

AMITY INSTITUTE

FOR COMPETITIVE EXAMINATIONS

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MOCK TEST - MEDICAL

NEET PATTERN

Time : 3 hrs.

M.M. : 720

TOPICS COVERED:

PHYSICS : Complete XI & XII

CHEMISTRY : Complete XI & XII

BOTANY : Complete XI & XII

ZOOLOGY : Complete XI & XII

INSTRUCTIONS :

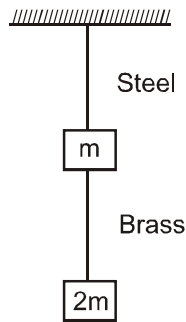
- (1) The paper contains 180 objective type questions (45 each in Physics, Chemistry, Botany & Zoology). Four alternatives are given for each question out of which only one is correct. Darken the correct alternative on the given answer-sheet, with a pencil or pen.
- (2) All the questions carry four marks each.
- (3) For each incorrect answer 1 mark will be deducted.
- (4) For unattempted questions the award is neither positive nor negative.
- (5) No student is permitted to leave examination hall before the time is complete.
- (6) Use of calculator is not permitted.
- (7) Use of unfair means shall invite cancellation of the test.

PHYSICS & CHEMISTRY

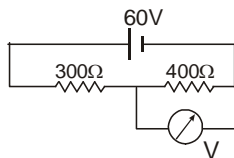
Choose the correct answers :

- The resultant of two forces $3P$ & $2P$ is R , if first force is doubled, the resultant is also doubled. Then the angle between the forces is :
 (1) 30° (2) 60°
 (3) 120° (4) 150°
- If the ratio of lengths, radii and Young's moduli of steel and brass wires in the figure are a , b , c respectively. Then the corresponding ratio of increase in their lengths would be :

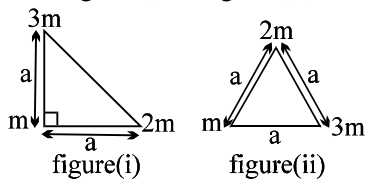
- $\frac{2ac}{b^2}$
- $\frac{3a}{2b^2c}$
- $\frac{3c}{2ab^2}$
- $\frac{2a^2c}{b}$



- In the circuit shown, reading of the voltmeter connected across $400\ \Omega$ resistance is 30 V . If it is connected across $300\ \Omega$ resistance then reading will be



- (1) 45 V (2) 32.5 V
 (3) 22.5 V (4) 18 V
- Consider two configurations of a system of three particles of masses m , $2m$ and $3m$. The work done by external agent in changing the configuration of the system from figure (i) to figure (ii) is

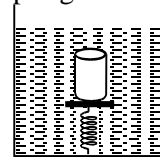


- (1) zero (2) $-\frac{6Gm^2}{a} \left(1 + \frac{1}{\sqrt{2}}\right)$

(3) $-\frac{6Gm^2}{a} \left(1 - \frac{1}{\sqrt{2}}\right)$ (4) $-\frac{6Gm^2}{a} \left(2 - \frac{1}{\sqrt{2}}\right)$

- The ratio of the wavelengths of the longest wavelength lines in the Lyman and Balmer series of hydrogen spectrum is : :
 (1) $\frac{3}{23}$ (2) $\frac{5}{27}$
 (3) $\frac{7}{29}$ (4) $\frac{9}{31}$

- A cylindrical block of area of cross-section A and of material of density ρ is placed in a liquid of density one-third of density of block. The block compresses a spring and compression in the spring is one-third of the length of the block. If acceleration due to gravity is g , the spring constant of the spring is:



- (1) ρAg (2) $2\rho Ag$
 (3) $2\rho Ag/3$ (4) $\rho Ag/3$

- In a uniform electric field, the potential is 10 V at the origin of coordinates, and 8 V at each of the points $(1, 0, 0)$, $(0, 1, 0)$ and $(0, 0, 1)$. The potential at the point $(1, 1, 1)$ will be

- (1) 0 (2) 4 V
 (3) 8 V (4) 10 V

- An unknown quantity "a" is expressed as

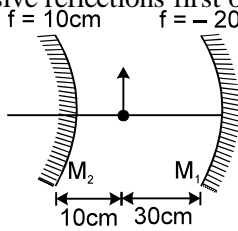
$\alpha = \frac{2ma}{\beta} \log\left(1 + \frac{2\beta l}{ma}\right)$ where $m = \text{mass}$, $a = \text{acceleration}$, $l = \text{length}$. The unit of α should be
 (1) meter (2) m/s
 (3) m/s^2 (4) s^{-1}

- A swimmer swims in still water at a speed = 5 km/hr . He enters a 200 m wide river, having river flow speed = 4 km/hr at point A and proceeds to swim at an angle of 127° ($\sin 37^\circ = 0.6$) with the river flow direction. Another point B is located directly across A on the other side. The swimmer lands on the other bank at a point C, from which he walks the distance CB with a speed = 3 km/hr . The total time in which he reaches from A to B is

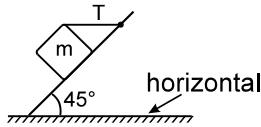
- (1) 5 minutes (2) 4 minutes

(3) 3 minutes (4) None of these

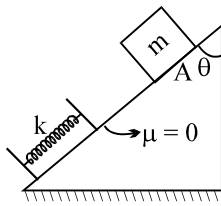
10. In the figure shown find the total magnification after two successive reflections first on M_1 & then on M_2



- (1) + 1 (2) - 2
 (3) + 2 (4) - 1
11. A block of mass 15 kg is resting on a rough inclined plane as shown in figure. The block is tied up by a horizontal string which has a tension of 50 N. The coefficient of friction between the surfaces of contact is ($g = 10 \text{ m/s}^2$)



- (1) 1/2 (2) 2/3
 (3) 3/4 (4) 1/4
12. A series LCR circuit containing a resistance of 120 ohm has angular resonance frequency $4 \times 10^3 \text{ rad s}^{-1}$. At resonance, the voltage across resistance and inductance are 60V and 40 V respectively. The values of L and C are respectively :
- (1) 20 mH, 25/8 μF (2) 2mH, 1/35 μF
 (3) 20 mH, 1/40 μF (4) 2mH, 25/8 nF
13. A block of mass 'm' is released from rest at point A. The compression in spring, when the speed of block is maximum, will be



- (1) $\frac{mg \sin \theta}{k}$ (2) $\frac{2mg \sin \theta}{k}$
 (3) $\frac{mg \cos \theta}{k}$ (4) $\frac{mg}{k}$

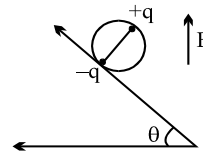
14. A particle of mass 2 kg located at the position $(\hat{i} + \hat{j}) \text{ m}$ has a velocity $2(+\hat{i} - \hat{j} + \hat{k}) \text{ m/s}$. Its angular momentum about z-axis in $\text{kg-m}^2/\text{s}$ is:

- (1) zero (2) +8
 (3) 12 (4) -8

15. The work function for aluminium surface is 4.2 eV and that for sodium surface is 2.0 eV. The two metals were illuminated with appropriate radiations so as to cause photo emission. Then :

