

Max. Marks: 720

Date: 13.11.2022

ANKUR BATCH PHYSICS : REVISION TEST 2 (SET A) Topics: Wave Optics, Rotational Motion and Elasticity

1. What is the value of linear velocity, if $\vec{r} = 3\hat{i} + 4\hat{j} + 6\hat{k}$ and $\vec{\omega} = -5\hat{i} + 3\hat{j} + 5\hat{k}$?

(a) $-2\hat{i} + 45\hat{j} - 29\hat{k}$ (b) $2\hat{i} - 45\hat{j} + 29\hat{k}$ (c) $3\hat{i} - 29\hat{j} + 45\hat{k}$ (d) $5\hat{i} - 6\hat{j} + 4\hat{k}$

- 2. A force $\vec{F} = \alpha \hat{i} + 3\hat{j} + 6\hat{k}$ is acting at a point $\vec{r} = 2\hat{i} 6\hat{j} 12\hat{k}$. The value of a force which angular momentum about origin is conserved is
 - (a) zero (b) 1 (c) -1 (d) 2
- 3. The conservation of angular momentum demands that
 - (a) the external force on the system must be zero
 - (b) the external torque on the system must be zero
 - (c) both the external force as well as the external torque must be zero
 - (d) neither of them must be zero
- 4. The total torque about pivot A provided by the forces shown in the figure, for L = 3.0 m, is





5. ABC is an equilateral triangle with O as its centre. $\vec{F_1}, \vec{F_2}$ and $\vec{F_3}$ represent three forces acting along the sides AB, BC and AC respectively. If the total torque about O is zero then the magnitude of $\vec{F_3}$ is



- (a) $F_1 + F_2$ (b) $F_1 F_2$ (c) $\frac{F_1 + F_2}{2}$ (d) $2(F_1 + F_2)$
- 6. Two rotating bodies A and B of masses m and 2 m with moments of inertia I_A and I_B ($I_B > I_A$) have equal kinetic energy of rotation. If L_A and L_B be their angular momenta respectively, then
 - (a) $L_A = \frac{L_B}{2}$ (b) $L_A = 2L_B$ (c) $L_B > L_A$ (d) $L_A > L_B$

7. Two metallic discs A and B of densities d_1 and d_2 respectively, possess same mass and thickness. If I_1 and I_2 are the moment of inertia of A and B respectively, then $I_1 =$

- (a) I_2 (b) $\frac{d_2^2}{d_1^2}I_2$ (c) $\frac{d_1}{d_2}I_2$ (d) $\frac{d_2}{d_1}I_2$
- 8. A solid sphere of mass M and radius R rotates about an axis passing through its centre making 600 rpm. Its kinetic energy of rotation is
 - (a) $\frac{2}{5}\pi^2 MR^2$ (b) $\frac{2}{5}\pi MR^2$ (c) $80\pi^2 MR^2$ (d) $80\pi MR^2$



9. Three identical square plates rotate about the axes shown in the figure in such a way that their kinetic energies are equal. Each of the rotation axes passes through the centre of the square. Then the ratio of angular speeds $\omega_1 : \omega_2 : \omega_3$ is



- (a) 1:1:1 (b) $\sqrt{2}:\sqrt{2}:1$ (c) $1:\sqrt{2}:1$ (d) $1:2:\sqrt{2}$
- 10. The ratio of radii of gyration of a circular ring and a circular disc, of the same mass and radius, about an axis passing through their centres and perpendicular to their planes are
 - (a) $1:\sqrt{2}$ (b) 3:2 (c) 2:1 (d) $\sqrt{2}:1$
- When a ceiling fan is switched off, its angular velocity reduces to half its initial value after it completes 36 rotations. The number of rotations it will make further before coming to rest is (assume angular retardation to be uniform)
 - (a) 10 (b) 20 (c) 18 (d) 12
- 12. A uniform rod of length L and mass M is held vertical, with its bottom end pivoted to the floor. The rod falls under gravity, freely turning about the pivot. If acceleration due to gravity is g, what is the instantaneous angular speed of the rod when it makes an angle 60° with the vertical?
 - (a) $\left(\frac{g}{L}\right)^{1/2}$ (b) $\left(\frac{3g}{4L}\right)^{1/2}$ (c) $\left(\frac{3\sqrt{3g}}{2L}\right)^{1/2}$ (d) $\left(\frac{3g}{2L}\right)^{1/2}$



13. A disc of moment of inertia I_1 is rotating in horizontal plane about an axis passing through a centre and perpendicular to its plane with constant angular speed ω_1 . Another disc of moment of inertia I_2 having zero angular speed is placed conxially on a rotating disc. Now both the discs are rotating with constant angular speed ω_2 . The energy lost by the initial rotating disc is

(a)
$$\frac{1}{2} \left[\frac{I_1 + I_2}{I_1 I_2} \right] \omega_1^2$$
 (b) $\frac{1}{2} \left[\frac{I_1 I_2}{I_1 - I_2} \right] \omega_1^2$ (c) $\frac{1}{2} \left[\frac{I_1 - I_2}{I_1 I_2} \right] \omega_1^2$ (d) $\frac{1}{2} \left[\frac{I_1 I_2}{I_1 + I_2} \right] \omega_1^2$

- 14. If the earth were to suddenly contract to $\frac{1}{n}^{\text{th}}$ of its present radius without any change in its mass, the duration of the new day will be nearly
 - (a) $\frac{24}{n}$ hr (b) 24n hr (c) $\frac{24}{n^2}$ hr (d) 24n^2 hr
- 15. A particle is undergoing uniform circular motion with angular momentum L. While moving on the same path if its kinetic energy becomes four limes, then its angular momentum will be
 - (a) $\frac{L}{4}$ (b) $\frac{L}{2}$ (c) L (d) 2L

16. I_1 and I_2 are the moments of inertia of two circular discs about their central axes perpendicular to their surfaces. Their angular frequencies of rotation are ω_1 and ω_2 respectively. If they are brought in constant face to face with their axes of rotation coinciding with each other, the angular frequency of the composite disc will be

- (a) $\frac{I_1 + I_2}{\omega_1 + \omega_2}$ (b) $\frac{I_2 \omega_1 I_1 \omega_2}{I_1 I_2}$ (c) $\frac{I_2 \omega_1 + I_1 \omega_2}{I_1 + I_2}$ (d) $\frac{I_1 \omega_1 + I_2 \omega_2}{I_1 + I_2}$
- 17. If the earth were to suddenly contract to half its present size, without any change in its mass, the duration of the new day will be
 - (a) 18 hours (b) 30 hours (c) 6 hours (d) 12 hours



