ANSWER KEY FOR MOCK TEST - 27 (FOR 2020 ASPIRANTS) (05^th June 2020)

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CENTERS: MUMBAI / DELHI / AKOLA / LUCKNOW / NAGPUR / NASHIK / PUNE / GOA / BOKARO / DUBAI # 1
3. **Correct option is (4)**

From Einstein photoelectric equation,

\[ h\nu = \phi + K_{\text{max}} \]

\[ \frac{hc}{\lambda} = \phi + e\nu_0 \quad \text{(}\nu_0 = \text{stopping potential)} \]

\[ \frac{hc}{\lambda} = \phi + ex \]

\[ \frac{hc}{2\lambda} = \phi + e \frac{x}{3} \]

On solving

(work function) \( \phi = \frac{hc}{4\lambda} \)

\[ \frac{hc}{\lambda_0} = \frac{hc}{4\lambda} \]

\[ \lambda_0 = 4\lambda \]
During complete motion in projectile motion, if $x = R, y = 0$ then 

$$R = \frac{2\sqrt{3}}{g}$$
7. Answer (1)
\[ \Delta P = F \times \Delta t \]
\[ F = \frac{\Delta P}{\Delta t} = \frac{50 \times 20}{0.1} = 10^4 \text{N} \]

8. Answer (1)
Direction of angular velocity is along axis of rotation.

9. Answer (2)
\[ mg - T = ma \]
But \[ T = \beta mg \]
Hence, \[ mg - mg \beta = ma \]
\[ a = (1 - \beta)g \]

10. Answer (1)
\[ F = Kx^2 \]
\[ \frac{mv^2}{dx} = Kx^2 \]
\[ \frac{v^2}{2} = \frac{K}{m} x^2 - \frac{3K}{m} x^3 \]
\[ v^2 = \frac{6K}{m} x^2 \]
\[ v = \sqrt{\frac{6K}{m} x^2} \]
\[ P = Fv - Kx \frac{2}{3} \sqrt{\frac{3K}{m} x^6} \]
\[ P = x^3 = x^{\frac{1}{3}} \]

11. Correct option is (1)
Let tension be T.
\[ T - mg = \frac{mg}{3} \quad T = \frac{4}{3}mg \]
\[ W = \text{force} \times \text{distance} = \frac{4}{3}mgh \]

12. (2)

13. Answer (2)
\[ v = \frac{v_0}{1 + \frac{k^2}{R^2}} = \frac{v_0}{1 + \frac{1}{2}} = \frac{2}{3}v_0 \]
14. Answer (1)

In place of this we know that \( F = \frac{dp}{dt} = n(2P) \)

\[ = n \times 2 \times \frac{h}{\lambda} \]

from de-Broglie hypothesis \( P = \frac{h}{\lambda} \) and \( n \) is number of photons incident per second solving \( n = 5 \times 10^{20} \) photons/second.

15. Answer (1)

\( I = \) moment of inertia about its own axis \( = \frac{1}{2} MR^2 \).

\( I = \) moment of inertia of cylinder about equatorial axis \( M \left[ \frac{l^2}{12} + \frac{R^2}{4} \right] \).

given \( I = I' \)

Hence, \( I = \sqrt{3} R \)

16. Answer (1)

K.E. of ring is given by

\[ (K.E.)_{mn} = \frac{1}{2} mv^2 + \frac{1}{2} l \omega^2 = \frac{1}{2} mv^2 + \frac{1}{2} (mr^2) \omega^2 \]

\[ = \frac{1}{2} mv^2 + \frac{1}{2} m(r \omega)^2 \quad (\because \ r \omega = v) \]

\[ = \frac{1}{2} mv^2 + \frac{1}{2} mv^2 \]

\[ = mv^2 = 16 \text{ J} \]
\[(K.E.)_{\text{disc}} = \frac{1}{2}mv^2 + \frac{1}{2}lax^2\]
\[= \frac{1}{2}mv^2 + \frac{1}{2}\left(\frac{mv^2}{2}\right)l = \frac{1}{2}mv^2 + \frac{1}{4}mv^2\]
\[= \frac{3}{4}mv^2 = \frac{3}{4}(16) = 12 \text{ J}\]