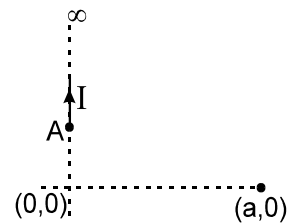
- (1) Both aluminium and sodium will have the same threshold frequency
 (2) The threshold frequency of aluminium will be more than that of sodium
 (3) The threshold frequency of aluminium will be less than that of sodium
 (4) The threshold wavelength of aluminium will be more than that of sodium

16. A wheel having mass m has charges +q and -q on diametrically opposite points. If it remains in equilibrium on a rough inclined plane in the presence of uniform vertical electric field E as shown, find E



- (1) $\frac{mg}{q}$ (2) $\frac{mg}{2q}$
 (3) $\frac{mg \tan \theta}{2q}$ (4) none of these

17. An infinitely long wire carrying current I is along Y axis such that its one end is at point A (0, b) while the wire extends upto $+\infty$. The magnitude of magnetic field strength at point (a, 0)



- (1) $\frac{\mu_0 I}{4\pi a} \left(1 + \frac{b}{\sqrt{a^2 + b^2}} \right)$

$$(2) \frac{\mu_0 I}{4\pi a} \left(1 - \frac{b}{\sqrt{a^2 + b^2}} \right)$$

$$(3) \frac{\mu_0 I}{4\pi a} \left(\frac{b}{\sqrt{a^2 + b^2}} \right)$$

(4) None of these

18. A 4 kg particle is moving along the x-axis under

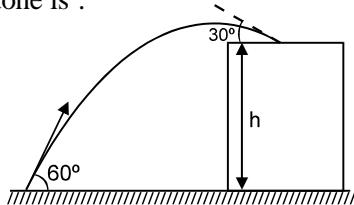
the action of the force $F = - \left(\frac{\pi^2}{16} \right) x$ N. At

$t = 2$ secs, the particle passes through the origin and at $t = 10$ secs its speed is $4\sqrt{2}$ m/s. The amplitude of the motion is :

$$(1) \frac{32\sqrt{2}}{\pi} \text{ m} \quad (2) \frac{16}{\pi} \text{ m}$$

$$(3) \frac{4}{\pi} \text{ m} \quad (4) \frac{16\sqrt{2}}{\pi} \text{ m}$$

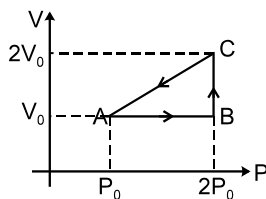
19. A stone projected at an angle of 60° from the ground level strikes at an angle of 30° on the roof of a building of height 'h' as shown. Then the speed of projection of the stone is :



$$(1) \sqrt{2gh} \quad (2) \sqrt{6gh}$$

$$(3) \sqrt{3gh} \quad (4) \sqrt{gh}$$

20. A thermodynamic process of one mole ideal monoatomic gas is shown in figure. The efficiency of cyclic process ABCA will be :



$$(1) 25\% \quad (2) 12.5\%$$

$$(3) 50\% \quad (4) \frac{100}{13}\%$$

21. A thin walled cylindrical metal vessel of linear coefficient of expansion $10^{-3} \text{ }^\circ\text{C}^{-1}$ contains benzene of volume expansion coefficient $10^{-3} \text{ }^\circ\text{C}^{-1}$. If the vessel and its contents are now heated by 10°C , the pressure due to the liquid at the bottom.

- (1) increases by 2% (2) decreases by 1%
 (3) decreases by 2% (4) remains unchanged

22. An open pipe is suddenly closed at one end with the result that the frequency of third harmonic of the closed pipe is found to be higher by 100 Hz than the fundamental frequency of the open pipe. The fundamental frequency of the open pipe is

- (1) 200 Hz (2) 300 Hz
 (3) 240 Hz (4) 480 Hz

23. A wire of fixed length is wound on a solenoid of length 'l' and radius 'r'. Its self inductance is found to be L. Now if same wire is wound on a solenoid of length

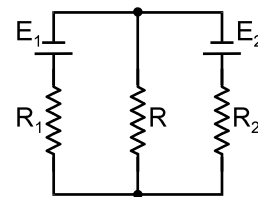
$\frac{l}{2}$ and radius $\frac{r}{2}$, then the self inductance will be:

- (1) 2 L (2) L
 (3) 4 L (4) 8 L

24. A metal plate 10 cm square rests on a 2 mm thick castor oil layer. Calculate the horizontal force needed to move the plate with speed 3 cm s^{-1} will be (Coefficient of viscosity of castor oil is 15 poise.)

- (1) 2.25×10^{-2} (2) 2.25×10^{-1}
 (3) 2.25×10^{-3} (4) 2.25×10^{-4}

25. In a circuit shown in figure resistances R_1 and R_2 are known, as well as emf's E_1 and E_2 . The internal resistances of the sources are negligible. At what value of the resistance R will the thermal power generated in it be the highest ?



$$(1) R_1 + R_2 \quad (2) R_1 - R_2$$

$$(3) \sqrt{R_1 R_2} \quad (4) \frac{R_1 R_2}{R_1 + R_2}$$

26. Suppose the gravitational force varies inversely as the n^{th} power of distance. Then the time period of a planet in circular orbit of radius R around the sun will be proportional to

(1) $R^{\left(\frac{n+1}{2}\right)}$

(2) $R^{\left(\frac{n-1}{2}\right)}$

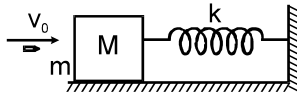
(3) R^n

(4) $R^{\left(\frac{n-2}{2}\right)}$

27. A heavy nucleus having mass number 200 gets disintegrated into two small fragments of mass number 80 and 120. If binding energy per nucleon for parent atom is 6.5 MeV and for daughter nuclei is 7 MeV and 8 MeV respectively, then the energy released in the decay will be:

- (1) 200 MeV (2) - 220 MeV
 (3) 220 MeV (4) 180 MeV

28. A bullet of mass m strikes a block of mass M connected to a light spring of stiffness k , with a speed V_0 . If the bullet gets embedded in the block then, the maximum compression in the spring is :



- (1) $\left(\frac{m^2 v_0^2}{(M+m)k}\right)^{1/2}$ (2) $\left(\frac{Mm v_0^2}{2(M+m)k}\right)^{1/2}$
 (3) $\left(\frac{M v_0^2}{2(M+m)k}\right)^{1/2}$ (4) $\left(\frac{m v^2}{(M+m)k}\right)^{1/2}$

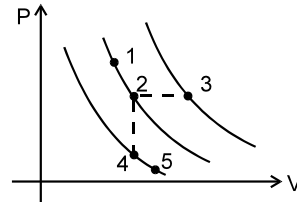
29. A metre stick swinging about its one end oscillates with frequency f_0 . If the bottom half of the stick were cut off, then its new oscillation frequency would become:

- (1) f_0 (2) $\sqrt{2} f_0$
 (3) $2f_0$ (4) $2\sqrt{2} f_0$

30. A solid uniform disk of mass m rolls without slipping down a fixed inclined plane with an acceleration a . The frictional force on the disk due to surface of the plane is :

- (1) $2 ma$ (2) $3/2 ma$
 (3) ma (4) $1/2 ma$

31. A certain gas is taken to the five states represented by dots in the graph. The plotted lines are isotherms. Order of the most probable speed v_p of the molecules at these five states is :



- (1) $V_{P \text{ at } 3} > V_{P \text{ at } 1} = V_{P \text{ at } 2} > V_{P \text{ at } 4} = V_{P \text{ at } 5}$
 (2) $V_{P \text{ at } 1} > V_{P \text{ at } 2} = V_{P \text{ at } 3} > V_{P \text{ at } 4} > V_{P \text{ at } 5}$
 (3) $V_{P \text{ at } 3} > V_{P \text{ at } 2} = V_{P \text{ at } 4} > V_{P \text{ at } 1} > V_{P \text{ at } 5}$
 (4) Insufficient information to predict the result.