- 18. A disk and a sphere of same radius but different masses roll off on two inclined planes of the same altitude and length. Which one of the two objects gets to the bottom of the plane first?
 - (a) Both reach at the same time (b) Depends on their masses
 - (c) Disk (d) Sphere
- 19. Three bodies, a ring, a solid cylinder and a solid sphere roll down the same inclined plane without slipping. They start from rest. The radii of the bodies are identical. Which of the bodies reaches the ground with maximum velocity?
 - (a) Ring (b) Solid cylinder
 - (c) Solid sphere (d) All reach the ground with same velocity
- 20. Young's modulus for a steel wire is 2×10^{11} Pa and its elastic limit is 2.5×10^8 Pa. By how much can a steel wire 3 m long and 2 mm in diameter be stretched before the elastic limit is exceeded?
 - (a) 3.75 mm (b) 7.50 mm (c) 4.75 mm (d) 4.00 mm
- 21. A crane with a steel cable of length 11 m and radius 2.0 cm is employed to lift a block of concrete of mass 40 tons in a building site. If the Young's modulus of steel is 2.0×10^{11} Pa, what will be roughly the increase in the length of the cable while lifting the block? (Take g = 10 ms⁻²)
 - (a) 0.75 cm (b) 1.25 cm (c) 1.75 cm (d) 2.50 cm
- 22. A steel wire with cross-section 3 cm² has elastic limit 2.4×10^8 Nm⁻². The maximum upward acceleration that can be given to a 1200 kg elevator supported by this cable wire if the stress is not to exceed one-third of the elastic limit is (Take g = 10 ms⁻²)
 - (a) 12 ms^{-2} (b) 10 ms^{-2} (c) 8 ms^{-2} (d) 7 ms^{-2}



23. A steel wire of 1.5 m long of diameter 0.25 cm and a brass wire of 1.0 m long of diameter 0.25 cm, are loaded as shown. Calculate the elongation of the brass wire.





24. A rigid bar of mass M is supported symmetrically by three wires each of length L. Those at each end are of copper and the middle one is of iron. The ratio of their diameters if each is to have the same tension is equal to

(a)
$$\frac{Y_{copper}}{Y_{iron}}$$
 (b) $\sqrt{\frac{Y_{iron}}{Y_{copper}}}$ (c) $\frac{Y_{iron}^2}{Y_{copper}^2}$ (d) $\frac{Y_{iron}}{Y_{copper}}$

25. Two wires of the same material and same length but diameters in the ratio 1 : 2 are stretched by the same force.The potential energy per unit volume of the two wires will be in the ratio

(a)
$$1:2$$
 (b) $4:1$ (c) $2:1$ (d) $16:1$

- 26. Which one of the following statements is wrong?
 - (a) Young's modulus for a perfectly rigid by is zero
 - (b) Bulk modulus is relevant for solids liquid and gases
 - (c) Rubber is less elastic than steel
 - (d) The Young's modulus and shear modulus are relevant for solids



27. A light rod of length 2 m suspended from the ceiling horizontally by means of two vertical wires of equal length. A weight W is hung from a light rod a shown in figure. The rod is hung by means of a steel wire of cross-sectional area $A_1 = 0.1$ cm² and brass wire of cross sectional area $A_2 = 0.2$ cm². To have equal stress in both wires, $T_1/T_2 =$





32. A solid sphere of mass m rolls without slipping on a inclined plane of inclination θ . The linear acceleration of the sphere is

(a)
$$\frac{7}{5}g\sin\theta$$
 (b) $\frac{2}{7}g\sin\theta$ (c) $\frac{3}{7}g\sin\theta$ (d) $\frac{5}{7}g\sin\theta$

33. Light enters from air into a medium of R.I. 1.5. What is the percentage change in its wavelength?

- 34. The number of waves in 7.5 cm length in vacuum is the same as the number of waves in 5 cm length of a medium. What is the refractive index of the medium?
 - (a) 1.25 (b) 1.75 (c) 1.5 (d) 1.33

35. A ray of light is incident on a medium at an angle i. It is found that the reflected ray is at right angles to the refracted ray. The refractive index of the medium is given by

- (a) sin i(b) cos i(c) tan i(d) cosec i
- 36. A ray of light passes from vacuum into a medium of refractive index n. If the angle of incidence is found to be twice the angle of refraction, then the angle of incidence is
 - (a) $2\sin^{-1}\left(\frac{n}{2}\right)$ (b) $2\cos^{-1}\left(\frac{n}{2}\right)$ (c) $\cos^{-1}\left(\frac{n}{2}\right)$ (d) $2\sin^{-1}(n)$
- 37. A ray of light travelling inside a glass slab of refractive index $\sqrt{2}$ is incident on the glass air interface at an angle of incidence of 45°. The refractive index of the air is one. In the case, the ray
 - (a) will be absorbed by the glass slab
 - (b) will travel in air without any deviation
 - (c) will travel parallel to the interface i.e. the angle of refraction will be 90°
 - (d) will be reflected back in glass



38. A ray of light is travelling from air into a medium in which its velocity is reduced to $\frac{3}{4}$ of its velocity in air. If it is incident at a very small angle on the surface of separation, and if i and r are the angles of incidence and reflection respectively, then the deviation of the ray is given by

(a)
$$\delta = i$$
 (b) $\delta = \frac{i}{2}$ (c) $\delta = \frac{i}{4}$ (d) $\delta = 2r$

39. A ray of light is incident on a medium of refractive index $\sqrt{2}$ at an angle of incidence of 45°. The ratio of the width of the incident beam in air to that of the refracted beam in the medium is

(a) $(3/2)^{1/2}$ (b) $(2/3)^{1/2}$ (c) 3/2 (d) 2/3

40. A short pulse of white light is incident from air to glass slab at normal incidence. After travelling through the slab, the first colour to emerge is

(a) blue (b) green (c) violet (d) red

41. In the case of linearly polarized light, the magnitude of the elastic field vector

- (a) is parallel to the direction of propagation (b) does not change with time
- (c) increase and decrease linearly with time (d) varies periodically with time
- 42. When an unpolarised light of intensity I₀ is incident on a polarizing sheet, the intensity of light which does not get transmitted as

(a)
$$I_0$$
 (b) Zero (c) $\frac{1}{4}I_0$ (d) $\frac{1}{2}I_0$

43. Two beams A and B, of plane polarized light with mutually perpendicular planes of polarization are seen through a Polaroid. From the position when the beam A has maximum intensity (and beam B has zero intensity), a rotation of Polaroid through 30° makes the two beams appear equally bright. If the initial intensities of the two beams are

I_A and	I _B respectively, the	n $\frac{I_A}{I_B}$ eq	luals				
(a)	3	(b)	$\frac{3}{2}$	(c)	1	(d)	$\frac{1}{3}$