17. \(\text{Answer (1)}\)
\[v^2 = u^2 + 2as\]
\[v = 2 \sin \theta \times l\]
\[\left\langle \frac{v}{l} \right\rangle^2 = 2g(\sin \theta - \mu \cos \theta)/l\]
Solving we get
\[\mu = \tan \theta \left(1 - \frac{1}{n^2}\right)\]
\[n = 2, \theta = 45 \text{ (given)}\]

18. \(\text{Answer (3)}\)
\[\frac{\Delta V}{l} = \alpha \Delta T\]
\[= 10^{-4} \times 100 = 10^{-2}\]
\[\frac{\Delta V}{l} \times 100\% = 1\%\]

19. \(\text{Answer (2)}\)
Work done in isobaric \(W = P(v_2 - v_1)\)
\[= nRT_2 - nRT_1 = nR(T_2 - T_1)\]
for one mole
\[W = R(T_2 - T_1) = 72 R\]
\[= 598.6 \text{ J} = 0.5 \text{ kJ}\]
Change in \(U\)
\[dU = Q - W = 216R - 72R = 144R\]
\[\gamma = \frac{C_p}{C_v} = \frac{216R}{144R} = 1.5\]

20. \(\text{Answer (2)}\)
\[PV^{\frac{3}{2}} = \text{constant}\]
\[\Rightarrow TV^{\frac{1}{2}} = \text{constant}\]
\[T_1V_1^{\frac{1}{2}} = T_2V_2^{\frac{1}{2}}\]
\[T_2 = T_1\left(\frac{V_1}{V_2}\right)^{\frac{3}{2}}\]
\[= T\left(\frac{V_2}{V_1}\right)^{\frac{3}{2}}\]
\[= T\sqrt{2}\]
21. Answer (2)
When terminals are short circuited.
\[ I = \frac{\pi a}{n r} = \frac{\pi}{r} \] It does not depend upon number of cells.

22. Answer (1)
40 Ω [R=Ω].

23. Answer (2)
\[ B_2 = B_1 + B_a + B_b \]
\[ -\frac{\mu_0 I}{4\pi R} \left( -\hat{k} - \pi i - j \right) \]
\[ = -\frac{\mu_0 I}{4\pi R} \left( \hat{k} + (\pi + 1) i \right) \]
\[ |B| = \frac{\mu_0 I}{4\pi R} \left( \sqrt{1 + (\pi + 1)^2} \right) \]

24. Answer (4)
\[ r = \frac{mv}{Bq} = \frac{\sqrt{2mk}}{qB} \]
\[ r_1 = \frac{\sqrt{2mk_1}}{Bq} = \frac{\sqrt{2mK}}{Bq} \]
\[ \frac{r}{r_1} = \frac{1}{\sqrt{2}} \]

25. Correct option is (4)
Parallel currents attract each other and parallel electron beams dominantly repel each other.

26. Answer (3)
\[ B \text{ of inner solenoid} \]
\[ B = \mu_0 N_1 I_1 \]
Flux through outer solenoid
\[ N_2 B_2 = N_2 B_2 / A_2 \]
\[ \frac{\mu_0 N_1 I_1}{l} = \frac{\mu_0 N_1 N_2 \pi r^2}{l} \]
\[ M = \frac{N_2 I_2}{l_1} = \frac{\mu_0 N_1 N_2 \pi r^2}{l} \]
\[ M = \frac{\sqrt{l}}{l} \]

27. Answer (2)
The current drawn by inductor and capacitor will be in opposite phase. Net current drawn from source.
\[ I_L - I_C = 1.2 - 1.0 = 0.2 \text{ A.} \]
28. Correct option is (2)
Solution:

\[ T = \frac{l}{\sqrt{MB}} \quad l' = 2l \]

\[ T' = \sqrt{2T} \]

29. Answer (3)
Apparent depth = \[ \frac{\text{Real depth}}{\mu} \]
where \[ \mu = A - \frac{B}{\lambda_2} \]
\[ \mu \text{ is least for red} \]

