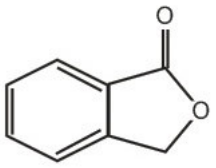
a F^- is the conjugate acid of CH_3COOH

b F^- is the conjugate base of HF

c CH_3COOH is the conjugate acid of $CH_3COOH_2^+$

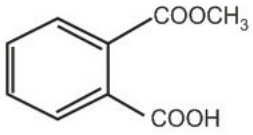
d $CH_3COOH_2^+$ is the conjugate base of CH_3COOH

4 Which of the following reactants on reaction with conc. NaOH followed by acidification gives the following lactone as the only product?

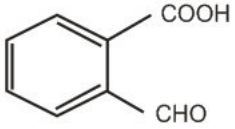


(Single option correct)

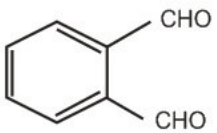
a



b



c



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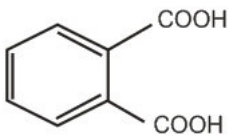
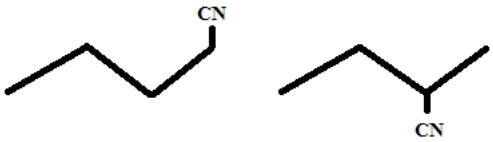


5 The compounds below exhibit:



(Single option correct)

a Chain Isomerism

b Position isomerism

c Functional group isomerism

d None

6 A, B, C and D are four different gases with critical temperatures 304.1, 154.3, 405.5 and 126.0K respectively. While cooling the gas which gets liquefied first is (Single option correct)

a B

b A

c D

d C

7 Which of the following amino acid is essential .

(Single option correct)

a Valine

b Alanine

c Aspartic acid

d None of these

8 Reduction potentials of four elements P, Q, R, S is −2.90 V, 0.34 V, 1.2 V and −0.76 V. The decreasing order of reducing power is (Single option correct)

a $\mathbf{P > Q > R > S}$

b $\mathbf{S > R > Q > P}$

c $\mathbf{P > S > Q > R}$

d $\mathbf{Q > S > R > P}$

9 For a gaseous reaction, following data is given:

$$\mathbf{A \longrightarrow B,\ k_1 = 10^{15}\ e^{-2000/T}}$$

$$\mathbf{C \longrightarrow D,\ k_2 = 10^{14}\ e^{-1000/T}}$$

The temperature at which $\mathbf{k_1 = k_2}$ is : (Single option correct)

a $\mathbf{1000\ K}$

b $\mathbf{2000\ K}$

c $\mathbf{868.82\ K}$

d $\mathbf{434.2\ K}$

10 Which of the following statements is/are correct?

i. Melting point of alkane increases with increase in number of C atoms and with increase in branching

ii. Boiling point of alkane increases with increase in number of C atoms but with decrease in branching

iii. Cycloalkanes have lower boiling point than normal alkane with same number of C atoms

iv. Alkenes have lower boiling point than same number of C atoms in alkanes (Single option correct)

a (I), (II)

b (I), (II), (III)

c (III), (IV)

d (IV)

11 16 g oxygen gas expands at STP to occupy double of its original volume. The magnitude of work done during the process is: (Single option correct)

a 260 cal

b 180 cal

c 130 cal

d 272.8 cal

12 The maximum proportion of free volume that is available in the crystal of diamond is : (Single option correct)

a 0.52

b 0.34

c 0.32

d 0.66

13 Copper sulphate solution does not react with (Single option correct)

a Zinc

b Iron

c Silver

d All of these

14 When 20 g of naphthoic acid ($C_{11}H_8O_2$) is dissolved in 50 g of benzene k_f = 1.72 Kkg mol $^{-1}$, a freezing point depression of 2 K is observed. The van't Hoff factor (i) is (Single option correct)

a 0.5

b 1

c 2

d 3

15 $A + 2B + 3C \rightleftharpoons AB_2C_3$

Reaction of 6.0 g of A, 6.0×10^{23} atoms of B, and 0.036 mol of C yields 4.8 g of compound AB_2C_3 . If the atomic mass of A and C are 60 and 80 amu, respectively, the atomic mass of B is (Avogadro no $= 6 \times 10^{23}$): (Single option correct)

a 40 amu

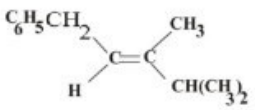
b 60 amu

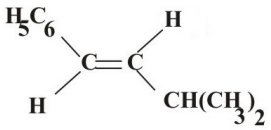
c 70 amu

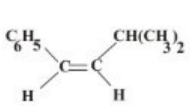
d 50 amu

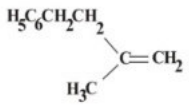
16 The main product of the following reactions is