44. If the refractive index of glass is $\sqrt{3}$, then its polarizing angle will be

	• • •	<i>a</i> .	1.70		100		
(a)	30°	(b)	45°	(c)	60°	(d)	90°

45. If the polarizing angle for red light is 60°, for a certain medium, then the polarizing angle for the blue light for the same medium will be

(a) 60° (b) less than 60° (c) 45° (d) more than 60°





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ANKUR BATCH CHEMISTRY : REVISION TEST 2 (SET A) Topics: Atomic Structure, States of Matter and Chemical Equilibrium

46.	The d	ensity of neon will	oe highe	st at				
	(a)	STP	(b)	0° C, 2 atm	(c)	273° C, 1 atm	(d)	273° C, 2 atm
47.	$^{212}_{11}$ N	a contains						
	(a)	22 protons	(b)	11 neutrons	(c)	22 neutrons	(d)	11 nucleons
48.	The g molec	ases are at absolute cules is:	tempera	ature 300 K and 350	K respec	tively. The ratio of	average]	kinetic energy of their
	(a)	7:6	(b)	6:7	(c)	36 : 49	(d)	49:36
49.	A mix was b pressu	ture of CH_4 and C_2 urnt to CO_2 and H_2 are was found to be	H ₂ occu $O_{(l)}$. The 69 torr.	pied a certain volum e $CO_{2(g)}$ alone was co What was the mole	e at a tot ollected ir fraction o	al pressure equal to a the same volume a of CH4 in the origina	63 torr. ' nd at the l gas mix	The same gas mixture same temperature, the ture?
	(a)	19/23	(b)	19/20	(c)	17/18	(d)	15/16
50.	A met (a) (b) (c) (d)	tal surface is expose The emitted elec incident radiation The emitted elec incident radiation The emitted elect The emitted elect	ed to sola trons ha etrons ha rons hav	ar radiations ve energy less than ave energy less than ve zero energy ve energy equal to en	a maxim n maxim ergy of p	um value of energy um value of energy hotons of incident li	y dependir y dependi ght	ng upon frequency of ing upon intensity of
51.	Two e	electrons occupying	the sam	e orbital are distingu	ished by			
	(a)	spin quantum nui	nber		(b)	Principal quantun	n number	
	(c)	Magnetic quantum	m numb	er	(d)	Azimuthal quantu	ım numbe	er
				Space for Ro	ough Wo	<u>rk</u>		



52. The equation constants of the following are:

$$N_2 + 3H_2 \rightleftharpoons 2NH_3, K_1$$

$$N_2 + O_2 \rightleftharpoons 2NO, K_2$$

$$H_2 + \frac{1}{2}O_2 \rightleftharpoons H_2O, K_2$$

The equilibrium constant (K) of the reaction:

$$2NH_3 + 5 / 2O_2 \xrightarrow{K} 2NO + 3H_2O$$
, will be

(a)
$$K_1 K_3^3 / K_2$$
 (b) $K_2 K_3^3 / K_1$ (c) $K_2 K_3 / K_1$ (d) $K_2^2 K_3 / K_1$

- 53. For the reaction $PCl_{3(g)} + Cl_{2(g)} \rightleftharpoons PCl_{5(g)}$ the position of equilibrium can be shifted to the right by
 - (a) Increasing the temperature
 - (b) Doubling the volume
 - (c) Addition of Cl_2 at constant volume
 - (d) Addition of equimolar quantities of PCl₃ and PCl₆
- 54. Temperature of a gas is t K. What would be the temperature at which volume and pressure, both will reduced to half of the initial values?
 - (a) t/2 (b) t/4 (c) t/3 (d) t/8
- 55. In hydrogen spectrum, the spectral line of Balmer series having lowest wavelength is
 - (a) H_{α} -line (b) H_{β} -line (c) H_{γ} -line (d) H_{δ} -line
- 56. If n = 6, the correct sequence for filling of electrons will be
 - (a) $ns \rightarrow (n-1)d \rightarrow (n-2)f \rightarrow np$ (b) $ns \rightarrow (n-2)f \rightarrow np \rightarrow (n-1)d$
 - (c) $ns \rightarrow np \rightarrow (n-1)d \rightarrow (n-2)f$ (d) $ns \rightarrow (n-2)f \rightarrow (n-1)d \rightarrow np$



57. Hydrolysis of sucrose gives Glucose + Fructose. Equilibrium constant K_C of the reaction is 2×10^{13} at 300 K. ΔG^0 of the reaction at 300 K is

(a)	-7.64×10^4 J/mole	(b)	7.54×10^3 J/mole

- (c) -7.64×10^4 k.J/mole (d) Data insufficient
- 58. The surface tension of which of the following liquid is maximum?
 - (a) CH_3OH (b) C_2H_5OH (c) C_6H_6 (d) H_2O
- 59. If wavelength is equal to the distance travelled by the electron in one second, then

(a)
$$\lambda = \frac{h}{p}$$
 (b) $\pi = \frac{\lambda}{m}$ (c) $\lambda = \sqrt{\frac{h}{p}}$ (d) $\lambda = \sqrt{\frac{h}{m}}$

- 60. What is the density of N₂ gas at 227° C and 5.00 atm pressure? (R = 0.0821 atm K⁻¹ mol⁻¹)
 - (a) 1.40 g/ml (b) 3.41 g/ml (c) 0.29 g/ml (d) 2.81 g/ml
- 61. The values of work functions of five metals are 2.42, 2.3, 2.25, 3.7 and 4.8 eV respectively. If a photon with energy 2.40 eV is used for all the metals in photoelectric effect, then the number of metals shows photoelectric effect is
 - (a) 1 (b) 2 (c) 3 (d) 4
- 62. An alkaline solution the following equilibrium exists

 $S^{2-} + S \Leftrightarrow S^{2-}_2, K_1 = 12$ $S^{2-}_2 + S \Leftrightarrow S^{2-}_3, K_2 = 11$

What is the equilibrium constant for the equation

$$S_3^{2-} \Leftrightarrow S^{2-} + 2S$$

(a) 23 (b) 132 (c) 1/132 (d) 1/32



63. The four tyres of a car are called with CO_2 , He, H₂ and O₂ respectively. The order in which they aree to be re inflated is

(a) CO_2, O_2, He, H_2 (b) H_2, He, O_2, CO_2 (c) H_2, He, CO_2, O_2 (d) H_2, O_2, He, CO_2

64. Based on equation $E = -2.178 \times 10^{-18} J\left(\frac{Z^2}{n^2}\right)$ certain conclusions are written. Which of them is not correct?