30. Answer (3)
31. Answer (1)
32. Answer (1)
\[ d_1 = \frac{7\lambda_0 D}{2d} \]
\[ d_2 = \frac{7\lambda_2 D}{2d} \]
\[ d_3 = \frac{\lambda_1}{\lambda_2} \]

33. Answer (1)
\[ eV_0 - K_{\text{max}} - hv - \theta_0 \]
\[ = 1.8 \text{ eV} - 1.2 \text{ eV} \]
\[ = 0.6 \text{ eV} \]
\[ V_0 = 0.6 \text{ V} \]

34. Correct option is (4)
According to conservation of linear momentum,
\[ 0 = (4)(v) - (206)(x) \]
\[ x = \frac{4v}{206} \]

35. Correct option is (3)
Solution:

\[ L_1 = 20 \text{ mH, } L_2 = 40 \text{ mH} \]

\[ L = L_1 + L_2 \pm 2 \text{ M} \]

\[ 80 = 20 + 40 + 2 \text{ M} \]

\[ M = 10 \text{ mH} \]

36. Answer (3)
Concept based
37. \[ g_\phi = g - R \omega^2 \cos^2 \phi \]

\[ 0 = g - R \omega^2 \cos^2 45^\circ \]

\[ R \omega^2 \frac{2}{2} = g \]

\[ \omega = \sqrt{\frac{2g}{R}} \]

\[ \frac{2 \pi}{T} = \sqrt{\frac{2g}{R}} \]

\[ T = 2 \pi \sqrt{\frac{R}{2g}} = \pi \sqrt{\frac{4R}{2g}} = \pi \sqrt{\frac{2R}{g}} \]

38. \( (3) \)
39. Correct option is \( (3) \)

\[ b^2 = \ell \lambda \Rightarrow \ell = \frac{b^2}{\lambda} \]

40. Answer (3)

In transformer concept of conservation of energy is not violated. If \( V \) increases then there is decrease in \( I \).

41. Answer (2)

\[ \vec{k} = k_x \vec{i} + k_y \vec{j} + k_z \vec{k} \]

\[ = \frac{\omega}{V_x} \vec{i} + \frac{\omega}{V_y} \vec{j} + \frac{\omega}{V_z} \vec{k} \]

42. Answer (1)

In adiabatic change

\[ \Delta Q = 0 \]

Hence by \( \Delta Q = mc \Delta T \)

\[ C = 0. \]
(46) (1) But-1-ene (I) $\text{CH}_3\text{CH}=\text{CH}_2\text{CH}_3$

\[
\text{CH}_3
\]

\[
\text{CH}_3
\]

(IV)

does not show geometrical isomerism as in (I)
double bond carbon has two similar hydrogens attached to carbon and in structure (IV) is cycloalkene derivative

which does not show geometrical isomerism.

(47) (2) $\text{Na} + \text{C} + \text{N} \rightarrow \text{NaCN}$ (organic compound)

(48) (3) $\text{BF}_3$ is a Lewis acid due to B' in incomplete octet (hypo octet)

(49) (4) $\text{Mg(OH)}_2(s) \rightleftharpoons \text{Mg}^{2+} + 2\text{OH}^{-}(aq)$

$\text{pH} = 12, \text{pOH} = 2, [\text{OH}^-] = 10^{-2} \text{M}$

$[\text{Mg}^{2+}] = \frac{1}{2} [\text{OH}^-] = \frac{1}{2} \times 10^{-2} \text{M} = 5 \times 10^{-3} \text{M}$

$K_{sp} [\text{Mg(OH)}_2] = [\text{Mg}^{2+}] [\text{OH}^-]^2 = (5 \times 10^{-3})(10^{-2})^2$

$K_{sp} = 5 \times 10^{-7} \text{mol}^3 \text{L}^{-2}$.

(50) (3) K, Rb, Cs forms bigger cations can form superoxides like $\text{KO}_2, \text{RbO}_2$ and $\text{CsO}_2$

(51) (4) $\text{Cumene-hydroperoxide}$

\[
\text{Cumene-hydroperoxide}
\]

\[
\text{(A)}
\]

\[
\text{Cumene}
\]

\[
\text{Cumene}
\]
(5) (4) Fact

(5) (3) \[ \text{N}_2(g) + \text{O}_2(g) \rightleftharpoons 2\text{NO}(g); \Delta \text{ng} = 0 \]

Hence, it has no effect the volume of flask.