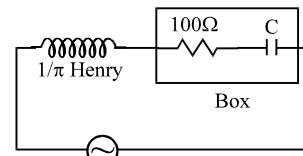
32. An oil bath (density of oil = $0.85 \times 10^3 \text{ kg/m}^3$) has a spherical cavity of diameter $26 \times 10^{-6} \text{ m}$ at a depth of 0.2 m. If the surface tension of oil is $26 \times 10^{-3} \text{ N/m}$ and the pressure of air over the surface of oil is 76 cm of mercury, the pressure inside the cavity will be

- (1) $1.03 \times 10^5 \text{ N/m}^2$ (2) $1.07 \times 10^5 \text{ N/m}^2$
 (3) $1.17 \times 10^5 \text{ N/m}^2$ (4) $3.07 \times 10^5 \text{ N/m}^2$

33. A cylinder of radius R made of a material of thermal conductivity k_1 is surrounded by a cylindrical shell of inner radius R and outer radius $2R$ made of a material of thermal conductivity k_2 . The two ends of the combined system are maintained at different temperatures. There is no loss of heat from the cylindrical surface and the system is in steady state. The effective thermal conductivity of the system is

- (1) $k_1 + k_2$ (2) $\frac{k_1 k_2}{k_1 + k_2}$
 (3) $\frac{1}{4}(k_1 + 3k_2)$ (4) $\frac{1}{4}(3k_1 + k_2)$

34. In the circuit, as shown in the figure, if the value of r.m.s current is 2.2 ampere, the power factor of the box is



$V_{\text{rms}} = 220 \text{ volt}, \omega = 100 \pi \text{ s}^{-1}$

- (1) $\frac{1}{\sqrt{2}}$ (2) 1
 (3) $\frac{\sqrt{3}}{2}$ (4) $\frac{1}{2}$

35. A particle of mass m is tied to one end of a string of length l . The particle is held horizontal with the string taut. It is then projected upward with a velocity u .

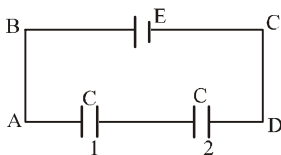
The tension in the string is $\frac{mg}{2}$ when it is inclined at an angle 30° to the horizontal. The value of u is

- (1) \sqrt{lg} (2) $\sqrt{2lg}$
 (3) $\sqrt{\frac{lg}{2}}$ (4) $2\sqrt{lg}$

36. A 40 kg sphere suspended by a thread of length 'l' is oscillating in a vertical plane, the angular amplitude being θ_0 . What is the tension in the thread when it makes an angle θ with the vertical during oscillations? If the thread can support a maximum tension of 80 kg-f, then what can be the maximum angular amplitude of oscillation of the sphere without breaking the rope?

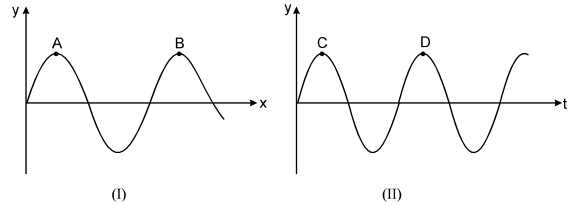
- (1) $3 mg \cos\theta - 2mg \cos\theta_0$, $\theta_0 = 60^\circ$
 (2) $3 mg \cos\theta + 2mg \cos\theta_0$, $\theta_0 = 60^\circ$
 (3) $2 mg \cos\theta - 3mg \cos\theta_0$, $\theta_0 = 30^\circ$
 (4) $2 mg \cos\theta + 3mg \cos\theta_0$, $\theta_0 = 30^\circ$

37. In the adjoining figure, capacitor (1) and (2) have a capacitance 'C' each. When the dielectric of dielectric constant K is inserted between the plates of one of the capacitor, the total charge flowing through battery is



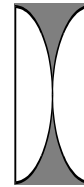
- (1) $\frac{KCE}{K+1}$ from B to C
 (2) $\frac{KCE}{K+1}$ from C to B
 (3) $\frac{(K-1)CE}{2(K+1)}$ from B to C
 (4) $\frac{(K-1)CE}{2(K+1)}$ from C to B

38. The same progressive wave is represented by two graphs I and II. Graph I shows how the displacement 'y' varies with the distance x along the wave at a given time. Graph II shows how y varies with time t at a given point on the wave. The ratio of measurements AB to CD, marked on the curves, represents :



- (1) wave number k
 (2) wave speed V .
 (3) frequency f .
 (4) angular frequency ω .

39. Two plano-convex lenses each of focal length 10 cm & refractive index $\frac{3}{2}$ are placed as shown. In the space between the lenses, water (R.I. = $\frac{4}{3}$) is filled. The whole arrangement is in air. The optical power of the system is (in diopters):



- (1) 6.67 (2) - 6.67
 (3) 33.3 (4) 20

40. A 1 kW signal is transmitted using a communication channel which provides attenuation at the rate of -2 dB per km. If the communication channel has a total length of 5 km, the power of the signal received

is $[\text{gain in dB} = 10 \log_{10} \left(\frac{P_0}{P_1} \right)]$

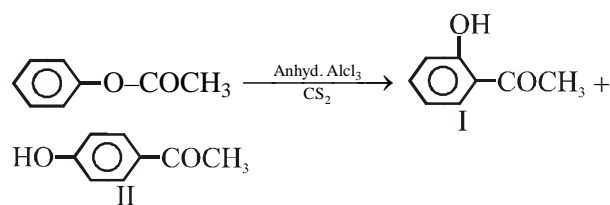
- (1) 900 W (2) 100 W
 (3) 990 W (4) 1010 W

41. A TV transmission tower has a height of 240 m. Signals broadcast from this tower **CANNOT** be received by LOS communication at a distance of (assume the radius of earth to be 6.4×10^6 m)

- (1) 100 km (2) 24 km

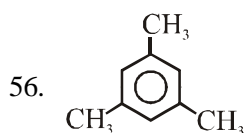
- (3) 55 km (4) 50 km.
42. To reduce the ripples in a rectifier circuit with capacitor filter, which of the following is **INCORRECT**:
- RL should be increased.
 - input frequency should be decreased.
 - input frequency should be increased.
 - capacitors with high capacitance should be used
43. The breakdown in a reverse biased p-n junction diode is more likely to occur due to
- large velocity of the minority charge carriers if the doping concentration is small.
 - large velocity of the minority charge carriers if the doping concentration is large.
 - strong electric field in a depletion region if the doping concentration is small.
 - None of these.
44. A paramagnetic sample shows a net magnetisation of 8 A m^{-1} when placed in an external magnetic field of 0.6 T at a temperature of 4 K . When the same sample is placed in an external magnetic field of 0.2 T at a temperature of 16 K , the magnetisation will be
- $\frac{32}{3} \text{ A m}^{-1}$ (2) $\frac{2}{3} \text{ A m}^{-1}$
 - 6 A m^{-1} (4) 2.4 A m^{-1}
45. If the first minima in a Young's slit experiment occurs directly in front of one of the slits. (distance between slit & screen $D = 12 \text{ cm}$ and distance between slits $d = 5 \text{ cm}$) then the wavelength of the radiation used is :
- 2 cm only (2) 4 cm only
 - $2\text{m}, \frac{2}{3} \text{ cm}, \frac{2}{5} \text{ cm}$ (4) $4\text{cm}, \frac{4}{3} \text{ cm}, \frac{4}{5} \text{ cm}$
46. A 100 ml solution of 0.1 N HCl was titrated with 0.2 N NaOH solution. The titration was discontinued after adding 30 ml of NaOH solution. The remaining titration was completed by adding 0.25 N KOH solution. The volume of KOH required for completing the titration is
- 70 ml (2) 32 ml
 - 35 ml (4) 16 ml
47. A $1 : 1$ mixture (by weight) of hydrogen and helium is enclosed in a one litre flask kept at 0°C . Assuming ideal behaviour, the partial pressure of helium is found to be 0.42 atm . Then the concentration of hydrogen would be