- (a) The negative sign in equation simply means that the energy of electron bound to the nucleus is lower than it would be if the electrons were at the infinite distance from the nucleus
- (b) Larger the value of n, the larger is the orbit radius
- (c) Equation can be used to calculate the change in energy when the electron changes orbit
- (d) For n = 1, the electron has a more negative energy than it does for n = 6 which means that the electron is more loosely bound in the smallest allowed orbit

65. Cathode rays are

66.

67.

68.

(a)	electromagnetic wa	aves		(b)	radiation		
(c)	stream of alpha pa	rticles		(d)	stream of electrons		
Which	of the following has	s maxim	um RMS velocity at	the same	temperature		
(a)	SO_2	(b)	CO_2	(c)	O ₂	(d)	H_2
Hydrog	gen diffuses six time	es faster	than gas A. The mola	r mass c	of gas A is		
(a)	72.0	(b)	6.0	(c)	24.0	(d)	36.0
NH ₃ ga	s is liquefied more	easily th	an N ₂ . Hence:				
(a)	Vander Waal's cor	nstant a	and b of $NH_3 > that o$	f N ₂			

- (b) Vander Waal's constant a and b of NH_3 < that of N_2
- (c) $a(NH_3) > a(N_2)$ but $b(NH_3) < b(N_2)$
- (d) $a(NH_3) < a(N_2)$ but $b(NH_3) > b(N_2)$



value of the electronic charge, indicated by these results is

69.

 1.6×10^{-29} -2.4×10^{-29} -4×10^{-19} -0.8×10^{-19} (a) (b) (c) (d) 70. A photon of wavelength 5000 A° strikes a metal surface having work function 2.20 eV. The kinetic energy of the emitted photo electron is $4.4 \times 10^{-20} \text{ J}$ (a) (b) 0.425 eV 2.20 eV (d) No electrons will be emitted (c) The three states of matter are solid, liquid and gas. Which of the following statement is/are true about them 71. Gases and liquids have viscosity as a common property (a) The molecules in all the three states possess random translational motion (b) (c) Gases cannot be converted into solids without passing through the liquid phase (d) Solids and liquids have vapour pressure as a common property 72. How many electrons in an atom with atomic number 105 can have (n + I) = 830 (b) 32 15 (d) (a) (c) 20 7.8 grams of a gas occupies 5.8 litres of volume at STP. The gas is 73. NO (b) N₂O (c) CO (d) CO_2 (a) The value of $\log_{10} K$ for the reaction $A \rightleftharpoons B$ is: 74. (Given $\Delta H^0 = -54.07 \text{ kJ mol}^{-1}$, $\Delta S^0 = -10 \text{ JK mol}^{-1}$, $R = 8.314 \text{ JK}^{-1} \text{ mol}^{-1}$, $2.303 \times 8.314 \times 298 = 5705$) (a) 5 (b) 10 95 100 (c) (d) 75. Which of the following is not an assumption of the kinetic theory of gases? A gas consists of many identical particles which are in continuous motion (a) Gas particles have negligible volume (b) (c) At high pressure, gas particles are difficult to compress Collisions of gas particles are perfectly elastic (d) **Space for Rough Work**

The value of charge on the oil droplets experimentally observed were -1.6×10^{-19} and -4×10^{-19} coulomb. The



76. The orbital diagram in which the aufbau principle is violated is



77. To liquefy gaseous substance whose critical temperatures are below room temperature requires

- (a) High pressure and lowering of temperature (below T_C)
- (b) Los pressure and raising of temperature (above T_C)
- (c) High pressure and lowering of temperature (above T_C)
- (d) Low pressure and lowering of temperature (below T_C)
- 78. Which of the following transition is associated with coloured spectral line

(a) n = 5 to n = 3 (b) n = 4 to n = 2 (c) n = 2 to n = 1 (d) n = 3 to n = 1

79. The number of electrons, neutrons and protons in a species are equal to 10, 8 and 8 respectively. The proper symbol of the species is

(a) $\frac{16}{8}$ O (b) $\frac{18}{8}$ O (c) $\frac{18}{10}$ Ne (d) $\frac{16}{8}$ O²⁻

80. If dissociation for reaction, $PCl_5 \rightleftharpoons PCl_5 + Cl_2$ is 20% at 1 atm pressure. Calculate K_C

(a) 0.04 (b) 0.05 (c) 0.07 (d) 0.06



81. The electrons are more likely to be found:

					1 W(x)			
					b x	<u> </u>		
				x- →	N	~		
					1.			
	(a)	In the region a and	lb		(b)	Only in the region a	L	
	(c)	Only in the region	c		(d)	In the region a and o	C	
82.	The orl	oital having minimu	m 'm' v	alue				
	(a)	Spherical in shape			(b)	dumbbell in shape		
	(c)	double dumbbell in	n shape		(d)	Tetrahedral		
83.	Carbox	ylic acids have hig	her boili	ng points than aldeh	ydes, ke	tones and even alcoh	ols of c	omparable molecular
	mass. 1	It is due to their						
	(a)	more extensive ass	sociation	of carboxylic acid vi	ia van de	er Waals force of attra	action	
	(b)	formation of carbo	oxylate ic	on				
	(c)	formation of intrar	nolecula	r H-bonding				
	(d)	formation of interr	nolecula	r H-bonding				
84.	The tot	al number of orbital	ls in the	fifth energy level is				
	(a)	5	(b)	10	(c)	18	(d)	25
85.	The en	ergy of hydrogen at	om in its	ground state is -13.	5 eV. Tl	he energy of the level	corresp	onding to $n = 5$ is
	(a)	-0.54 eV	(b)	– 5.40 eV	(c)	– 0.85 eV	(d)	– 2.72 eV
86.	A mixt value o	ure of 0.3 mol of H f K_c is 64, the amou	H ₂ and 0 int of iod	.3 mol of I_2 is allow line that remains unre	ed to rea eached a	act in a 10 litre evacu t equilibrium is	uated fla	ask at 500° C. If the

	(a)	0.15 mol	(b)	0.06 mol	(c)	0.03 mol	(d)	0.2 mol
Space for Rough Work								



- 87. The ratio of RMS velocity to average velocity of gas molecules at a particular temperature is
 - (a) 1.086 : 1 (b) 61 (c) 121 (d) 1.086 : 2

88. For a reversible chemical reaction where the forward process is exothermic which of the following statements is correct.