(5A) (4) \[ \text{BF}_3 \text{ is trigonal planar so } \]

\[ \text{dipole moment is zero, but } \text{PF}_3 \text{ is pyramidal in shape, dipole moment is not zero.} \]

(55) (4) \[ \Delta \text{ng} = 1; \quad K_p = K_c (RT)^\Delta \text{ng} \]

\[ K_p = K_c (RT)^0; \quad K_p = K_c (RT) \]

\[ K_p = RT; \quad K_p = K_c \text{ when } RT = 1 \]

\[ K_c = \frac{1}{R} = \frac{1}{0.0821 \text{ Latm mol}^{-1} \text{K}^{-1}} \]

\[ T = \frac{1}{8.21 \times 10^{-2}} = \frac{100}{8} = 12.18 K \]

(56) (4) \[ \text{Hydrolysis} \]

\[ \text{Polymerisation} \]

\[ \text{Silicones} \]
57 (4) \[ \Delta H = (E_a)_f - (E_a)_b \]
\[ \Delta H = -30 \text{ KJ mol}^{-1}, \quad (E_a)_f = 70 \text{ KJ mol}^{-1} \]
\[ (E_a)_b = ? \]
\[-30 = 70 - x \]
\[ x = 70 + 30 = 100 \text{ KJ mol}^{-1} \]

58 (3) \[ \Lambda_{\text{eq}} (\text{Na}_2 \text{SO}_4) = [2x \Lambda_{\text{KCl}} + \Lambda_{\text{NaCl}}] - [2x \Lambda_{\text{KCl}}] \]
\[ = [2 \times 123.7 + 152.1] - [2 \times 147.0] \]
\[ = 105.5 \]

59 (3) \[ \Delta H_f (\text{NH}_3) = -46 \text{ KJ mol}^{-1} \]
\[ \Delta H_f (\text{NH}_3) = 2 \times (+46 \text{ KJ mol}^{-1}) \]
\[ \text{for 2 moles } \text{NH}_3 \]
\[ = +92 \text{ KJ mol}^{-1} \]

60 (4) Conceptual

61 (1) Conceptual

62 (4) Conceptual

63 (2) ZnO and Fe$_2$O$_3$ undergo carbon reduction easily as they have less affinity for oxygen.

64 (3)\[
\text{CH}_3\stackrel{\text{C} = \text{O}}{\text{CH}_2\text{CH}_3} + (\text{O}_3) \xrightarrow{(\text{ii}) \text{Zn/H}_2\text{O}} \text{CH}_3\text{C} = \text{O} + \text{C} = \text{C}\text{H}_2\text{CH}_3
\]

Dimethyl ketone
Ethyl methyl ketone
(65) (3) \[ A = \frac{1}{8} \times 7 \quad \text{and} \quad B = \frac{1}{2} \times 6 = 3 \]

\[ A_1 B_2 \Rightarrow A_7 B_{24} \]

(66) (2) \[ n_{Br_2} = \frac{160}{160} = 1 \text{mole} \quad \text{and} \quad n_{KI} = \frac{166}{166} = 1 \text{mole} \]

\[ Br_2 + 2KI \rightarrow I_2 + 2KBr \]

\[ 1 \text{mole} \quad 1 \text{mole} \]

\[ Br_2 \text{ (excess)} = 0.5 \text{mole} \quad \text{and} \quad KI \text{ (limiting)} = 1 \text{mole} \]

\[ 2KI \rightarrow I_2 \quad \text{and} \quad I_2 + 2Na_2S_2O_3 \rightarrow Na_2S_4O_6 + 2NaI \]

\[ 1 \text{mole} \quad \frac{1}{2} \text{mole} \quad \frac{1}{2} \text{mole} \]

\[ NaI = 1 \text{mole} = 127 + 23 = 150.9 \]