- 0.0375 M (2) 0.028 M
 - 0.0562 M (4) 0.0187 M
48. Two flasks X and Y have capacity 1 L and 2 L respectively and each of them contains 1 mole of a gas. The temperatures of the flasks are so adjusted that average speed of molecules in X is twice as those in Y. The pressure in flask X would be
- same as that in Y (2) half of that in Y
 - twice of that in Y (4) 8 times of that in Y
49. The wavelength associated with a golf ball weighing 200 g and moving at a speed of 5 m/h is of the order
- 10^{10} m (2) 10^{-20} m
 - 10^{-30} m (4) 10^{-40} m
50. A diatomic molecule has a dipole moment of 1.2 D . If the bond distance is 1 \AA , what percentage of electronic charge exists on each atom ?
- 12% of e (2) 19% of e
 - 25% of e (4) 29% of e
51. Choose the correct statement about the following reaction



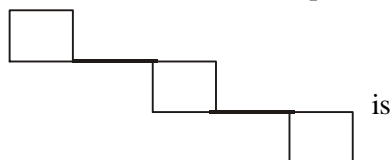
- low temperatures ($< 232 \text{ K}$) favour the formation of II
 - high temperatures ($> 423 \text{ K}$) favour the formation of I
 - I is more volatile than II
 - all are correct
52. If K_1 and K_2 are respective equilibrium constants for the two reactions
- $$\text{XeF}_6(\text{g}) \rightleftharpoons \text{XeOF}_4(\text{g}) + 2\text{HF}(\text{g})$$
- $$\text{XeO}_4(\text{g}) + \text{XeF}(\text{g}) \rightleftharpoons \text{XeOF}_4(\text{g}) + \text{XeO}_3\text{F}_2(\text{g})$$
- the equilibrium constant for the reaction
- $$\text{XeO}_4(\text{g}) + 2\text{HF}(\text{g}) \rightleftharpoons \text{XeO}_3\text{F}_2(\text{g}) + \text{H}_2\text{O}(\text{g})$$
- will be
- K_1/K_2^2 (2) $K_1 \cdot K_2$





- (3) K_1 / K_2 (4) K_2 / K_1
53. In the reaction
 $A(s) + B(g) + \text{Heat} \rightleftharpoons 2C(s) + 2D(g)$
 equilibrium is established. The pressure of B is doubled to re-establish the equilibrium. The factor by which D is changed is
 (1) 2 (2) 3
 (3) $\sqrt{2}$ (4) $\sqrt{3}$
54. At a certain temperature, the solubility of the salt $M_m A_n$ in water is s moles per litre. The solubility product of the salt is
 (1) $M^m A^n$ (2) $(m + n)s^{m+n}$
 (3) $(ms)^m (ns)^n$ (4) $M^m A^n s$
55. For the reaction,
 $M^{x+} + MnO_4^- \longrightarrow MO_3^- + Mn^{2+} + 1/2 O_2$
 If one mole of MnO_4^- oxidises 1.67 moles of M^{x+} to MO_3^- , then the value of x in the reaction is
 (1) 5 (2) 3
 (3) 2 (4) 1



- The above compound describes a condensation polymer which can be obtained in two ways : either treating 3 molecules of acetone (CH_3COCH_3) with conc. H_2SO_4 or passing propyne ($CH_3C \equiv CH$) through a red hot tube. The polymer is
 (1) phorone (2) mesityl oxide
 (3) diacetyl alcohol (4) mesitylene
57. Cannizzaro reaction is not given by
 (1) acetaldehyde (2) formaldehyde
 (3) benzaldehyde (4) trimethylacetaldehyde
58. The element whose hydride contains minimum number of hydrogen atoms per atom of the element is
 (1) Na (2) O
 (3) B (4) Si

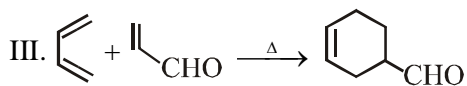
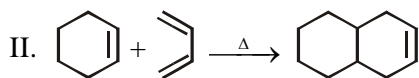
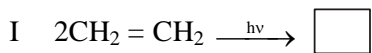
59. Cs^+ ion imparts violet colour to the flame. This is due to the fact that the emitted radiations have
 (1) high energy (2) low energy
 (3) longer wavelength (4) none of these
60. Graphite is a soft, solid, lubricant, extremely difficult to melt. The reason for this anomalous behaviour is that graphite
 (1) is an allotropic form of diamond
 (2) has molecules of variable molecular masses like polymers
 (3) has carbon atoms arranged in large plates of rings of strongly bound carbon atoms with weak interplate bonds
 (4) is a non crystalline substance
61. The type of hybridisation involved in recently discovered allotrope of carbon (e.g., C_{60} or fullerene) is
 (1) sp (2) sp^2
 (3) sp^3 (4) d^2sp^3
62. The IUPAC name of compound



- (1) 1,3-biscyclobutylcyclobutane
 (2) 1,3-cyclobutylcyclobutane
 (3) 1,1',3,1''-triscyclobutane
 (4) 1,1',3,1''-tercyclobutane
63. The stability order of the compounds
- I.  II. 
- III.  IV. 
- (1) $IV > III > I > II$ (2) $I > III > II > IV$
 (3) $II > III > I > IV$ (4) $IV > I > III > II$
64. The number of isomers for the compound with molecular formula $C_2BrClFI$ is
 (1) 3 (2) 4

(3) 5 (4) 6

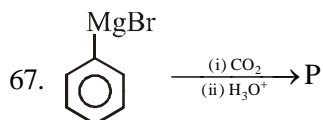
65. Among the following, pericyclic reactions are



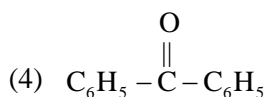
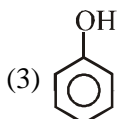
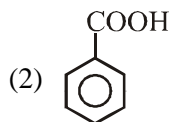
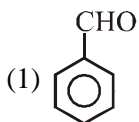
- (1) I only (2) I and II only
(3) II and III only (4) all of these

66. The most stable carbonium ion among the following is

- (1) $\text{C}_6\text{H}_5\text{C}^+\text{HC}_6\text{H}_5$ (2) $\text{C}_6\text{H}_5\text{C}^+\text{H}_2$
(3) $\text{CH}_3\text{C}^+\text{H}_2$ (4) $\text{C}_6\text{H}_5\text{CH}_2\text{C}^+\text{H}_2$