- (a) The backward reaction has higher activation energy than the forward reaction
- (b) The backward and the forward processes have the same activation energy
- (c) The backward reaction has lower activation energy
- (d) No activation energy is required at all since energy is liberated in the process
- 89. Orbital angular momentum depends on _____
 - (a) 1 (b) n and 1 (c) n and m (d) m and s
- 90. In a chemical reaction

 $N_2 + 3H_3 \rightleftharpoons 2NH_3$, at equilibrium point, state whether

- (a) Equal volumes of N_2 and H_2 are reacting
- (b) Equal masses of N_2 and H_2 are reacting
- (c) The reaction has stopped
- (d) The same amount of ammonia is formed as is decomposed into N_2 and H_2



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ANKUR BATCH BIOLOGY : REVISION TEST-2 (SET A) Topic: Unit 7

- 91. In Antirrhinum, two plants with pink flowers were hybridized. The F₁ plants produced red, pink and white flowers in the proportion of 1 red, 2 pink and 1 white. What could be the genotype of the two plants used for hybridization? Red flower colour is determined by RR, and white by rr genes
 - (a) rrrr (b) RR (c) Rr (d) rr

92. A cross in which an organism showing a dominant phenotype is crossed with the recessive parent in order to know its genotype is called

- (a) monohybrid cross(b) back cross
- (c) test cross (d) dihybrid cross.
- 93. Study the pedigree chart of a certain family given below and select the correct conclusion which can be drawn for the character.



- (a) The female parent is heterozygous.
- (b) The parents could not have had a normal daughter for this character.
- (c) The trait under study could not be colour blindness.
- (d) The male parent is homozygous dominant.
- 94. When two unrelated individuals or lines are crossed, the performance of F_1 hybrid is often superior to both its parents. This phenomenon is called
 - (a) heterosis (b) transformation (c) splicing (d) metamorphosis.
- 95. Which one of the following conditions correctly describes the manner of determining the sex?
 - (a) Homozygous sex chromosomes (ZZ) determine female sex in birds.
 - (b) X0 type of sex chromosomes determine male sex in grasshopper.
 - (c) XO condition in humans as found in Turner's syndrome, determines female sex.
 - (d) Homozygous sex chromosomes (XX) produce male in *Drosophila*.
- 96. Mutations can be induced with
 - (a) infrared radiations (b) IAA
 - (c) ethylene (d) gamma radiations.

	Z					
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Learni 97.	ng with th Test ci	he Speed of Mumbai and the Tradition of Kota ross in plants or in Drosophila involves crossing				
	(a)	between two genotypes with recessive trait	(b)	between two F1 hyl	orids	
	(c)	the F_1 hybrid with a double recessive genotype	(d)	between two genot	ypes wi	th dominant trait.
3.	Which	one of the following conditions of the zygotic ce	ll would	l lead to the birth of a	norma	l human female child?
	(a)	Two X chromosomes.	(b)	Only one Y chrome	osome.	
	(c)	Only one X chromosome.	(d)	One X and one Y c	hromos	ome.
Э.	F ₂ gen	eration in a Mendelian cross showed that both	genotyp	ic and phenotypic ra	tios are	e same as 1 : 2 : 1. It
	represe	ents a case of				
	(a)	co-dominance	(b)	dihybnd cross		
	(c)	monohybrid cross with complete dominance	(d)	monohybrid cross	with inc	complete dominance.
00.	A nor	mal-visioned man whose father was colour-blind	d, marri	es a woman whose	father	was also colour-blind.
	They h	have their first child as a daughter. What are the ch	nances t	hat this child would b	be colou	ır-blind?
	(a)	100% (b) zero percent	(c)	25%	(d)	50%
1.	A test	cross is carried out to				
	(a)	determine the genotype of a plant at F_2				
	(b)	predict whether two traits are linked				
	(c)	assess the number of alleles of a gene				
	(d)	determine whether two species or varieties will	breed si	accessfully.		
			ain type	e of trait in humans.	Which	one of the following
02.	Repres	sented below is the inheritance pattern of a cert	un opp			one of the following



(b)

(c)

(a) Phenylketonuria

Sickle cell anaemia

(c) Haemophilia

(d) Thalassemia.

103. If both parents are carriers for thalassaemia, which is an autosomal recessive disorder, what are the chances of pregnancy resulting in an affected child?

(a) 25%

No chance (d)

50%

104. Which idea is depicted by a cross in which the F_1 generation resembles both the parents?

(a) Inheritance of one gene (b) Codominance

100%

(b)

(c) Incomplete dominance (d) Complete dominance



- 105. Select the incorrect statement with regard to haemophilia.
 - (a) It is a dominant disease.
 - (b) A single protein involved in the clotting of blood is affected.
 - (c) It is a sex-linked disease.
 - (d) It is a recessive disease.
- 106. If two persons with 'AB' blood group marry and have sufficiently large number of children, these children could be classified as 'A' blood group: 'AB' blood group : 'B' blood group in 1 : 2 : 1 ratio. Modern technique of protein electrophoresis reveals presence of both 'A' and 'B' type proteins in 'AB' blood group individuals. This in an example of
 - (a) partial dominance (b) complete dominance
 - (c) codominance (d) incomplete dominance.
- 107. Which of the following statements is not true of two gases that show 50% recombination frequency?
 - (a) The gene show independent assortment
 - (b) If the genes are present on the same chromosome, they undergo more than one crossovers in every meiosis
 - (c) The genes may be on different chromosomes
 - (d) The genes are tightly linked.
- 108. Fruit colour in squash is an example of
 - (a) recessive epistasis (b) dominant
 - (c) complementary genes (d) inhibitory genes

109. A man whose father was colour blind marries a woman who had a colour blind mother and normal father. What percentage of male children of this couple will be colour

	(a)	25%	(b)	0%	(c)	50%	(d)	75%
110.	A hum	an female with Turr	ner's syı	ndrome				
	(a)	has 45 chromosom	nes with	XO	(b)	has one additional X	chromo	osome
	(c)	exhibits male char	acters		(d)	is able to produce ch	nildren w	vith normal husband
111.	Alleles	are						
	(a)	different molecula	r forms	of a gene	(b)	heterozygotes		
	(c)	different phenotyp	be		(d)	true breeding homoz	zygotes	
112.	Multip	le alleles are presen	t					
	(a)	at the same locus of	of the cl	nromosome	(b)	on non-sister chrom	atids	
	(c)	on different chrom	nosomes	3	(d)	at different loci on the	he same	chromosome.