$C_6H_5CH_2CH(OH)CH(CH_3)_2 \xrightarrow{\text{Conc. } H_2SO_4} ?$ (Single option correct)

a 

b 

c 

d 

17 You are given marbles of diameter 10 mm. They are to be placed such that their centres are lying in a square bound by four lines each of length 40 mm. The number of marbles per unit area is (Single option correct)

a 1.565 marbles cm^{-2}

b 2.754 marbles cm^{-2}

c 1.000 marbles cm^{-2}

d 1.985 marbles cm^{-2}

18 Which of the following mineral does not contain Al. (Single option correct)

a Cryolite

b Mica

c Feldspar

d Fluorspar

19 Alkali metals act as (Single option correct)

a good dehydrating agent

b good reducing agent

c good oxidising agent

d none of these

20 Which of the following carboxylic acid undergoes decarboxylation easily ? (Single option correct)

a $C_6H_5 - CO - CH_2 - COOH$

b $C_6H_5 - CO - COOH$

c $C_6H_5 - \underset{\underset{OH}{|}}{CH} - COOH$

d $C_6H_5 - \underset{\underset{NH_2}{|}}{CH} - COOH$

21 A freshly prepared radioactive source of half-life 2 hours emits radiations of intensity which is 64 times the permissible safe level. The minimum time after which it would be possible to work safely with this source is (Single option correct)

a 6 hours

b 12 hours

c 24 hours

d 128 hours

22 Out of the following redox reactions

I. $NH_4NO_3 \xrightarrow{\Delta} N_2O + 2H_2O$

II. $NH_4NO_2 \xrightarrow{\Delta} N_2 + 2H_2O$

III. $PCl_5 \xrightarrow{\Delta} PCl_3 + Cl_2$

disproportionation is not shown in (Single option correct)

a I and II

b II and III

c I and III

d I, II and III

23 A solution which is 10^{-3} M each in Mn^{2+}, Fe^{2+}, Zn^{2+} and Hg^{2+} is treated with 10^{-16} M sulphide ion. If K_{sp} of MnS, FeS, ZnS and HgS are 10^{-13}, 10^{-18}, 10^{-24} and 10^{-53} respectively, which one will precipitate first ? (Single option correct)

a FeS

b MgS

c HgS

d ZnS

24 How many molecules of water are present in the one mL of water? (Single option correct)

a 3.34×10^{25} molecules

b 3.34×10^{26} molecules

c 3.34×10^{22} molecules

d 3.34×10^{12} molecules

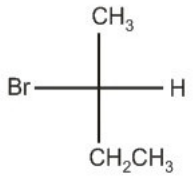
25 Which is true for a eutrophic lake - (Single option correct)

a It has high level of D O

b Nutrient concentration is low

c Algal bloom is observed

d temperature is low

26 When  reacts with KOH in the presence of water (through S_N2 reaction mechanism), then the stereochemistry of product so formed will be - (Single option correct)

a R

b S

c Mixture of R and S

d Partial S + racemic mixture

27 The solution of potassium dichromate is prepared from which of the following compound and how its colour changes with change in pH:

(Single option correct)

a Potassium chromate,

At lower pH yellow and higher pH orange

b Sodium chromate,

At lower pH yellow and higher pH orange

c Potassium chromate,

At lower pH orange and higher pH yellow

d Sodium chromate,

At lower pH orange and higher pH yellow

28 The reaction, $N_2O_5\ (g) \rightleftarrows 2\ NO_2\ (g) + \frac{1}{2}\ O_2\ (g)$, is started with initial pressure of $N_2O_5\ (g)$ equal to 600 torr. What fraction of $N_2O_5\ (g)$ decomposed when total pressure of the system is 960 torr ? (Single option correct)

a 0.05

b 0.1

c 0.2

d 0.4

29 Which one of the following is known as broad spectrum antibiotics? (Single option correct)

a Streptomycine

b Amylopectin

c Chloramphenicol

d Penicillin G

30 Which one of the following conversions involve change in both hybridisation and shape? (Single option correct)

a $CH_4 \longrightarrow C_2H_6$

b $NH_3 \longrightarrow NH_4^+$

c $BF_3 \longrightarrow BF_4^-$

d $H_2O \longrightarrow H_3O^+$

31 If ΔH_f^o for H_2O_2 and H_2O are -188 kJ/mol and -286 kJ/mol, what will be the enthalpy change of the reaction:

$2H_2O_2\ (l) \rightarrow 2H_2O\ (l) + O_2(g)$ (Single option correct)

a -196 kJ

b -494 kJ

c 146 kJ

d -98 kJ

32 Higher order (>3) reactions are rare due to: (Single option correct)

a Loss of active species on collision.

b Low probability of simultaneous collision of all the reacting species.

c Increase in entropy and activation energy as more molecules are involved.

d Shifting of equilibrium towards reactants due to elastic collisions.