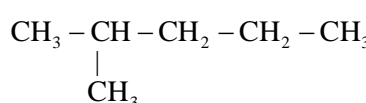
In the above reaction, product 'P' is

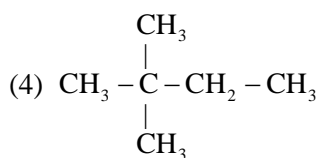
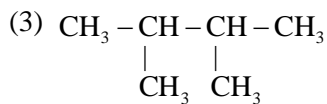


68. When CH_3Cl and AlCl_3 are used in Friedel-Crafts reaction, the electrophile is

- (1) Cl^+ (2) AlCl_4^-
(3) CH_3^+ (4) AlCl_2^+

69. Which of the following isomers will have the highest boiling point ?

- (1) $\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_3$
(2) 



70. Arrange the following compounds in increasing order of reactivity towards the addition of HBr

$\text{RCH} = \text{CHR}$, $\text{CH}_2 = \text{CH}_2$, $\text{R}_2\text{C} = \text{CHR}$, $\text{R}_2\text{C} = \text{CR}_2$

- (1) $\text{CH}_2 = \text{CH}_2 < \text{RCH} = \text{CHR}$
 $< \text{R}_2\text{C} = \text{CHR} < \text{R}_2\text{C} = \text{CR}_2$
(2) $\text{R}_2\text{C} = \text{CHR} < \text{RCH} = \text{CHR} < \text{CH}_2 = \text{CH}_2$
 $< \text{R}_2\text{C} = \text{CR}_2$
(3) $\text{RCH} = \text{CHR} < \text{R}_2\text{C} = \text{CR}_2 < \text{R}_2\text{C} = \text{CHR}$
 $< \text{CH}_2 = \text{CH}_2$
(4) $\text{R}_2\text{C} = \text{CR}_2 < \text{R}_2\text{C} = \text{CHR} < \text{RCH} = \text{CHR}$
 $< \text{CH}_2 = \text{CH}_2$

71. Addition of IBr to 2-methyl-2-butene would form

- (1) 2-Bromo-3-Iodobutane
(2) 2-Bromo-3-iodo-2-methylbutane
(3) 2-iodo-3-bromobutane
(4) 2-bromo-2-iodopentane

72. Benzoic acid undergoes dimerisation in benzene solution, the van't Hoff factor 'i' is related to the degree of association 'x' of the acid as

- (1) $i = (1 - x)$ (2) $i = (1 + x)$
(3) $i = (1 - x/2)$ (4) $i = (1 + x/2)$

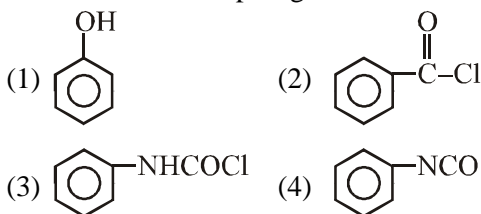
73. A molal solution is one that contains one mole of a solute in

- (1) 1000 g of the solvent
(2) one litre of the solvent
(3) one litre of the solution
(4) 22.4 litres of the solution

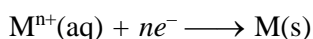
74. The vapour pressure of a solvent decreases by 10 mm of mercury when a non-volatile solute was added to the solvent. The mole fraction of the solute in the solution is 0.2. What should be the mole fraction of the solvent if the decrease in vapour pressure is to be 20 mm of mercury ?

- (1) 0.8 (2) 0.6
 (3) 0.4 (4) 0.2

75. Aniline reacts with phosgene and KOH to form



76. Consider the reaction



The standard reduction potential values of the elements M_1 , M_2 and M_3 are -0.34 V, -3.05 V and -1.66 V respectively. The order of their reduction power will be

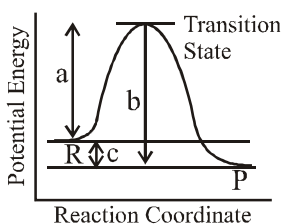
- (1) $M_1 > M_2 > M_3$ (2) $M_3 > M_2 > M_1$
 (3) $M_1 > M_3 > M_2$ (4) $M_2 > M_3 > M_1$
77. The rate of the reaction
 $N_2(g) + 3H_2(g) \longrightarrow 2NH_3(g)$ was measured as

$$\frac{d}{dt}[NH_3] = 2 \times 10^{-4} \text{ mol L}^{-1} \text{ sec}^{-1}.$$

The rates of the reaction expressed in terms of N_2 and H_2 are

Rates in terms of N_2 (mol L ⁻¹ sec ⁻¹)	Rate in terms of H_2 (mol L ⁻¹ sec ⁻¹)
(1) 1×10^{-4}	1×10^{-4}
(2) 3×10^{-4}	1×10^{-4}
(3) 1×10^{-4}	3×10^{-4}
(4) 1×10^{-4}	1.5×10^{-4}

78. The potential energy diagram for a reaction $R \rightarrow P$ is given below :



ΔH° of the reaction corresponds to the energy

- (1) a (2) b
 (3) c (4) $a + b$

79. For adsorption of a gas on a solid, the plot of $\log x/m$ vs $\log P$ is linear with slope equal to (n being whole number)

- (1) k (2) $\log k$
 (3) n (4) $1/n$

80. A colloidal solution is subjected to an electrical field. The particles move towards anode. The coagulation of same sol is studied using $NaCl$, $BaCl_2$ and $AlCl_3$ solutions. Their coagulating power should be ?

- (1) $NaCl > BaCl_2 > AlCl_3$
 (2) $BaCl_2 > AlCl_3 > NaCl$
 (3) $AlCl_3 > BaCl_2 > NaCl$
 (4) $BaCl_2 > NaCl > AlCl_3$

81. Which of the following oxides of nitrogen is the anhydride of nitrous acid ?

- (1) NO (2) N_2O_3
 (3) N_2O_4 (4) N_2O_5

82. Which would quickly absorb oxygen ?

- (1) Alkaline solution of pyrogallol
 (2) conc. H_2SO_4
 (3) Lime water
 (4) Alkaline solution of $CuSO_4$

83. Freon - 12 is used as a

- (1) refrigerant (2) insecticide
 (3) fungicide (4) herbicide

84. An element (X) forms compounds of the formula XCl_3 , X_2O_5 and Ca_3X_2 but does not form XCl_5 . Which of the following is the element X ?