A man with blood group 'A' marries a woman with blood group 'B' What are all the possible blood groups of 113. their offsprings? (a) A, B, AB and O (b) O only (c) A and B only (d) A, B and AB only 114. How many pairs of contrasting characters in pea plants were studied by Mendel in his experiments? Five (a) Eight (b) Seven (c) (d) Six 115. An abnormal human baby with 'XXX' sex chromosomes was bom due to fusion of two ova and one sperm (b) (a) fusion of two sperms and one ovum formation of abnormal sperms in the father (c) (d) formation of abnormal ova in the mother. 116. A gene showing codominance has alleles that are recessive to each other (b) both alleles independently expressed in the (a) alleles tightly linked on the same chromosome. (c) one allele dominant on the other (d) 117. In his classic experiments on pea plants, Mendel did not use (a) shape flower position (c) seed colour (d) pod length. (b) 118. A colour blind man marries a woman with normal sight who has no history of colour blindness in her family. What is the probability of their grandson being colour blind ? (a) Nil (b) 0.25 (c) 0.5 (d) 1 119. A pleiotropic gene (a) controls a trait only in combination with another gene (b) controls multiple traits in an individual

- (c) is expressed only in primitive plants
- (d) is a gone evolved during Pliocene.
- 120. In the following human pedigree, the filled symbols represent the affected individuals. Identify the type of given pedigree.



- (a) Autosomal recessive
- (c) Autosomal dominant

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	L								
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Learni 121.	ng with the The ter	ne Speed of Mumbai an rm "linkage" was co	oined by	dition of Kota					
	(a)	G.Mendel	(b)	W. Sutton	(c)	T.H. Morgan	(d)	T. Boveri.	
122.	Amino	acid sequence, in p	orotein s	ynthesis is decided by	y the sec	quence of			
	(a)	rRNA	(b)	tRNA	(c)	mRNA	(d)	cDNA	
123.	Which antibiotic inhibits interaction between tRNA and mRNA during bacterial protein synthesis?								
	(a)	Tetracycline	(b)	Erythromycin	(c)	Neomycin	(d)	Streptomycin	
124.	Antipa	rallel strands of a D	NA mo	lecule means that					
	(a)	one strand turns c	lockwise	2					
	(b)	one strand turns a	nti-clocl	cwise					
	(c)	the phosphate gro	ups of tv	wo DNA strands, at th	neir end	s, share the same pos	sition		
	(d)	the Phosphate gro	ups at tł	ne start of two DNA s	trands a	re in opposite positio	on (pole)		
125.	In whi	ch mode of inherita	nce do y	ou expect more mate	rnal infl	uence among the off	fspring?		
	(a)	X-linked	(b)	Autosomal	(c)	Cytoplasmic	(d)	Y-linked.	
126.	One ge	ene-one enzyme hyp	oothesis	was postulated by					
	(a)	Beadle and Tatum	1		(b)	R. Franklin			
	(c)	Hershey and Chas	se		(d)	A. Garrod.			
127.	One tu	rn of the helix in a	B-form	DNA is approximatel	У				
	(a)	2 nm	(b)	20 nm	(c)	0.34 nm	(d)	3.4 nm.	
128.	Which	one of the followin	ig pairs	of codons is correctly	matche	ed with their function	n or the s	ignal for the particular	
	amino	acid?							
	(a)	AUG, ACG - Star	t/methic	onine	(b)	UUA, UCA - Leu	cine		
	(c)	GUU, GCU - Ala	nine		(d)	UAG, UGA - Stoj	p.		
129.	Polyso	me is formed by							
	(a)	a ribosome with s	everal su	ıbunits					
	(b)	ribosomes attache	d to eac	h other in a linear arr	angeme	nt			
	(c)	several ribosomes	attache	d to a single mRNA					
	(d)	many ribosomes a	ttached	to a strand of endopla	asmic re	ticulum.			
130.	Which	one of the followi	ng pairs	s of nitrogenous base	es of nu	cleic acids, is wrong	gly mate	hed with the category	
	mentic	oned against it?							
	(a)	Guanine, Adenine	e - Purin	es	(b)	Adenine, Thymine	e - Purine	es	
	(c)	Thymine, Uracil -	Pyrimd	ines	(d)	Uracil, Cytosine -	Pyrimid	ines.	



131. In the DNA molecule

- (a) the proportion of adenine in relation to thymine varies with the organism
- (b) there are two strands which run antiparallel-one in $5' \rightarrow 3'$ direction and other in $3' \rightarrow 5'$
- (c) the total amount of purine nucleotides and pyrimidine nucleotides is not always equal
- (d) there are two strands which run parallel in the 5' \rightarrow 3' direction.
- 132. What is not true for genetic code?
 - (a) It is nearly universal.
 - (b) It is degenerate.
 - (c) It is unambiguous.
 - (d) A codon in mRNAt is read in a non-contiguous fashion.
- 133. Removal of introns and joining the exons in a defined order in a transcription unit is called
 - (a) tailing (b) transformation (c) capping (d) splicing.
- 134. Semiconservative replication of DNA was first demonstrated in
 - (a) Escherichia coli (b) Streptococcus pneumoniae
 - (c) Salmonella typhimurium (d) Drosophila melanogaster

135. Whose experiments cracked the DNA and discovered unequivocally that a genetic code is a "triplet"?

- (a) Hershcy and Chase (b) Morgan and Sturtevant
- (c) Beadle and Tatum (d) Nircnberg and Mathaei.
- 136. Point mutation involves
 - (a) change in single base pair (b) duplication
 - (c) deletion (d) insertion.
- 137. Select the two correct statements out of the four (i iv) statements given below about *lac* operon.
 - (i) Glucose or galactose may bind with the represser and inactivate it.
 - (ii) In the absence of lactose the represser binds with the operator region.
 - (iii) The Z-gene codes for permease.
 - (iv) This was elucidated by Francois Jacob and Jacques Monod.
 - The correct statement's are
 - (a) (ii) and (iii) (b) (i) and (iii) (c) (ii) and (iv) (d) (i) and (ii).





138. Which one of the following palindromic base sequences in DNA can be easily cut at about the middle by some

particular restriction enzyme?

5´ _____ CACGTA _____ 3´ (a) 5´ _____ CGTTCG _____ 3´ (b) 3´ — ATGGTA — 5´ 5´ _____ GAATTC _____ 3´ (c) 5´ —— GATATG —— 3´ (d) 3´_____ CTACTA _____ 5´ 139. Which one of the following does not follow the central dogma, of molecular biology? (a) Pea (b) Mucor (c) Chlamydomonas (d) HIV 140. Which one of the following statements about the particular entity is true? Centromere is found in animal cells, which produces aster during cell division. (a) (b) The gene for producing insulin is present in every body cell. (c) Nucleosome is formed of nucleotides. (d) DNA consists of core of eight histones. 141. In eukaryotic cell transcription, RNA splicing and RNA capping take place inside the (a) ribosomes (b) nucleus (c) dictyosomes (d) ER 142. The fruit fly Drosophila melanogaster was found to be very suitable for experimental verification of chromosomal theory of inheritance by Morgan and his colleagues because it reproduces parthenogenetically (a) (b) a single mating produces two young flies smaller female is easily recognisable from larger male (c) (d) it completes life cycle in about two weeks. 143. The lac operon consists of (a) four regulatory genes only (b) one regulatory gene and three structural genes (c) two regulatory genes and two structural genes (d) three regulatory genes and three structural genes The 3' - 5' phosphodiester linkages inside a polynucleotide chain serve to join 144. (a) one DNA strand with the other DNA strand (b) one nucleoside with another nucleoside (c) one nucleotide with another nucleotide (d) one nitrogenous base with pentose sugar What are the structures called that give an appearance as 'beads on string' in the chromosomes when viewed 145. under electron microscope? Nucleotides Nucleosomes Base pairs. (a) Genes (b) (c) (d)