33 The hypothetical complex Chloro-di-aqua-tri-aminecobalt (III) chloride can be represented as- (Single option correct)

a $[CoCl(NH_3)_3(H_2O)_2]Cl_2$

b $[Co(NH_3)_3(H_2O)Cl_3]$

c $[Co(NH_3)_3(H_2O)_2Cl]$

d $[Co(NH_3)_3(H_2O)_3]Cl_3$

34 The Beilstein test for organic compound is used to detect (Single option correct)

a Nitrogen

b Sulphur

c Carbon

d Halogens

35 The number of P-O-P bonds in cyclic metaphosphoric acid is (Single option correct)

a Zero

b Two

c Four

d Three

36 At STP, 0.50 mole H_2 gas and 1.0 mole He gas (Single option correct)

a Have equal effusion rates

b Occupy equal volumes

c Have equal molecular speeds

d Have equal average kinetic energies

37 Which of the following pairs have identical values of $\frac{e}{m}$? (Single option correct)

a A proton and a neutron

b A proton and deuterium

c Deutron and an $\alpha-$ particle

d An electron and $\gamma-$ rays

38 $(X) \xrightarrow{KOH} (Y)$ **(gas turns red litmus blue)** $+ (Z) \xrightarrow{Zn+KOH} (Y)$ **(gas).**

$(X) \xrightarrow{\Delta}$ gas **(does not support combustion)**

Identify (X) to (Z): (Single option correct)

a $X = NH_4NO_2 \quad Y = NH_3 \quad Z = KNO_2$

b $X = (NH_4)_2Cr_2O_7 \quad Y = NH_3 \quad Z = Cr_2O_3$

c $X = (NH_4)_2SO_4 \quad Y = NH_3 \quad Z = K_2SO_4$

d $X = NH_4NO_3 \quad Y = NH_3 \quad Z = KNO_3$

39 According to the Periodic Law of elements, the variation in properties of elements is related to their (Single option correct)

a Nuclear masses

b Atomic number

c Atomic masses

d Nuclear neutron-proton number ratios

40 The degree of dissociation (α) of a weak electrolyte A_xB_y is related to Van't Hoff factor (i) by the expression (Single option correct)

a $\alpha = \frac{i-1}{(x+y-1)}$

b $\alpha = \frac{i-1}{x+y+1}$

c $\alpha = \frac{x+y-1}{i-1}$

d $\alpha = \frac{x+y+1}{i-1}$

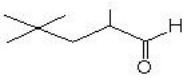
41 The compound obtained by heating salicylic acid with phenol in the presence of phosphorus oxychloride is (Single option correct)

a Salol

b Aspirin

c Oil of wintergreen

d o -chlorobenzoyl chloride

42  having the IUPAC name as (Single option correct)

a 2,4,4-trimethyl pentanal

b 4,4,2-trimethyl pentanal

c 1,3,3-trimethyl butanal

d 3,3,1-trimethyl butanal

43 For $PCl_5 \rightleftharpoons PCl_3 + Cl_2$, initial concentration of each reactant and product is 1 M. If $K_{eq} = 0.41$ then (Single option correct)

a More PCl_3 will form

b More Cl_2 will form

c More PCl_5 will form

d No change

44 For a certain atom, there are energy levels A, B, C corresponds to energy values $E_A < E_B < E_C$. Choose the correct option if $\lambda_1, \lambda_2, \lambda_3$ are the wavelength of radiations corresponding to the transition from C to B, B to A and C to A respectively. (Single option correct)

a $\lambda_3 = \lambda_1 + \lambda_2$

b $\lambda_3 = \frac{\lambda_1\lambda_2}{\lambda_1+\lambda_2}$

c $\lambda_1 + \lambda_2 + \lambda_3 = 0$

d $3\lambda_2 = \lambda_3 + 2\lambda_2$

45 Fill in the blank :

$^{235}_{92}U + ^{1}_{0}n \rightarrow ? + ^{92}_{36}Kr + 3^{1}_{0}n$ (Single option correct)

a $^{141}_{56}Ba$

b $^{139}_{56}Ba$

c $^{139}_{54}Ba$

d $^{141}_{54}B$

BIOLOGY

1. In *Eco*RI, the letter 'R' is derived from (Single option correct)

a. Genus
b. Species
c. Strain
d. Class

2. Which of the following is most dangerous to wild life (Single option correct)

a. Over exploitation
b. Man made forest
c. Habitat destruction
d. Introduction of foreign species