- (1) B (2) Al
 (3) N (4) P

85. $S - S$ bond is not present in

- (1) $S_2O_4^{2-}$ (2) $S_2O_5^{2-}$
 (3) $S_2O_3^{2-}$ (4) $S_2O_7^{2-}$

86. Which of the noble gas has highest polarizability ?
 (1) He (2) Ar
 (3) Kr (4) Xe
87. Mixture of $K_2Cr_2O_7$ and conc. H_2SO_4 is called
 (1) perchromic acid (2) chromic acid
 (3) chromium sulphate (4) none of these
88. Cuprous ion is colourless, while cupric ion is coloured because
 (1) both have unpaired electrons in the *d*-orbital
 (2) cuprous ion has a complete *d*-orbital and cupric ion has an incomplete *d*-orbital
 (3) both have half-filled *p*- and *d*-orbitals
 (4) cuprous ion has incomplete *d*-orbital and cupric ion has a complete *d*-orbital
89. Fac-Mer isomerism is associated with which of the following general formula
 (1) $M(AA)_2$ (2) $M(AA)_3$
 (3) MABCD (4) $MA_3 B_3$
90. In the following groups : $-OAc$ (I), $-OMe$ (II), $-OSO_2Me$ (III), $-OSO_2CF_3$ (IV) the order of leaving group ability is
 (1) $I > II > III > IV$ (2) $IV > III > I > II$
 (3) $III > II > I > IV$ (4) $II > III > IV > I$

BOTANY & ZOOLOGY

91. Heating food to $100^\circ C$ will prevent all except
 (1) *Salmonella* infection
 (2) Cholera
 (3) Botulism
 (4) Hepatitis-B
92. Climax communities
 (1) Are more diverse than pioneer communities
 (2) Are less stable than pioneer communities
 (3) Have greater entropy than pioneer communities
 (4) Have a larger number but fewer species of plants than pioneer communities
93. Mango ginger is
 (1) Root (2) Bulb
 (3) Corm (4) Rhizome
94. Ethanol is produced from acetaldehyde by the enzyme
 (1) Pyruvate kinase
 (2) Lactate dehydrogenase
 (3) Pyruvate decarboxylase
 (4) None of the above
95. Gene library refers to
 (1) DNA sequence information maintained in data bank
 (2) DNA fragments maintained in agarose gel
 (3) DNA fragments of a genome maintained by cloning in cultured cells
 (4) Photographs of DNA fragments printed in books
96. Tumor inducing (Ti) plasmid transforms
 (1) Animals (2) Plants
 (3) Bacteria (4) Fungi
97. The action of ultraviolet radiation on DNA to induce mutation is the
 (1) Formation of thymine dimers
 (2) Deletion of base pairs
 (3) Addition of base pairs
 (4) Methylation of base pairs
98. Beta diversity is
 (1) Diversity of the habitats over the total landscape
 (2) Diversity of species within the community
 (3) Diversity of species between communities
 (4) Both (1) and (4)
99. Environment (protection) Act of India was enacted in the year
 (1) 1996 (2) 1968
 (3) 1986 (4) 1972
100. Telomeric activity is high in
 (1) Normal differentiated cell
 (2) Cancer cell
 (3) Both (1) and (2)
 (4) None of the above

101. The percentage of junk DNA in human genome is
 (1) 3% (2) 50%
 (3) 97% (4) 20%
102. In eukaryotes mRNA which enters in the cytoplasm for protein synthesis is made up from
 (1) Only introns
 (2) Only exons
 (3) Both introns and exons
 (4) None of the above
103. The exponential growth cannot be sustained infinitely because
 (1) Environment is ever changing
 (2) Limited food
 (3) Limited space
 (4) All of the above
104. Forerunners of the elaters are
 (1) Pseudoelaters of *Anthoceros*
 (2) Columella of *Funaria*
 (3) Nurse cells of *Riccia*
 (4) Spores of *Marchantia*
105. Which of the following is absent in *Marchantia* ?
 (1) Perigynium (2) Perichaetium
 (3) Calyptra (4) Paraphysis
106. Recently established biosphere reserve is
 (1) Nilgiri (2) Manas
 (3) Simlipal (4) Amarkantak
107. Surface of earth is kept warm by
 (1) Solar radiations
 (2) Geothermal energy
 (3) Greenhouse flux
 (4) Absorption of infra-red radiations by greenhouse gases
108. Arboretum is
 (1) A forest patch
 (2) A piece of social forestry
 (3) Botanical garden with trees and shrubs
 (4) Botanical garden with cacti and herbs
109. Alpha diversity is biodiversity present
 (1) Within community
 (2) Between community
 (3) Ranges of community
 (4) All of the above
110. In maize, PEP-carboxylation reaction takes place in
 (1) Epidermis
 (2) Bundle sheath cells
 (3) Mesophyll cells
 (4) Bundle sheath and cortex
111. Heterosis cannot be maintained in sexually reproducing plants as it disappears on
 (1) Outbreeding (2) Inbreeding
 (3) Cross breeding (4) Allogamy
112. In photosynthesis, light energy is utilized in
 (1) Converting ATP into ADP
 (2) ADP converted into ATP
 (3) CH_3 change into $\text{C}_2\text{H}_5\text{OH}$
 (4) CO_2 change into carbohydrate
113. Some effects of sulphur dioxide and its transformation products on plants include
 (1) Plasmolysis
 (2) Protein disintegration
 (3) Golgi body destruction
 (4) Chlorophyll destruction
114. Which of the following is the importance of molybdenum in plants metabolism?
 (1) Plant breeding
 (2) Carbon assimilation
 (3) Nitrate reduction
 (4) Chromosome contraction
115. Turgor pressure
 (1) Is the positive hydrostatic pressure which develops in a confined part of an osmotic system due to osmotic entry of water into it
 (2) Is the negative hydrostatic pressure which develops in a system due to entry of solute into it
 (3) Is essential for elongation of cell during growth
 (4) Both (1) and (3)
116. Which of the following does not show winged seeds?
 (1) *Hopea* (2) *Shorea*
 (3) *Moringa* (4) *Calotropis*
117. Find out the mismatch
 (1) UV radiation – thymine dimers
 (2) X-rays – chromosomal breakage
 (3) Alkylating agents – deamination of bases
 (4) Acridines – frame shift mutation

118. Osmosis is
- (1) Physical process
 - (2) Physiological process
 - (3) Chemical process
 - (4) Biochemical process
119. Antiasthmatic drug is extracted from
- (1) *Cedrus* (2) *Gnetum*
 - (3) *Thuja* (4) *Ephedra*
120. Eukaryotic DNA replication differs from prokaryotic DNA replication in
- (1) Several points of origin
 - (2) Single point of origin
 - (3) Bidirectional
 - (4) Semidiscontinuous
121. F_1F_0 -ATPase in chloroplasts is located on the
- (1) Inner chloroplast membrane with F_1 facing the stroma
 - (2) Inner chloroplast membrane with F_1 facing the inter-membrane space
 - (3) Thylakoid membrane with F_1 facing the stroma
 - (4) Thylakoid membrane with F_1 facing the thylakoid lumen
122. DNA polymerase I
- (1) Synthesizes RNA primer
 - (2) Polymerise DNA in the gap formed by removal of primer
 - (3) Joins the Okazaki fragments
 - (4) All of the above
123. Surface of earth is kept warm by
- (1) Solar radiations
 - (2) Geothermal energy
 - (3) Greenhouse flux
 - (4) Absorption of infra-red radiations by greenhouse gases
124. Chlorosis of younger leaves is due to deficiency of
- (1) Sulphur (2) Magnesium
 - (3) Nitrogen (4) Chlorine
125. Which of the following is not a characteristics of family fabaceae ?
- (1) Diadelphous androecium
 - (2) Presence of vexillum in corolla
 - (3) Basal placentation
 - (4) Superior ovary
126. In the Flavr Savr variety of tomato, fruit softening is checked by
- (1) Production of Cry protein
 - (2) Blocking production of Cry protein
 - (3) Production of polygalacturonase
 - (4) Blocking production of polygalacturonase
127. Which of the following plants is a pitcher plant but it is not an insectivorous plant ?
- (1) *Utricularia* (2) *Wolffia*
 - (3) *Sarracenia* (4) *Dischidia*
128. Androgynophore is present in
- (1) *Passiflora* (2) *Silene*
 - (3) *Gynandropsis* (4) *Clematis*
129. Lampbrush chromosomes occur in
- (1) Primary oocytes of animals, spermatocytes and *Acetabularia*
 - (2) Primary oocytes, spermatocytes and larvae of mosquitoes
 - (3) Larval of dipteran insects, *Acetabularia* and spermatocytes
 - (4) All of these
130. Wildlife (protection) Act was enacted in
- (1) 1952 (2) 1963
 - (3) 1972 (4) 1988
131. Ecological hot spots present in India are
- (1) 1 (2) 2
 - (3) 3 (4) 4
132. Number of wild relatives of crop plants found in India is
- (1) 320 (2) 448
 - (3) 557 (4) 207
133. New species are being discovered faster than ever before due to the effort of projects like
- (1) Species 2000
 - (2) Global biodiversity Information Facility
 - (3) Montreal protocol
 - (4) Both (1) and (2)
134. Gymnosperm species known from India is
- (1) 33 (2) 60
 - (3) 64 (4) 73