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<i>Learn</i> 146.	ing with t The u	he Speed of Mumbai nequivocal proof c	and the Tra of DNA as	<i>idition of Kota</i> s the genetic ma	terial came fro	om the studies on a		
	(a)	bacterium	(b)	fungus	(c)	viroid	(d)	bacterial virus.
147.	In hist	tory of biology, hu	iman geno	ome project led t	to the develop	ment of		
	(a)	biotechnology			(b)	biomonitoring		
	(c)	biomformatics			(d)	biosystematics		
148.	Remo	val of RNA polym	nerase III t	from nucleoplas	m will affect	the synthesis of		
	(a)	tRNA	(b)	hnRNA	(c)	mRNA	(d)	rRNA
149.	Which	n one of the follow	ving is not	a part of a trans	scription unit i	in DNA?		
	(a)	Theinducer			(b)	A terminator		
	(c)	A promoter			(d)	The structural ge	ene.	
150.	Ribos	omal RNA is activ	ely synthe	esized in				
	(a)	lysosomes	(b)	nucleolus	(c)	nucleoplasm	(d)	ribosomes.
151.	If one	strand of DNA h	nas the ni	trogenous base	sequence as A	ATCTG, what wou	ild be the	complementary RNA
	strand	sequence?						
	(a)	TTAGU	(b)	UAGAC	(c)	AACTG	(d)	ATCGU.
152.	Remo	val of introns and	joining of	exons in a define	ned order duri	ng transcription is	called	
	(a)	looping	(b)	inducing	(c)	slicing	(d)	splicing.
153.	The co	oncept of chemical	l evolution	n is based on				
	(a)	interaction of wa	ater, air ai	nd clay under in	tense heat			
	(b)	effect of solar ra	diation of	n chemicals				
	(c)	possible origin o	of life by a	combination of o	chemicals und	ler suitable environ	mental co	nditions
	(d)	crystallization o	f chemica	ls.				
154.	The fi	nches of Galapago	os islands	provide an evide	ence in favou	r of		
	(a)	evolution due to	mutation	L	(b)	retrogressive evo	olution	
	(c)	biogeographical	evolution	1	(d)	special creation.		
155.	When	two species of dif	fferent ge	nealogy come to	o resemble ea	ch other as a result	t of adapta	ation, the phenomenon
	is tern	ned as						
	(a)	microevolution			(b)	co-evolution		
	(c)	convergent evol	ution		(d)	divergent evoluti	on.	
156.	Adapt	tive radiation reference	s to					
	(a)	evolution of diff	ferent spec	cies from a com	mon ancestor			
	(b)	migration of me	mbers of	a species to diff	erent geograp	hical areas		
	(c)	power of adapta	tion in an	individual to a	variety of env	ironments .		
	(d)	adaptations due	to geogra	phical isolation.				



157. Which one of the following scientist's name is correctly matched with the theory put forth by him?

- (a) de Vries Natural selection (b) Mendel Theory of Pangenesis
- (c) Weismann Theory of continuity of germplasm (d) Pasteur Inheritance of acquired characters.
- 158. Which one of the following is incorrect about the characteristics of protobionts (coacervates and microspheres) as envisaged in the abiogenic origin of life?
 - (a) They were partially isolated from the surroundings
 - (b) They could maintain an internal environment.
 - (c) They were able to reproduce.
 - (d) They could separate combinations of molecules from the surroundings
- 159. Thorn of *Bougainvillea* and tendril of *Cucurbita* are examples of
 - (a) vestigial organs (b) retrogressive evolution
 - (c) analogous organs (d) homologous organs.
- 160. Darwin's Finches are an excellent example of
 - (a) brood parasitism (b) connecting links
 - (c) adaptive radiation (d) seasonal migration.
- 161. Peripatus is a connecting link between
 - (a) mollusca and echinodermata (b) annelida and arthropoda
 - (c) coelenterata and porifera (d) ctenophora and platyhelminthes.
- 162. In the case of peppered moth (Biston betularia) the black-coloured form became dominant over the light-coloured form in England during industrial revolution. This is an example of
 - (a) appearance of the darker coloured individual due to very poor sunlight
 - (b) protective mimicry
 - (c) inheritance of darker colour character acquired due to the darker environment
 - (d) natural selection whereby the darker forms were selected



163. Given below are four statements (A-D) each with one or two blanks. Select the option which correctly fills up the

blanks in two statements.

Statements:

167.

- (A) Wings of butterfly and birds look alike and are the results of __(i)__ evolution
- (B) Miller showed that CH₄, H₂, NH₃ and ___(i)___ when exposed to electric discharge in a flask resulted in formation of __(ii)__.
- (C) Vermiform appendix is a __(i)__ organ and an __(ii)__ evidence of evolution.
- (D) According to Darwin evolution took place due to __(i)__ and __(ii)__ of the fittest.
- (a) (D) (i) small variations, (ii) survival,
 - (A) (i) convergent
- (b) (A) (i) convergent,
 - (B) (i) oxygen, (ii) nucleosides
- (c) (B) (i) water vapour, (ii) amino acids
 - (C) (i) rudimentary, (ii) anatomical
- (d) (C) (i) vestigial, (ii) anatomical
 - (D) (i) mutations, (ii) multiplication
- 164. The most apparent change during the evolutionary history of Homo sapiens is traced in
 - (a) loss of body hair (b) walking upright
 - (c) shortening of the jaws (d) remarkable increase in the brain size.

165. Evolution of different species in a given area starting from a point and spreading to other geographical areas is known as

- (a) adaptive radiation (b) natural selection
- (c) migration (d) divergent evolution.

166. Which one of the following options gives one correct example each of convergent evolution and divergent evolution?

	Convergent evolution		Divergent evolution
(a)	Eyes of octopus and mammals		Bones of forelimbs of vertebrates
(b)	Thorns of Bougainvillea and tendrils of Cucurb	ita	Wings of butterflies and birds
(c)	Bones of forelimbs of vertebrates		Wings of butterfly and birds
(d)	Thorns of Bougainvillea and tendrils of Cucurb	ita	Eyes of octopus and mammals.
What	was he most significant trend in the evolution of r	nodern	man (Homo sapiens) from his ancestors?
(a)	Shortening of jaws	(b)	Binocular vision

(c) Increasing cranial capacity (d) Upright posture.