3. During isolation of DNA, addition of which of the following causes precipitation of purified DNA? (Single option correct)

a. Chilled ethanol
b. Ribonuclease enzyme
c. DNA polymerase
d. Proteases

4. Select the incorrect statement :- (Single option correct)

a. DNA from single cell is enough to performDNA fingerprinting analysis
b. DNA fingerprinting has much widerapplications in determining population &genetic diversities
c. The VNTR belongs to a class of satellite DNA referred as Minisatellites
d. DNA fingerprint differs in the case of monozygotic twins

5. Mutation is (Single option correct)

a. Sudden change in morphology
b. Change in characters
c. Change in heritable characters
d. None of these

6. Natural system of classification is based on (Single option correct)

a. Morphology
b. Phylogeny
c. Morphology and affinities
d. Ontogeny

7. Which one of the following animals may occupy more than one trophic level in the same ecosystem at the same time? (Single option correct)

a. Sparrow
b. Mice
c. Goat
d. Frog

8. The example of the trait that is controlled by many genes in human beings is (Single option correct)

a. Skin colour
b. Phenylketonuria
c. Colour blindness
d. Sickle cell anaemia

9 Excretion in Amoeba occurs through (Single option correct)

a Nucleus

b Parapodia

c Plasmalemma

d Contractile vacuole

10 Formation of non-functional methaemoglobin causes blue-baby syndrome. This is due to (Single option correct)

a Excess of arsenic concentration in drinking water

b Excess of nitrates in drinking water

c Deficiency of iron in food

d Increased methane content in the atmosphere

11 Viviparity is found in (Single option correct)

a Frog

b Lizard

c Snake

d Rabbit

12 Choose the option that is showing the correct sequence of events occurring in each cycle of polymerase chain reaction (PCR). (Single option correct)

a Denaturation, extension, primer annealing.

b Primer annealing, denaturation, extension.

c Denaturation, primer annealing, extension.

d Extension, primer annealing, denaturation.

13 There is no natural death in single-celled organisms like *Amoeba* and bacteria because (Single option correct)

a They cannot reproduce sexually

b They reproduce by binary fission

c Parental body is distributed among the offspring

d They are microscopic

14 Match, the following columns and choose the correct combination.

Column-I	Column- II
(A) Endodermis	(1) Companion cells
(B) Stomata	(2) Lenticels
(C) Sieve tube	(3) Palisade cells
(D) Periderm	(4) Passage cells
(E) Mesophyll	(5) Accessory cells

(Single option correct)

a A B C D E
4 5 2 1 3

b A B C D E
5 3 1 2 4

c A B C D E
4 5 1 2 3

d A B C D E
2 5 3 4 1

15 De Vries gave his mutation theory on organic evolution while working on: (Single option correct)

a Pisum sativum

b Drosophila melanogaster

c Oenothera lamarckiana

d Althea rosea

16 Unique features of Bryophytes is that they (Single option correct)

a Produce spores

b Have sporophyte attached to gametophyte

c Lack roots

d Lack vascular tissues

17 The immunity associated with memory is called (Single option correct)

a Natural immunity
b Acquired immunity
c Innate immunity.
d Passive immunity

18 IARI, New Delhi developed which variety of beans which is protein enriched :- (Single option correct)

a Pusa sawni
b Pusa Gaurav
c Pusa A-4
d Lablab

19 Fertilization is depicted by the condition: (Single option correct)

a Haploid to diploid
b Diploid to triploid
c Diploid to haploid
d Diploid to hexaploid