135. Mechanical removal of hard seed coat to break dormancy is
 (1) Photoactivation (2) Stratification
 (3) Scarification (4) Bolting
136. A person is wearing spectacles with convex lenses for correcting vision. While not using the glasses, the image of a distant object in his case will be formed:
 (1) On the retina
 (2) Behind the retina
 (3) In front of the retina
 (4) On the yellow spot
137. The source of somatostatin is same as that of :
 (1) Thyroxine and calcitonin
 (2) Insulin and glucagon
 (3) Somatotropin and prolactin
 (4) Vasopressin and oxytocin
138. Which one of the following statements with regard to embryonic development in humans is correct?
 (1) Cleavage divisions bring about considerable increase in the mass of protoplasm.
 (2) In the second cleavage division, one of the two blastomeres usually divides a little sooner than the second.
 (3) With progressive cleavage divisions, the resultant blastomeres become larger and larger.
 (4) Cleavage divisions result in a hollow ball of cells called morula
139. Colchicine is used to induce polyploidy because it
 (1) Inhibits meiosis
 (2) Inhibits spindle formation
 (3) Inhibits centromere formation
 (4) Kills cell.
140. Inhibition of hexokinase (which act on glucose) by Glucose 6PO₄ is
 (1) Allosteric feed back inhibition
 (2) Competitive inhibition
 (3) Non competitive inhibition
 (4) Enzyme action.
141. Choose the correct set of vestigial organs in man.
 (1) Nictating membrane, body hair, coccyx and ear muscles
 (2) Ear ossicles, coccyx, vermiform appendix
 (3) Mammary gland, coccyx and ear ossicles.
 (4) All of the above.
142. Course of origin of life was
 (1) H₂O – NH₃ – Nucleic acids – Proteins.
 (2) NH₃ – Nucleic acids – Amino acids – Proteins
 (3) NH₃ – CH₄ – Amino acids – Proteins.
 (4) Nucleotides – Nucleic acids – Proteins – NH₃.
143. Most direct ancestor of modern man is
 (1) *Homo habilis*
 (2) *Australopithecus*
 (3) *Ramapithecus*
 (4) *Homo erectus*
144. Ornithine cycle involves excretion of
 (1) NH₃ and urea
 (2) CO₂ and NH₃
 (3) CO₂ and urea
 (4) Urea and uric acid
145. Choose the pair of viral diseases.
 (1) Rabies & Measles
 (2) Syphilis & AIDS
 (3) Herpes & Cholera
 (4) T.B. & Tetanus.
146. All of the following are correct for antibiotics except
 (1) Term antibiotic was given by Walksmann.
 (2) First antibiotic was discovered by Fleming.
 (3) One antibiotic is specific for one pathogen.
 (4) Antibiotics are obtained from microbes.
147. In pulmonary alveoli, the air at the site of gaseous exchange, is separated from the body by
 (1) Alveolar epithelium only
 (2) Alveolar squamous epithelium and capillary endothelium

- (3) Alveolar squamous epithelium, capillary endothelium and tunica adventitia
 (4) Alveolar epithelium, capillary endothelium, a thin layer of tunica media and tunica adventitia
148. Which of the following is *not* a granulocyte?
 (1) Lymphocyte (2) Eosinophil
 (3) Basophil (4) Neutrophil
149. Which of the following has been recently used for increasing productivity of super milch cows?
 (1) Artificial insemination by a pedigreed bull only
 (2) Superovulation of a high production cow only
 (3) Embryo transplantation only
 (4) A combination of superovulation, artificial insemination and embryo transplantation into a 'carrier cow' (surrogate mother)
150. Diphtheria is caused by
 (1) Toxins released from dead bacterial cells into the host tissues.
 (2) Toxins released by living bacterial cells into the host tissues
 (3) Excessive immune response by the host's body
 (4) Toxins released by the virus into the host body tissues
151. If a certain person, shows production of interferons in his body, the chances are that he has got an infection of
 (1) typhoid (2) measles
 (3) malaria (4) tetanus
152. Which one of the following statements about fossil human species is correct?
 (1) Fossils of *Homo neanderthalensis* have been found recently in South America
 (2) Neanderthal man and Cro-Magnon man existed for some time together.
 (3) *Australopithecus* fossils have been found in Australia
 (4) *Homo erectus* preceded *Homo habilis*
153. Epinephrine does not
 (1) Reduce Blood-Clotting time
 (2) Inhibit peristalsis
 (3) Promote salivation
 (4) Increase RBC Count
154. In *Lacerta saxicola* & Turkey Birds
 (1) The females develop parthenogenetically but males develop from fertilized eggs
 (2) The males develop parthenogenetically but females develop from fertilized eggs.
 (3) The type of parthenogenesis is Arrhenotoky.
 (4) The type of parthenogenesis is Thelytoky.
155. Benign tumours are
 (1) Enclosed in connective tissue sheath
 (2) Enclosed in without any sheath
 (3) Enclosed in epithelial tissue sheath
 (4) Formed only in connective tissue
156. Electric potential inside of axolemma during impulse conduction changes from
 (1) +ve to -ve and remain -ve
 (2) +ve to -ve and again +ve
 (3) -ve to +ve and again -ve
 (4) -ve to +ve and remains +ve
157. Which of the following disorders are recessively determined?
 (1) Dwarfism (2) Phenylketonuria
 (3) Polydactyly (4) Down's syndrome
158. Which organic acid was first to be produced industrially by fermentation?
 (1) Lactic acid (2) Melanic acid
 (3) Sulphuric acid (4) Picric acid.
159. Suppose the terminal ends of one axon are in contact of dendrites of three neurons, the nerve impulse from the axon will
 (1) Get distributed in all the three neurons resulting in weak impulse
 (2) Travel undiminished but in the first neuron only
 (3) Travel in none of the neurons
 (4) Travel in all the three neurons with equal strength
160. A person had to undergo a surgery in which a major portion of his pancreas was removed. Which of the following food constituents will he find especially difficult to digest ?
 (1) Starch (2) Proteins
 (3) Fats (4) Lactose

