# Answer Key for Mock Test-12 (For 2020 Aspirants) 20th April 2020

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>(1)</td>
<td>2.</td>
<td>(3)</td>
<td>3.</td>
<td>(2)</td>
</tr>
<tr>
<td>6.</td>
<td>(1)</td>
<td>7.</td>
<td>(2)</td>
<td>8.</td>
<td>(3)</td>
</tr>
<tr>
<td>11.</td>
<td>(2)</td>
<td>12.</td>
<td>(1)</td>
<td>13.</td>
<td>(3)</td>
</tr>
<tr>
<td>16.</td>
<td>(3)</td>
<td>17.</td>
<td>(4)</td>
<td>18.</td>
<td>(1)</td>
</tr>
<tr>
<td>21.</td>
<td>(1)</td>
<td>22.</td>
<td>(3)</td>
<td>23.</td>
<td>(1)</td>
</tr>
<tr>
<td>26.</td>
<td>(1)</td>
<td>27.</td>
<td>(1)</td>
<td>28.</td>
<td>(1)</td>
</tr>
<tr>
<td>31.</td>
<td>(2)</td>
<td>32.</td>
<td>(3)</td>
<td>33.</td>
<td>(3)</td>
</tr>
<tr>
<td>36.</td>
<td>(2)</td>
<td>37.</td>
<td>(3)</td>
<td>38.</td>
<td>(3)</td>
</tr>
<tr>
<td>41.</td>
<td>(2)</td>
<td>42.</td>
<td>(2)</td>
<td>43.</td>
<td>(2)</td>
</tr>
<tr>
<td>46.</td>
<td>(4)</td>
<td>47.</td>
<td>(4)</td>
<td>48.</td>
<td>(2)</td>
</tr>
<tr>
<td>51.</td>
<td>(2)</td>
<td>52.</td>
<td>(1)</td>
<td>53.</td>
<td>(2)</td>
</tr>
<tr>
<td>56.</td>
<td>(1)</td>
<td>57.</td>
<td>(2)</td>
<td>58.</td>
<td>(4)</td>
</tr>
<tr>
<td>61.</td>
<td>(1)</td>
<td>62.</td>
<td>(3)</td>
<td>63.</td>
<td>(1)</td>
</tr>
<tr>
<td>66.</td>
<td>(3)</td>
<td>67.</td>
<td>(3)</td>
<td>68.</td>
<td>(3)</td>
</tr>
<tr>
<td>71.</td>
<td>(4)</td>
<td>72.</td>
<td>(3)</td>
<td>73.</td>
<td>(4)</td>
</tr>
<tr>
<td>76.</td>
<td>(1)</td>
<td>77.</td>
<td>(1)</td>
<td>78.</td>
<td>(2)</td>
</tr>
<tr>
<td>81.</td>
<td>(2)</td>
<td>82.</td>
<td>(2)</td>
<td>83.</td>
<td>(4)</td>
</tr>
<tr>
<td>86.</td>
<td>(3)</td>
<td>87.</td>
<td>(3)</td>
<td>88.</td>
<td>(4)</td>
</tr>
<tr>
<td>91.</td>
<td>(3)</td>
<td>92.</td>
<td>(3)</td>
<td>93.</td>
<td>(4)</td>
</tr>
<tr>
<td>96.</td>
<td>(1)</td>
<td>97.</td>
<td>(2)</td>
<td>98.</td>
<td>(3)</td>
</tr>
<tr>
<td>101.</td>
<td>(2)</td>
<td>102.</td>
<td>(4)</td>
<td>103.</td>
<td>(4)</td>
</tr>
<tr>
<td>106.</td>
<td>(2)</td>
<td>107.</td>
<td>(2)</td>
<td>108.</td>
<td>(1)</td>
</tr>
<tr>
<td>111.</td>
<td>(4)</td>
<td>112.</td>
<td>(1)</td>
<td>113.</td>
<td>(1)</td>
</tr>
<tr>
<td>116.</td>
<td>(4)</td>
<td>117.</td>
<td>(4)</td>
<td>118.</td>
<td>(2)</td>
</tr>
<tr>
<td>121.</td>
<td>(2)</td>
<td>122.</td>
<td>(2)</td>
<td>123.</td>
<td>(2)</td>
</tr>
<tr>
<td>126.</td>
<td>(3)</td>
<td>127.</td>
<td>(3)</td>
<td>128.</td>
<td>(3)</td>
</tr>
<tr>
<td>131.</td>
<td>(1)</td>
<td>132.</td>
<td>(4)</td>
<td>133.</td>
<td>(1)</td>
</tr>
<tr>
<td>136.</td>
<td>(3)</td>
<td>137.</td>
<td>(2)</td>
<td>138.</td>
<td>(4)</td>
</tr>
<tr>
<td>141.</td>
<td>(4)</td>
<td>142.</td>
<td>(2)</td>
<td>143.</td>
<td>(3)</td>
</tr>
<tr>
<td>146.</td>
<td>(2)</td>
<td>147.</td>
<td>(4)</td>
<td>148.</td>
<td>(3)</td>
</tr>
<tr>
<td>151.</td>
<td>(4)</td>
<td>152.</td>
<td>(2)</td>
<td>153.</td>
<td>(3)</td>
</tr>
<tr>
<td>156.</td>
<td>(3)</td>
<td>157.</td>
<td>(2)</td>
<td>158.</td>
<td>(4)</td>
</tr>
<tr>
<td>161.</td>
<td>(2)</td>
<td>162.</td>
<td>(1)</td>
<td>163.</td>
<td>(2)</td>
</tr>
<tr>
<td>166.</td>
<td>(3)</td>
<td>167.</td>
<td>(2)</td>
<td>168.</td>
<td>(3)</td>
</tr>
<tr>
<td>171.</td>
<td>(3)</td>
<td>172.</td>
<td>(2)</td>
<td>173.</td>
<td>(4)</td>
</tr>
<tr>
<td>176.</td>
<td>(4)</td>
<td>177.</td>
<td>(3)</td>
<td>178.</td>
<td>(2)</td>
</tr>
</tbody>
</table>