20 According to available fossil records which of the following were the first land vascular plant (Single option correct)

a Psilophytales
b Lycopods
c Horse-tail
d *Cycas*

21 The percentage of oxygen in inhaled air is about (Single option correct)

a 21%
b 16%
c 79%
d 4%

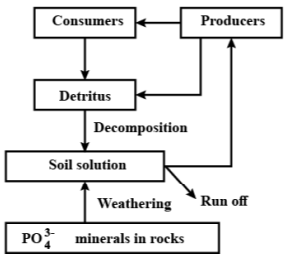
22 In cell cycle DNA replication occurs during which phase? (Single option correct)

a G_1 – Phase
b S – phase
c G_2 – phase
d M – phase

23 The measure of resources enough to support a maximum possible number of species, beyond which no further growth is possible is known as: (Single option correct)

a Population growth
b Biotic potential
c Carrying capacity
d None of these

24 The diagram/flow chart represents which of the sedimentary biogeochemical cycle?



(Single option correct)

a Nitrogen cycle
b Phosphorus cycle
c Oxygen cycle
d Sulphur cycle

25 When a cell is plasmolysed, it becomes (Single option correct)

a Flaccid and its TP becomes zero

b Turgid and its becomes zero

c Turgid and TP becomes equal to OP

d Flaccid and DPO becomes zero

26 A plant is kept in 300ppm CO_2 concentration, what will happen to it (Single option correct)

a Plant will die soon

b Plant will grow but will not die

c Plant will show normal photosynthesis

d Respiration will be greatly decreased

27 The character which differentiates mammals from birds is (Single option correct)

a Seven cervical vertebrae in neck

b Parental care

c One aortic arch

d Metanephric kidney

28 Potato is included in Solanaceae family because (Single option correct)

a It is epipetallous

b It is pentamerous

c The ovary is slightly diverted from its position

d All these

29 During double fertilization, the pollen tube enters the embryo sac through (Single option correct)

a Egg cell

b Persistent synergid

c Degenerating synergid

d Central cell

30 'Pathogens' are
I. Normally non-disease causing in nature.
II. Bacteria, viruses, fungi, protozoans, helminths are few examples of pathogens.
III. It causes harm to the host by living in (or on) them. (Single option correct)

a I and III

b II and III

c I and II

d All are correct

31 The total number of lobes and alveoli present in both the lungs of man are (Single option correct)

a 17 and 30 million, respectively

b 5 and 300 million, respectively

c 19 and 300 million, respectively

d 18 and 300 lakh, respectively

32 Deficiency of tocopherol in the human body causes which condition? (Single option correct)

a Beri-beri

b Pellagra

c Infertility

d Scurvy

33 Very strong light has a direct inhibiting effect on photosynthesis, which is known as (Single option correct)

a Solarization

b Etiolation

c Chlorosis

d Defoliation

34 Simple epithelium is a tissue in which the cells are (Single option correct)

a hardened and provide support to the organs.
b cemented directly to one another to form a single layer.
c continuously dividing to provide form to an organ.
d loosely connected to one other to form an irregular organ.

35 Which one of the following elements in plants is not remobilised? (Single option correct)

a Phosphorus
b Calcium
c Potassium
d Sodium

36 Which one of the following is a correct option with reference to pathogenic bacteria and DDT? (Single option correct)

a Bacteria can undergo multiplication and DDT is degraded by living cells
b Bacteria can be degraded by living cells and DDT can not be degraded by living cells.
c Bacteria can undergo biological magnification and DDT can be degraded by living cells.
d Bacteria can undergo biological magnification and DDT can not be degraded by living cells.

37 Which of the following is a technique of direct introduction of gametes into the oviduct: (Single option correct)

a MTS
b ET
c GIFT
d POST

38 To which of the following, a bundle of His passes stimulus of contraction? (Single option correct)

a AV node
b SA node
c Purkinje fibre
d Atrium

39 The function of hyaluronidase is (Single option correct)

a To form cone of reception in egg
b To dissolve the cementing part of granulosa cells
c To release IInd polar body
d None of these

40 The connecting link between glycolysis and Krebs cycle is (Single option correct)

a Pyruvic acid
b Acetyl Co-A
c Oxaloacetic acid
d Phosphoenol Pyruvate

41 What is the female counterpart of prostate gland in the male (man) (Single option correct)

a Bartholin's gland
b Uterus
c Clitoris
d None of these

42 Which part of the human brain controls the urge for eating and drinking? (Single option correct)

a Forebrain
b Midbrain
c Hindbrain
d Spinal cord

43 Which of the following shows the absence of chlorophyll *'b'* (Single option correct)

a Green algae
b Red algae
c Blue-green algae
d Brown algae

44 The transfer vesicle from RER fuse with which region of golgi complex (Single option correct)

a Cis
b Medial
c Trans
d Protein arms

45 Parchment paper is (Single option correct)

a Permeable membrane
b Impermeable membrane
c Semipermeable membrane
d None of these