(67) (2) Conceptual

(68) (1) \[ \frac{q_{(Crms)}^{300K}}{(Crms)_{300K}} = \sqrt{\frac{T}{300}} \]

\[ A = \frac{T}{300} \quad \text{and} \quad T = 1200K \]

\[ T = 927^\circ C \]

(69) (2) \[ \Delta T_f = k_f \times \frac{W_2}{M_2 \times W_1 \text{ (in kg)}}, \quad M_2 = 8 \quad C_2H_6O_2 \]

\[ a.8 = 1.86 \times \frac{W_2}{62} \]

\[ W_2 = \frac{2.8 \times 62}{1.86} = 939 \]
70. (2) \( \text{As}_2\text{S}_3 \) sol is negative sol.
So, coagulating power increasing order is \( \text{As}^{3+}(\text{II}) > \text{Ba}^{2+}(\text{III}) > \text{Na}^+(\text{I}) \)
- Coagulating power \( \propto \) Valency of cation.

71. (1) Conceptual

72. (2) \( l = 0 \) for \( s^1 \)-electron
- So, orbital angular momentum
  \[ L = \sqrt{l(l+1)} \frac{h}{2\pi} = \sqrt{0(0+1)} \frac{h}{2\pi} \]

73. (3) PhCHO (\( \text{CHO} \))
- Benzaldehyde does not give Fehling’s test as it is aromatic aldehyde.

74. (2) Maximum dehydration occurs in due to stable carbocation and stable product
- Formation (Conjugated double bond) have resonance.
75 (2) It is a carbamylamine reaction, the products are CH$_2$NC and KCl (A) (B)

76 (4) During Kolbe’s electrolysis either NaOH (X) KCl (Y) is formed at cathode, so pH of the solution increases.

77 (3) Sucrose is non-reducing sugar so it can’t reduce both Fehling’s solution and Tollens reagent.

78 (1) $\text{Ca}_2\text{B}_8\text{O}_{11} + 2\text{Na}_2\text{CO}_3 \rightarrow 3\text{CaCO}_3 + \text{Na}_2\text{B}_4\text{O}_7 + 4\text{NaBO}_2$

\[ 4\text{NaBO}_2 + \text{CO}_2 \rightarrow \text{Na}_2\text{CO}_3 + \text{Na}_2\text{B}_4\text{O}_7 \]

\[ \text{Na}_2\text{B}_4\text{O}_7 + 7\text{H}_2\text{O} \rightarrow 2\text{NaOH} + 4\text{H}_3\text{BO}_3 \]

\[ \text{Na}_2\text{CO}_3 + 4\text{H}_3\text{BO}_3 \rightarrow \text{Na}_2\text{B}_4\text{O}_7 + 6\text{H}_2\text{O} \]

Hydrated $Y = \text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$ (Borax) = $\text{Na}_2\text{B}_4\text{O}_5(\text{OH})_4 \cdot 8\text{H}_2\text{O}$

It has 5 B–O–B bonds

\[
\begin{array}{c}
\text{B} \quad \text{O} \\
\text{O} \quad \text{B} \\
\text{O} \quad \text{B} \\
\text{O} \quad \text{B} \\
\text{O} \quad \text{B} \\
\end{array}
\]

$2\text{Na}^+ \cdot 8\text{H}_2\text{O}$


\[ \text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O} \rightarrow \text{Na}_2\text{B}_4\text{O}_7 \rightarrow 2\text{NaBO}_2^+ \]

79. (2) \( \text{sp}^3 \) (Dimethylamine) is pyramidal

\[ \text{CH}_3 \]

\[ \text{CH}_3 \]

\[ \text{SiH}_3 \text{SiH}_3 \rightarrow \text{sp}^2 \]

\[ \text{N} \]

\[ \text{SiH}_3 \text{SiH}_3 \]

\( \text{sp}^1 \) has a vacant d orbital.