161. Which one of the following includes all homologous organs ?
- (1) The wing of butterfly, wing of bird, patagia of bat
 - (2) Forelimb of frog, wings of bird and forelimbs of rabbit
 - (3) The thoracic leg of cockroach, the hindleg of frog and forelimbs of rabbit
 - (4) The wing of bird, patagia of bat and wings of "flying" lizard
162. Choose the correct matching sequence of hormones and endocrine cells
- | | |
|-------------------|-----------------|
| I. C-cell | A. Inhibin |
| II. β -cell | B. Calcitonin |
| III. Leydig cell | C. Testosterone |
- (1) I-A, II-C, III-B
 - (2) I-C, II-B, III-A
 - (3) I-A, II-C, III-B
 - (4) I-B, II-C, III-A
163. All of the following are true, except
- (1) Cells which stop dividing early, age earlier than those which keep dividing
 - (2) Ageing is faster in women than in men
 - (3) Animals having brisk metabolic rate and maturing rapidly age more quickly than those having slow metabolic rate and maturing slowly
 - (4) Obese rats generally live longer than lean rats
164. With the advancing age,
- (1) Mitochondria increase in number
 - (2) Lysosomes decrease in number
 - (3) Size of nucleus increases
 - (4) Mitochondria decrease & lysosomes increase in number
165. Which of the following combinations will prove serious or fatal in case of man?
- (1) Rh-negative husband & Rh-positive wife
 - (2) Rh-positive husband & Rh-negative wife
 - (3) Rh-negative husband & Rh-negative wife
 - (4) All of the above
166. Choose the incorrect statement among the following
- (a) Kidney are reddish brown, bean shaped structures situated between the levels of last lumbar and third thoracic vertebra close to the dorsal inner wall of the abdominal cavity
 - (b) Average weight of both kidney is 120-170 g
 - (c) The centre of the inner convex surface of the kidney has a notch called hilum
 - (d) The medulla of kidney is divided into a few conical masses projecting into the calyces
- (1) a, b, c and d
 - (2) a, b and d
 - (3) b and c
 - (4) a, b and c
167. Alcohol is not considered a food, since
- (1) It does not provide energy
 - (2) It does not play role in metabolism
 - (3) It is not used for growth
 - (4) All of the above
168. Sedatives differ from tranquillizers, in that
- (1) Sedatives induce sleep while tranquillisers don't
 - (2) Sedatives depress CNS activity while tranquillisers stimulate CNS
 - (3) Sedatives are stronger tranquillisers
 - (4) Sedatives cause addiction while tranquillisers don't
169. Brown sugar is
- (1) Barbiturate
 - (2) Heroin
 - (3) LSD-15
 - (4) Hashish
170. Copper-T/inhibits
- (1) Ovulation
 - (2) Fertilization
 - (3) Implantation
 - (4) Cleavage
171. Which one of the following bacteria can grow in acidic pH ?
- (1) *Vibrio*
 - (2) *Lactobacillus*
 - (3) *Shigella*
 - (4) *Salmonella*
172. Antigens are present
- (1) Inside nucleus
 - (2) On the cell surface
 - (3) Inside cytoplasm
 - (4) On nuclear membrane
173. Anti-Rh antibodies are
- (1) IgG
 - (2) IgD
 - (3) IgA
 - (4) IgE

174. AZT is used in treatment of
(1) Malaria (2) AIDS
(3) Koch's disease (4) Hensen's disease
175. Both kidney of human has nearly about complex tubular structures called nephrons, which are the functional units
(1) 3 million (2) 1 million
(3) 2 million (4) 5 million
176. Aquaculture involves production of
(1) Useful aquatic plants
(2) Useful aquatic animals
(3) Useful aquatic plants and animals
(4) Harmful aquatic plants and animals
177. Royal jelly consists of
(1) Pollen
(2) Honey
(3) Digested honey and pollen mixed with a glandular secretion
(4) Mucus
178. *Entamoeba histolytica* contains
(1) Food vacuoles and one contractile vacuole
(2) One pseudopodium and one contractile vacuole
(3) Two nuclei and no contractile vacuole
(4) Food vacuoles and no contractile vacuole
179. Pre-erythrocytic schizogony in life cycle of *Plasmodium* is completed in
(1) Liver cells of man
(2) RBC's of man
(3) Stomach lumen of female Anopheles mosquito
(4) Stomach epithelium of female Anopheles mosquito
180. *Ancylostoma duodenale* infection occurs by
(1) Boring through skin of feet
(2) Contaminated food & H₂O
(3) *Culex* mosquito bite
(4) Droplets
- ■ ■ ■ ■

MOCK TEST - MEDICAL

ANSWERS

Physics

1.	(3)	2.	(2)	3.	(3)	4.	(3)	5.	(2)
6.	(2)	7.	(2)	8.	(1)	9.	(2)	10.	(3)
11.	(1)	12.	(1)	13.	(3)	14.	(4)	15.	(2)
16.	(2)	17.	(2)	18.	(1)	19.	(3)	20.	(4)
21.	(3)	22.	(1)	23.	(1)	24.	(1)	25.	(4)
26.	(1)	27.	(3)	28.	(1)	29.	(2)	30.	(4)
31.	(1)	32.	(2)	33.	(3)	34.	(1)	35.	(2)
36.	(1)	37.	(4)	38.	(2)	39.	(1)	40.	(2)
41.	(1)	42.	(2)	43.	(1)	44.	(2)	45.	(1)

Chemistry

46.	(4)	47.	(3)	48.	(4)	49.	(3)	50.	(3)
51.	(4)	52.	(4)	53.	(3)	54.	(3)	55.	(3)
56.	(4)	57.	(1)	58.	(1)	59.	(1)	60.	(3)
61.	(2)	62.	(1)	63.	(1)	64.	(4)	65.	(4)
66.	(1)	67.	(2)	68.	(3)	69.	(1)	70.	(1)
71.	(2)	72.	(3)	73.	(1)	74.	(2)	75.	(4)
76.	(4)	77.	(3)	78.	(3)	79.	(4)	80.	(3)
81.	(2)	82.	(1)	83.	(1)	84.	(3)	85.	(4)
86.	(4)	87.	(2)	88.	(2)	89.	(4)	90.	(2)

Botany

91	(4)	92	(1)	93	(1)	94	(4)	95	(3)
96	(2)	97	(1)	98	(3)	99	(3)	100	(2)
101	(3)	102	(2)	103	(4)	104	(3)	105	(3)
106	(4)	107	(3)	108.	(3)	109.	(1)	110.	(3)
111	(2)	112.	(2)	113.	(4)	114.	(3)	115	(4)
116	(4)	117	(3)	118	(1)	119	(4)	120	(1)
121	(3)	122	(2)	123	(3)	124	(1)	125	(3)
126	(4)	127	(4)	128	(3)	129	(1)	130	(3)
131	(3)	132	(1)	133	(4)	134	(3)	135	(3)

Zoology

136.	(2)	137.	(4)	138.	(2)	139.	(2)	140.	(1)
141.	(1)	142.	(1)	143.	(4)	144.	(2)	145.	(1)
146.	(3)	147.	(2)	148.	(1)	149.	(4)	150.	(2)
151.	(2)	152.	(2)	153.	(3)	154.	(4)	155.	(1)
156.	(3)	157.	(2)	158.	(1)	159.	(4)	160.	(4)
161.	(2)	162.	(4)	163.	(4)	164.	(4)	165.	(2)
166.	(4)	167.	(3)	168.	(1)	169.	(2)	170.	(3)
171.	(2)	172.	(2)	173.	(1)	174.	(2)	175.	(3)
176.	(3)	177.	(3)	178.	(4)	179.	(1)	180.	(1)