**Centers:** Mumbai / Delhi / Akola / Lucknow / Nagpur / Nashik / Pune / Goa / Bokaro / Dubai
\[ \frac{\Delta P}{P} \times 100 = \left( 3 \cdot \frac{\Delta a}{a} + 2 \cdot \frac{\Delta b}{b} + \frac{\Delta c}{c} + \frac{\Delta d}{d} \right) \times 100 \]

\[ = 3.1 + 2.2 + 3 + 4 \]

\[ = 14 \text{ %} \]

3. \[ S = ut + \frac{1}{2} at^2 \]

\[ h_1 = 0 \pm \frac{1}{2} g (5)^2 \]

\[ h_1 + h_2 = \frac{1}{2} g (10)^2 \]

\[ h_1 + h_2 + h_3 = \frac{1}{2} g (15)^2 \]

4. A block is moving with constant speed, so the net force will be zero.

5. \[ v^2 = u^2 + 2as \]

\[ v^2 = 0 + 2(g \sin \theta) s \]

\[ 0 = v^2 - \frac{g \cos \theta - g \sin \theta}{s} \]

From (1) and (2):

\[ 2(g \sin \theta) s = 2 \left( g \sin \theta - g \sin \theta \right) s \]

\[ \ell_l = 2 \tan \theta \]
\[ mg - B = ma \quad \text{(1)} \]

\[ B - (m - m') g = (m - m') a \quad \text{(2)} \]

From (1) and (2),

\[ m' = \frac{2ma}{a + g} \]

From momentum conservation,

\[ v_1 = \frac{v}{2} \]

\[ k.E = \frac{1}{2} mu^2 + \frac{1}{2} mu'^2 + \frac{1}{2} (m') v^2 \]

\[ = \frac{3}{2} mu^2 \]

\[ a = -\omega^2 A \cos \omega t \]
\[ T \cdot R = I \alpha \]
\[ \Rightarrow TR = \frac{MR^2}{2} \cdot \alpha \]
\[ \Rightarrow T = \frac{(50)(0.5)(2)}{2} = 25 \text{ N} \]

\[ \text{for pure rolling} \]
\[ a = \left(g \sin \theta - \frac{g}{m} \right) \]
\[ \Rightarrow R = I \alpha \]
\[ \Rightarrow \dot{a} = \frac{2}{5} \cdot MA \]
\[ \Rightarrow \dot{a} = \frac{2}{5} \cdot MA \]

\[ a = g \sin \theta - \frac{a}{5} \]
\[ \boxed{a = \frac{4}{5} g \sin \theta} \]

\[ \frac{1}{A} = R^2 \left[ \frac{1}{n_1^2} - \frac{1}{n_2^2} \right] \]
\[ = 10^4 \left( \frac{1}{4} - \frac{1}{20} \right) \]

\[ v_e \propto \sqrt{\frac{M}{R^4}} \propto \sqrt{\frac{R^3 P}{R}} \]
for maximum safe speed friction would be inward.

\[ \pm \cos \theta + N \sin \theta = \frac{\mu u^2}{R} \quad (1) \]

\[ N \cos \theta = \pm \sin \theta + mg \quad (2) \]

\[ f = \mu N \quad (3) \]