(Plane)

80. (3) \[ \text{CH}_3-\text{C}^\equiv-\text{C}^\equiv-\text{CH}_3 \rightarrow \text{CH}_2-\text{C}^\equiv-\text{C}^\equiv-\text{CH}_3 + \]

2,4-Dimethyl butane

81. (3) \[ \text{HO} \] (Acetyl salicylic acid) (on) Aspirin

It is analgesic

(Acrylaldehyde)

82. (4) \[ \text{CH}_2=\text{CH}-\text{C}^\equiv-\text{H} \]

Does not show keto-enol tautomerism as it gives an unstable enol form

\[ \text{CH}_2=\text{C}=\text{C}^\equiv-\text{H} \] (unstable)
(83) (4) CFCl₃ (chlorofluorocarbons) is a component responsible of depletion of ozone layer.

(84) (4) \([\text{Pt}(\text{Py})(\text{NH₃})\text{Br}][\text{Mabcd}]\) has 2 cis and 1 trans, totally 3 geometrical isomers.

(85) (2) Conceptual

(86) (2) Conceptual

(87) (3) Conceptual

(mol. mass = 84.9)

(88) (2) Conceptual

(C₆H₁₂)

(89) (3) (Aniline) does not show Friedel-Crafts alkylation as aniline forms complex (coordinate complex) with AlCl₃ (lewis acid) as

\[ \text{AlCl₃} \rightarrow \text{AlCl₃} \]

(90) p-nitrophenol is not that much acidic, to be dissolved in NaHCO₃.
91. (4) (XI, NCERT Pg.7)
Both (1) and (2) are correct
Both the words in binomial name, when handwritten, are separately underlined or are printed in italics, to indicate their Latin origin

92. (3) (XII) (NCERT Pg.282)
93. (1) (XI, NCERT Pg. 23, 24)
Zygospores, ascospores, basidiospores are sexual spores.
Zoospores and sporangiospores are asexual spores.

94. (2) (XII) (NCERT Pg.265)
95. (1) (XI, NCERT Pg.27)
96. (3) (XII) (NCERT Pg.242)
97. (3) (XI, NCERT Pg. 35, 38, 39)
98. (2) (XII) (NCERT Pg.226)
99. (2) (XI, NCERT Pg. 36)
100. (1) (XII) (NCERT Pg.184,185)
101. (4) (XI, NCERT Pg. 29, 30)
102. (3) (XII) (NCERT Pg.101)
103. (1) (XI, NCERT Pg. 200)
Incorrect statements:
(2) as, initial rapid uptake of ions in the outer space of cells is passive process.
(3) as, passive movement of ions into the apoplast usually occurs through ion channels, the transmembrane proteins that acts as selective pores.
(4) as, passive movement of ions into the apoplast usually occurs through ion channels, the transmembrane proteins that acts as selective pores.

104. (1) (XII ) (NCERT Pg.79)
105. (4) (XI, NCERT Pg.204)
8 ATP for each NH₃ produced Nitrogenase requires 8 ATP for each NH₃ produced
106. (2) (XII)(NCERT Pg.23)
107. (2) (XI, NCERT Pg.249)
108. (2) (XII) (NCERT Pg.234)
109. (4) (XI, NCERT Pg.252)
110. (4) (XII) (NCERT Pg.184)
111. (3) (XI, NCERT Pg.168)
Leptotene – Zygotene -Pachytene – Diplotene - Diakinesis
112. (1) (XII )
113. (3) (XI, NCERT Pg.163)
Haploid egg has 5 pg DNA. This a diploid cell will have 10 pg DNA. As in S phase DNA content gets doubled, diploid cell at the end of G₂ will have 20 pg DNA.
114. (2) (XII ) (NCERT Pg.89)
115. (3) (XI, NCERT Pg.165)
116. (2) (XII) (NCERT Pg.109)
117. (3) (XI, NCERT Pg.139)
P-ii, Q-iv, R-iii, S-i
118. (2) (XII) (NCERT Pg.177)
119. (1) (XI, NCERT Pg.183)
Water movement is along concentration gradient
120. (4) (XII)(NCERT Pg.22)
121. (1) Cells A, E absorb water from B (as water moves to cells which have higher DPD.)
122. (4) (XII)(NCERT Pg.23)
123. (1) (XI, NCERT Pg.212)
124. (2) (XII) (NCERT Pg.110)
125. (2) (XI, NCERT Pg.217)
126. (3) (XII )
127. (4) (XI, NCERT Pg.218)
as Kranz anatomy is shown by C₄ plants