46 If the base sequence in one chain of DNA is GCATG, what shall be the sequence in the replicated complementary strand (Single option correct)

a GCATG
b CGTAC
c ATGCG
d GCATC

47 The endoplasmic reticulum is closely associated with the Golgi apparatus. Synthesized proteins from the RER are released from which part of the Golgi apparatus? (Single option correct)

a *Cis* face of Golgi apparatus
b Cisternae
c *Trans* face of Golgi apparatus
d Both (a) and (c)

48 Identify the correct sequence of organs/regions in the organisation of human ear as an auditory mechanoreceptor organ. (Single option correct)

a Pinna - Cochlea - Tympanic membrane canal - Malleus - Stapes - Incus - Auditory nerve
b Pinna - Auditory canal - Tympanic membrane - Malleus- Incus - Stapes - Cochlea - Auditory nerve
c Pinna - Malleus - Incus - stapes - Auditory canal - Tympanic membrane - Cochlea - Auditory nerve
d Pinna - Tympanic membrane - Auditory canal - Cochlea - Malleus - Incus - Stapes - Auditory nerve

49 Enzymes are biocatalyst of the body which fasten the biochemical reactions and are regulated by various factors. Generally, the majority of the enzymes are apoenzymes which represent the protein part of an enzyme. Which of the following biocatalyst is non-protein in nature? (Single option correct)

a Ribozyme
b Pepsin
c Trypsin
d All of the above

50 Diaphragms are contraceptive devices used by females. Read the statements given below and choose the correct option.

(i) They are introduced into the uterus.
(ii) They are placed to cover the cervical region.
(iii) They act as physical barriers for sperm entry.
(iv) They act as spermicidal agents. (Single option correct)

a (i) and (ii)
b (i) and (iii)
c (ii) and (iii)
d (iii) and (iv)

51 In Cushing's syndrome, there is (Single option correct)

a An increase in blood glucose level

b Hypertrophy of the skeletal muscles

c A fall in plasma cortisol

d A thickening of the skin

52 Which of the following bacterium converts the sucrose into dextrin (Single option correct)

a *Bacillus megatherium*

b *Leuconostoc mesenteroides*

c *Clostridium botulinum*

d None of the above

53 An advantage of excreting nitrogenous wastes in the form of uric acid is that: (Single option correct)

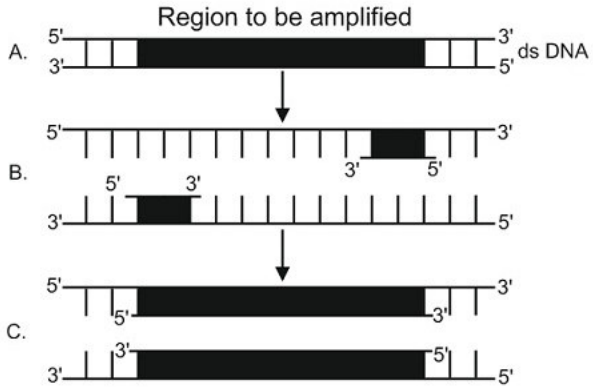
a Uric acid can be excreted in almost solid form.

b The formation of uric acid requires a least amount of energy.

c Uric acid is the first metabolic breakdown product of acids

d Uric acid may be excreted through the lungs

54 The figure below shows three steps (A, B, C) of Polymerase Chain Reaction (PCR). Select the option giving correct identification together with what it represents ?



(Single option correct)

a A - Denaturation at a temperature of about 50° C.

b B-Denaturation at a temperature of about 98° C separating the two DNA strands.

c C - Extension in the presence of heat stable DNA polymerase.

d A- Annealing with two sets of primers.

55 In which of the following organisms the chances of survival are more:

(Single option correct)

a Vegetative

b All of these

c Sexual

d Asexual

56 Proteinaceous endosperm of maize is called (Single option correct)

a Apophysis

b Scutellum

c Aleurone layer

d None of the above

57 Water stress in plants causes decrease in photosynthesis because :-

(A) it reduces the CO_2 availability
(B) it reduces the surface area of the leaves
(C) it reduces the metabolic activities of leaves