16

\[ \begin{array}{c}
10 \text{ m/s}\text{cc} \\
2 \text{ kg} \\
\rightarrow \\
\text{rest} \\
3 \text{ kg} \\
\end{array} \quad \begin{array}{c}
\text{3 kg} \\
\rightarrow \\
5 \text{ kg} \\
\end{array} \]

\[ 10 \cdot (2) + 0 = 5 \cdot (4) \]

\[ U = 4 \text{ m/s}\text{cc} \]

\[ \text{loss} = k_i - k_f \]

\[ = \frac{1}{2} \cdot 2 \cdot (10)^2 - \frac{1}{2} \cdot (5) \cdot (4)^2 \]

\[ = 60 J \]
20. Solution:

\[ v = 48 \text{ m/s}, \quad l = 12 \text{ m}, \quad f = \frac{nv}{2l} \]

\[ f = 2n \text{ (where } n = 1, 2, 3 \ldots) \]

Hence answer is (4).

\[
\begin{align*}
\text{loss in PE} & = \text{gain in KE} \\
mg(\theta_0) & = \frac{1}{2}mv^2
\end{align*}
\]

22. Solution:

\[ l_1 + e = \frac{\lambda}{4} \]

\[ l_2 + e = \frac{3\lambda}{4} \]

\[ l_2 - l_1 = \frac{\lambda}{2} \]

\[ 0.48 - 0.15 = \frac{\lambda}{2} \]

\[ 0.33 = \frac{\lambda}{2} \]

\[ \lambda = 0.66 \]

Velocity = \( f \times \lambda = 500 \times 0.66 = 330 \text{ m/s} \)

23. Solution:

\[ E_r = 2.25, \quad \mu_r = 4 \]

\[ V = \frac{1}{\sqrt{\mu_0 \mu_r \varepsilon_0 \varepsilon_r}} \]

\[ = \frac{1}{\sqrt{\mu_0 \varepsilon_0}} \times \frac{1}{\sqrt{2.25 \times 4}} \]

\[ = \frac{3 \times 10^8}{1.5 \times 2} \]

\[ V = 10^8 \text{ m/s} \]
35. Solution:

\[ P = VI \cos \phi \]

240 = 4(100) \cos \phi

\[ \frac{3}{5} = \cos \phi = \frac{R}{Z} \quad \text{...(i)} \]

and 4Z = 100 \Rightarrow Z = 25 \ \Omega

So in (i) \[ \frac{3}{5} = \frac{R}{25} \Rightarrow R = 15 \ \Omega \]
ΔT = \frac{1}{2} \alpha \Delta \Theta T

C_{v_{\text{mix}}} = \frac{C_{v_1} + C_{v_L}}{2}

\Delta \Phi = W + \Delta U
\Delta U = \Phi_0 + \Delta U

H = \frac{k A \Delta \Theta}{L}, \quad H \propto \frac{r^2}{l}

40. **Solution:**

\[ m = \frac{f}{f - u} \]
\[ f = -0.15 \text{ m} \]
\[ m = +2 \text{ (virtual image)} \]
\[ 2 = \frac{-0.15}{-0.15 - u} \]
\[ \Rightarrow = -0.075 \text{ m or } -7.5 \text{ cm}. \]

42. **Solution:**

Energy needed to convert He* ion to He^{2+} is \( E_0 Z^2 \)
\[ = 13.6 \times 4 \]

Hence total energy to create alpha particle out of helium atom is
\[ E_{\text{total}} = 13.6 \times 4 + 29.5 \]
\[ = 83.9 \text{ eV} \]

\[ R \propto A^{\frac{1}{3}} \]

\[ Y = \overrightarrow{A + B} = A \cdot B \]
46. (4)

- \([\text{CO}_3^2-\text{]}\): Pyramidal Shape
- \(\text{XeF}_4\): Square Planar
- \(\text{SF}_6\): Irregular Tetrahedral
- \([\text{I}_3\text{]}\): Linear Shape

47. (4)
Order of a reaction can be fraction or zero or complete positive and negative number.

48. (2)
Equimolar amounts of NO and \(\text{NO}_2\) gases at -30°C give \(\text{N}_2\text{O}_3\) which is a blue liquid

\[
\text{NO}_{(g)} + \text{NO}_2\text{(g)} \rightleftharpoons \text{N}_2\text{O}_3\text{(blue)}
\]

49. (3)

<table>
<thead>
<tr>
<th>Ore</th>
<th>Chemical Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cuprite</td>
<td>(\text{Cu}_2\text{O})</td>
</tr>
<tr>
<td>Chalcocite</td>
<td>(\text{Cu}_2\text{S})</td>
</tr>
<tr>
<td>Chalcopyrite</td>
<td>(\text{CuFeS}_2)</td>
</tr>
<tr>
<td>Malachite</td>
<td>(\text{Cu(OH)}_2\cdot\text{CuCO}_3)</td>
</tr>
</tbody>
</table>

50. (2)
All silicates have tetrahedral \(\text{SiO}_4^{4-}\) ion, as a basic building unit i.e. all silicates are composed of many units. Tetrahedral shape of \([\text{SiO}_4]\)^{4-} ion is due to \(sp^3\)-hybridisation of \(\text{Si}\)-atom. Sheet silicates are formed when three oxygen atoms (bridging O-atoms) of each \((\text{SiO}_4)^{4-}\) unit are shared.