128. (1) (XI)(NCERT Pg.229,232)
129. (2) (XI, NCERT Pg.78)
130. (4) (XII)(NCERT Pg.6)
131. (2) (XI, NCERT Pg.76,77)
132. (2) (XI)(NCERT Pg.228)
One molecule of glucose splits into two molecules of pyruvic acid.
To completely oxidize one glucose, six oxygen molecules are required.
Hence for two molecules of pyruvic acid six oxygen molecules are required.
133. (1) (XI, NCERT Pg.77)
134. (2) (XI)(NCERT Pg.231)
135. (3) (XI, NCERT Pg.70)
136. (2) (XI)(NCERT Pg.76,77)
137. (2) (XI)(NCERT Pg.270)
138. (2) (XI)(NCERT Pg.103)
139. (3) (XI)(NCERT Pg.312, 335)
140. (3) (XI)(NCERT Pg.285)
141. (4) XI, NCERT Chapt. 1, Both show organ system level of organization, bilateral symmetry and coelom.
142. (2) XII, NCERT Page – 208, 2nd last para
143. (3) XI, NCERT Chapt. 1, Both show tube within tube body plan.
144. (4) XII, NCERT Chapt. 16, Page – 204, 2nd para, Fig. 11.7
145. (2) XI, NCERT Chapt. 1, Page - 53
146. (3) XII, NCERT Chapt. 17, Page – 209, 2nd para, last line
147. (4) XI, NCERT Chapt. 1, Page – 60, 2nd para
148. (1) XII, NCERT Chapt. 18, Page – 169, last line
149. (4) Chapt. 8, Other cells too have elastin and elongated shape. Only muscle cell has actin and myosin.
150. (2) XII, NCERT, Page 149
151. (2) XI, NCERT Chapt. 3, Page – 150, 4th line
152. (1) XII, NCERT Chapt. 15, Page – 158, 4th para, 2nd line.
153. (2) XI, NCERT Chapt. 3, Page – 144, last para, 5th line
154. (4) XII, NCERT Chapt. 15, Page – 159, 1st para
156. (3) XII, NCERT Chapt. 14, Page – 140, last line
157. (4) XI, NCERT Chapt. 4, Page – 262, 1st para
158. (4) XII, NCERT Chapt. 14, Page - 137
159. (1) XI, NCERT Chapt. 4, Page – 262, 2nd and 3rd para, Parietal cells secrete HCl.
160. (1) XII, NCERT Chapt. 14, Page – 149, 3rd para
161. (3) XI, NCERT Chapt. 7, Page – 293, last para
162. (3) XII, NCERT, Page 62, 3rd and 4th para.
163. (2) XI, NCERT Chapt. 5, Page – 274, 1st para, 4th line
164. (3) XII, NCERT Chapt. 13, Page – 60, last para
165. (4) XI, NCERT Chapt. 5, Page - 276
166. (3) Chapt. 12, Outer layer of blastula is called trophoblast, its daughter cells are called blastomeres and cavity is called blastocoel.
167. (4) XI, NCERT Chapt. 6, Page – 281, 1st para
168. (1) XII, NCERT Chapt. 12, Page – 54, last para, 4th line
169. (2) XI, NCERT Chapt. 6, Nodal tissue of heart is modified cardiac muscle making conducting system.
170. (4) XII, NCERT Chapt. 12, Page – 43, last para
171. (2) XI, NCERT Chapt. 7, Page – 294, 5th para, 1st line
172. (3) XII, NCERT Chapt. 12, Page – 42, 44, last para, 1st line
173. (2) XI, NCERT Chapt. 7, Page – 298, last para
174. (3) XI, NCERT Chapt. 10, Page – 338, 2nd para, 8th line
175. (3) XI, NCERT Chapt. 8, Page – 312, 5th para
176. (2) XI, NCERT Chapt. 10, Page – 333, 2nd para
177. (2) XI, NCERT Chapt. 9, Page – 321, 1st para, 23rd line.
178. (3) XI, NCERT, Page 332, 333
179. (4) XI, NCERT Chapt. 9
180. (4) XI, NCERT Chapt. 9, Page – 326, 1st line