Choose the correct option from the following :- (Single option correct)

a A and B are correct but C is incorrect

b A and C are correct but B is incorrect

c A, B and C all are incorrect

d A, B and C all are correct

58 The common pathway for both aerobic and anaerobic respiration is (Single option correct)

a EMP pathway

b Kreb's cycle

c HMP pathway

d Oxidative phosphorylation

59 Three of the following pairs of the human skeletal parts are correctly matched with their respective inclusive skeletal category and one pair is not matched. Identify the non-matching pair. (Single option correct)

a

	Pairs of skeletal parts	Category
(a)	Sternum and Ribs	Axial skeleton

b

	Pairs of skeletal parts	Category
(b)	Clavicle and Glenoid cavity	Pelvic girdle

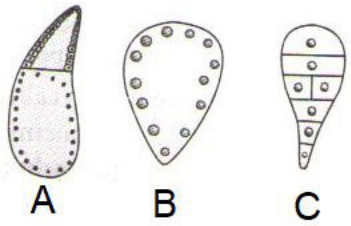
c

	Pairs of skeletal parts	Category
(c)	Humerus and Ulna	Appendicular skeleton

d

	Pairs of skeletal parts	Category
(d)	Malleus and Stapes	Ear ossicles

60 Select the correct order of endosperm types.



(Single option correct)

a A: Cellular, B: Helobial, C: Free nuclear

b A: Cellular, B: Free nuclear, C: Helobial

c A: Helobial, B: Free nuclear, C: Cellular

d A: Free nuclear, B: Cellular, C: Helobial

61 The correct order of the macromolecules that gets digested in the body is (Single option correct)

a Carbohydrate-fat-protein

b Carbohydrate-protein-fat

c Fat-protein-carbohydrate

d Fat-carbohydrate-protein

62 Highest calories is obtained from (Single option correct)

a Fats

b Proteins

c Carbohydrates

d Vitamins

63 Wilting of leaves at noon and their recovery toward evening is known as (Single option correct)

a Incipient wilting
b Temporary wilting
c Midday desiccation
d Permanent wilting

64 Which one of the following elements is not an essential micronutrient for plant growth? (Single option correct)

a Zn
b Cu
c Ca
d Mn

65 The difference between systolic and diastolic pressure in human is (Single option correct)

a 120 mm Hg
b 80 mm Hg
c 40 mm Hg
d 200 mm Hg

66 The process of RNA interference has been used in the development of plants resistant to (Single option correct)

a Nematodes
b Fungi
c Viruses
d Insects

67 The white fibres are chemically formed of (Single option correct)

a Collagen
b Elastin
c Myosin
d Reticulin

68 A plant requires magnesium for (Single option correct)

a Protein synthesis
b Chlorophyll synthesis
c Cell wall development
d Holding cells together

69 The transforming principle of *Pneumococcus* as found out by Avery, MacLeod and McCarty was (Single option correct)

a mRNA
b DNA
c Protein
d Polysaccharide

70 Which of the following is/are example(s) of passive immunity? (Single option correct)

a Antibodies present in colostrum
b Antibodies received by foetus through placenta
c Antibodies against the snake venom injected in patients
d All of these

71 The term test-tube baby implies that (Single option correct)

a Fertilization of ovum takes place in the uterus but develops in the test-tube
b Fertilization of ovum takes place in the test-tube and develops in test-tube itself
c Fertilization of ovum takes place in the test-tube but it develops in the uterus
d Fertilization of ovum takes place in the fallopian tube and embryo develops in the uterus

72 The emergency gland is (Single option correct)

a Pituitary
b Thyroid
c Pancreas
d Adrenal

73 Growth plotted against time gives a (Single option correct)

a Parabolic curve
b Sigmoid curve
c Upright line
d Horizontal line

74 The theory of Natural selection that explains the appearance of new forms of life on earth was given by (Single option correct)

a Oparin and Haldane
b Hardy-Weinberg
c Mendel
d Darwin

75 Branch connected with nomenclature, identification and classification is (Single option correct)

a Ecology
b Taxonomy
c Morphology
d Physiology

76 What differentiates leaf of dicots from monocots? (Single option correct)

a Parallel venation
b Differentiation of palisade and spongy parenchyma
c Stomata only on upper side
d Stomata both on upper and lower sides

77 Which one of the following pairs is wrongly matched? (Single option correct)

a Yeast - ethanol
b *Streptomycetes* - Antibiotic
c Coliforms - vinegar
d Methanogens - gobar gas.

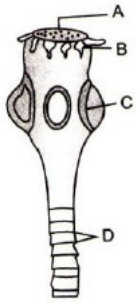
78 Which one of the following is wrongly matched? (Single option correct)

a Myosin-Contractile protein
b Tendon- Connective tissue
c Smooth muscle- voluntary muscle
d Red muscle- Myoglobin

79 Which of the following statements is incorrect? (Single option correct)

a Shoot apices those modify themselves into flowering apices, cannot perceive photoperiods.
b Sugarbeet, cabbage and carrots are monocarpic plants.
c To initiate flowering, LDP must be exposed to light for a period less than critical duration.
d Ethephon causes thinning of cotton, cherry & walnut.