Learning with the Speed of Mumbai and the Tradition of Kota The extinct human who lived 1,00,000 to 40,000 years ago, in Europe, Asia parts of Africa, with short stature, 168. heavy eye brows, retreating force heads, large jaws with heavy teeth, stocky bodies, a lumbering gait and stooped posture was (a) Homo habilis (b) Neanderthal human (c) Cro-magnon humans (d) Ramapithecus. 169. According to Darwin, the organic evolution is due to competition within closely related species (a) (b) reduced feeding efficiency in one species due to the presence of interfering species (c) intraspecific competition (d) interspecific competition. 170. The tendency of population to remain in genetic equilibrium may be disturbed by (a) lack of mutations (b) lack of random mating (c) random mating (d) lack of migration 171. Variation in gene frequencies within populations can occur by chance rather than by natural selection. This is referred to as (a) random mating (b) genetic load (c) genetic flow (d) genetic drift 172. The process by which organisms with different evolutionary history evolve similar phenotypic adaptations m response to a common environmental challenge, is called (a) non-random evolution (b) adaptive radiation natural selection (d) (c) convergent evolution. 173. The eye of octopus and eye of cat show different patterns of structure, yet they perform similar function. This is an example (a) analogous organs that have evolved due to convergent evolution. analogous organs that have evolved due to divergent evolution (b) homologous organs that have evolved due to convergent evolution. (c) (d) homologous organs that have evolved due to divergent evolution. 174. In a population of 1000 individuals 360 belong to genotype AA, 480 to Aa and the remaining 160 to aa. Based on this data, the frequency of allele A in the population is (a) 0.4 (b) 0.5 (c) 0.6 (d) 0.7 175. Forelimbs of cat, lizard used in walking; forelimbs of whale used in swimming and forelimbs of bats used in flying are an example of analogous organs adaptive radiation (a) (b) (c) homologous organs (d) convergent evolution.



- 176. Which one of the following are analogous structures?
 - (a) Wings of bat and wings of pigeon
 - (b) Gills of prawn and lungs of man
 - (c) Thorns of *Bougainvillea* and tendrils of *Cucurbita*
 - (d) Flippers of dolphin and legs of horse
- 177. A population will not exist in Hardy-Weinberg equilibrium if
 - (a) there is no migration (b) the population is large
 - (c) individuals mate selectively (d) there are no mutations.
- 178. Which is the most common mechanism of genetic variation in the population of a sexually reproducing organism?
 - (a) Genetic drift (b) Recombination
 - (c) Transduction (d) Chromosomal aberrations
- 179. Which of the following had the smallest brain capacity?
 - (a)Homo neanderthalensis(b)Homo habilis
 - (c) Homo erectus (d) Homo sapiens
- 180. The wings of a bird and the wings of an insect are
 - (a) phylogenetic structures and represent divergent evolution
 - (b) homologous structures and represent convergent evolution
 - (c) homologous structures and represent divergent evolution
 - (d) analogous structures and represent convergent evolution.





Max. Marks: 720

Date: 13.11.2022

Topics: Wave Optics, Rotational Motion and Elasticity									
1.	(a)	2.	(c)	3.	(b)	4.	(d)	5.	(a)
6.	(c)	7.	(d)	8.	(c)	9.	(b)	10.	(d)
11.	(d)	12.	(d)	13.	(d)	14.	(c)	15.	(d)
16.	(d)	17.	(c)	18.	(d)	19.	(c)	20.	(a)
21.	(c)	22.	(b)	23.	(b)	24.	(b)	25.	(d)
26.	(a)	27.	(d)	28.	(d)	29.	(a)	30.	(a)
31.	(b)	32.	(d)	33.	(b)	34.	(c)	35.	(c)
36.	(b)	37.	(c)	38.	(c)	39.	(b)	40.	(d)
41.	(d)	42.	(d)	43.	(d)	44.	(c)	45.	(d)

ANKUR BATCH PHYSICS : REVISION TEST 2 (SET A) ANSWER KEY Topics: Wave Optics, Rotational Motion and Elasticity

CHEMISTRY : REVISION TEST 2 (SET A) ANSWER KEY Topics: Atomic Structure, States of Matter and Chemical Equilibrium

46.	(b)	47.	(b)	48.	(b)	49.	(a)	50.	(a)
51.	(a)	52.	(b)	53.	(c)	54.	(b)	55.	(d)
56.	(d)	57.	(a)	58.	(d)	59.	(d)	60.	(b)
61.	(b)	62.	(c)	63.	(b)	64.	(d)	65.	(d)
66.	(d)	67.	(a)	68.	(c)	69.	(d)	70.	(a)
71.	(a)	72.	(b)	73.	(a)	74.	(b)	75.	(c)
76.	(a)	77.	(b)	78.	(b)	79.	(d)	80.	(b)
81.	(d)	82.	(c)	83.	(d)	84.	(d)	85.	(a)
86.	(b)	87.	(a)	88.	(a)	89.	(a)	90.	(d)





91.	(c)	92.	(c)	93.	(a)	94.	(a)	95.	(b)
96.	(d)	97.	(c)	98.	(a)	99.	(d)	100.	(b)
101.	(a)	102.	(c)	103.	(a)	104.	(b)	105.	(a)
106.	(c)	107.	(d)	108.	(b)	109.	(c)	110.	(a)
111.	(a)	112.	(a)	113.	(a)	114.	(b)	115.	(d)
116.	(b)	117.	(d)	118.	(b)	119.	(b)	120.	(a)
121.	(c)	122.	(c)	123.	(c)	124.	(d)	125.	(c)
126.	(a)	127.	(d)	128.	(d)	129.	(c)	130.	(b)
131.	(b)	132.	(b)	133.	(d)	134.	(a)	135.	(d)
136.	(a)	137.	(c)	138.	(c)	139.	(d)	140.	(b)
141.	(b)	142.	(c)	143.	(b)	144.	(c)	145.	(c)
146.	(d)	147.	(c)	148.	(a)	149.	(a)	150.	(b)
151.	(b)	152.	(d)	153.	(c)	154.	(c)	155.	(c)
156.	(a)	157.	(c)	158.	(c)	159.	(d)	160.	(c)
161.	(b)	162.	(d)	163.	(a)	164.	(d)	165.	(a)
166.	(a)	167.	(c)	168.	(b)	169.	(c)	170.	(b)
171.	(d)	172.	(d)	173.	(a)	174.	(c)	175.	(c)
176.	(a), (b)	177.	(c)	178.	(b)	179.	(b)	180.	(d)