80 In the given diagram different parts are indicated by alphabets. Choose the answer, in which these alphabets correctly match with the parts they indicate.



(Single option correct)

a A-Rostellum B-Hooks C-Sucker D-Proglottids

b A-Suctorial mouth B-Hooks C-Sucker D-Segments

c A-Mouth B-Tentacles C-Sucker D-Segments

d A-Sucker B-Hairs C-Ring D-Proglottids

81 A segment of DNA has 120 adenine and 120 cytosine bases. The total number of nucleotides present in the segment is (Single option correct)

a 120

b 240

c 60

d 480

82 Bio-insecticides includes (Single option correct)

a Pathogens

b Parasites

c Predators

d All of these

83 Statement - 1: Biolistics method is used to transfer used to make transgenic plants.
Statement - 2: In biolistics method pBR322 is used. (Single option correct)

a Both statement-1 and statement-2 is true.

b Statement-1 is false but statement-2 is true.

c Statement-1 is true but statement-2 is false.

d Both statement-1 and statement-2 is false.

84 Lipid molecules in plasma membrane are arranged in which manner? (Single option correct)

a Scattered

b Series

c Alternate

d Head parallel

85 Which type of ovary is found in the Liliaceae family? (Single option correct)

a Superior & monocarpellary

b Superior & tricarpellary

c Inferior & monocarpellary

d Inferior & bicarpellary

86 How does pruning help in making the hedge dense? (Single option correct)

a It frees axillary buds from apical dominance

b The apical shoot grows faster after pruning

c It releases wound hormones

d It induces the differentiation of new shoots from the rootstock

87 Which one of the following is associated with excretion in amoeba? (Single option correct)

a Endoplasm

b Mitochondria

c Contractile vacuole

d Plasma membrane

88 Which of the following does not have stomata ? (Single option correct)

a Hydrophytes

b Mesophytes

c Xerophytes

d Submerged hydrophytes

89 Embryoids are the (Single option correct)

a Embryos produced from the culture of somatic plant cells

b Plants produced after hardening

c Plants which show totipotency

d Young embryos

90 Co-varieties of sugarcane obtained red rot resistance from (Single option correct)

a Saccharum munja

b S. spontaneum

c S. arundinaceum

d S. edula

Date : 09 - 08 - 2020	AITS FULL TEST : FT # 19 (NEET PATTERN) Target : NEET - 2020	

IMPORTANT INSTRUCTIONS

1. Immediately fill the particulars on this page of the Test Booklet with Blue/Black Point Pen. Use of Pencil is strictly prohibited.
2. When you are directed, fill in the particulars of the Answer Sheet carefully.
3. The test is 3 hours duration.
4. The Test Booklet consists of **180** questions. The maximum marks are **720**.
5. There are three parts in the question paper **Biology** having **90** questions and **Physics** and **Chemistry** having **45** questions each.
6. For each question, you will be awarded ***4*** marks if you darken all the bubble(s) correspondind to the correct answer(s) and **zero** mark if no bubbles are darkened. In all other cases, **1 (one)** marks will be deducted.
7. There is only one correct response for each question. Filling up more than one response in any question will be treated as wrong response and marks for wrong response will be decucted accordingly as per instructions 6 above.

Filling the ORS (Optical Response Sheet) :

Use only Black ball point pen only for filling the ORS. Do not use Gel/Ink pen as it might smudge the ORS.

8. Write your Roll no. in the books given. Also darken the corresponding bubbles with Black ball point pen only. Also fill your roll no in the space provided.
9. **Fill your Paper Code as mentioned on the Test Paper.**
10. If student does not fill his/her roll no. and paper code correctly and properly, then his/her marks will not be displayed and 5 marks will be deducted (paper wise) from the total.
11. Since it is not possible to erase and correct pen filled bubble, you are advised to be extremely careful while darkening the bubble corresponding to your answer.
12. Neither try to erase/rub/scratch the option nor make the Cross(X) mark on the option once filled. Do not scribble, smudge, cut, tear, or wrinkle the ORS. Do not put any stray marks or whitener anywhere on the ORS.
13. If there is any discrepancy between the written data and the bubbled data in your ORS the bubbled data will be taken as final.

Name of the candidate

Roll Number :

I have read all the instructions and shall abide by them

.....

Signature of the Candidate

I have read all the instructions and shall abide by them

.....

Signature of the Candidate