51. (2)

Colour of transition metal ion salt is due to \(d\)-\(d\) transition of unpaired electrons of \(d\)-orbital. Metal ion salt having similar number of unpaired electrons in \(d\)-orbitals show similar colour in aqueous medium. In \(\text{VOCl}_3\), Vanadium is present as \(\text{V}^{4+}\) and in \(\text{CuCl}_2\), copper is present as \(\text{Cu}^{2+}\).

- \(\text{V}^{4+}\): \(1s^2\ 2s^2\ 2p^6\ 3s^2\ 3p^6\ 3d^1\): 1 unpaired \(e^-\)
- \(\text{Cu}^{2+}\): \(1s^2\ 2s^2\ 2p^6\ 3s^2\ 3p^6\ 3d^9\): 1 unpaired \(e^-\)

Hence, \(\text{VOCl}_3\) and \(\text{CuCl}_2\) show similar colour.
52. (1)

Number of radial nodes = \((n-l-1)\)
For \(3s\), \(n = 3, l = 0\)
Number of radial node = \(3 - 0 - 1 = 2\)
For \(2p\), \(n = 2, l = 1\)
Number of radial node = \(2 - 1 - 1 = 0\)

53. (2)

54. (4)

55. (4)

56. (1)

Molar heat capacity for any process is given as

\[
C = C_v + \frac{R}{1 - \gamma} \quad \text{when} \ PV = \text{constant and} \ C_p/C_v = \gamma
\]

\[
P \frac{V}{P} = 1 \quad \text{i.e.} \ PV^{-1} = \text{constant}
\]

\[
C = \frac{3}{2}R + \frac{R}{2(1 - (-1))} = \frac{3}{2}R + \frac{R}{2} = \frac{4R}{2}
\]

57. (2)

Orbital angular momentum = \(\frac{\hbar}{2\pi}\sqrt{l(l+1)}\)
For \(3s\) electron, \(l = 0\)

\[
\text{Orbital angular momentum} = \frac{\hbar}{2\pi}\sqrt{0(0+1)} = 0
\]
58. \( \Delta E = \hbar \nu = \frac{hc}{\lambda} \)

\[
\lambda = \frac{hc}{\Delta E} = \frac{6.62 \times 10^{-34} \times 3 \times 10^8}{4.4 \times 10^{-14}} = 4.52 \times 10^{-10} \text{ m}
\]

59. (2)

For NaCl type structure,
Distance between \( A^+ \) and \( B^- \)

\[
= \frac{1}{2} \times \text{edge length}
\]

\[
= \frac{1}{2} \times 400 = 200 \text{ pm}
\]

Radius of cation = 75 pm
Radius of anion = 200 - 75 = 125 pm

60. (1)

SO\(_4\) has sp\(^3\) hybridisation of S-atom while NH\(_4\)
SO\(_2\) and H\(_2\)O species have sp\(^3\) hybridisation.

61. (1)

Number of electron in NO\(_3^-\) = 7 + 24 + 1 = 32

Number of electron in CO\(_3^2-\) = 6 + 24 + 2 = 32

Hence, they are isoelectronic

Total number of valence e\(^-\) in NO\(_3^-\)
\[
= 5 + 8 \times 3 + 1 = 24
\]

Total number of valence e\(^-\) in CO\(_3^2-\)
\[
= 4 + 6 \times 3 + 2 = 24
\]

Now 24 \( \div 8 = 3 \) (O\(_3\)) + 0 (R\(_1\))

Hence, hybridisation of central atom in both cases is sp\(^3\). Hence they are isostructural also.
62. \[ 2\text{CH}_2\text{COOH} \rightleftharpoons (\text{CH}_3\text{COOH})_2 \]

\[ i = 1 - \frac{\alpha}{2} \]

\[ \alpha = 2(1 - i) = 2(1 - 0.52) = 0.96 \]

63. Electrode potential = -0.3 V
The electrode reaction may be given as

\[ 2\text{H}^+ + 2\text{e}^- \rightarrow \text{H}_2 \]

\[ E = E^o - 0.059 \frac{2}{2} \log \left[ \frac{1}{[\text{H}^+]} \right] \]

\[ -0.3 = 0 - 0.059 \log(-2\log([\text{H}^+])) \]

\[ -0.3 = -0.059 \text{pH} \]

\[ \text{pH} = \frac{0.3}{0.059} \]

\[ \text{pH} = 5.085 \]

64. CaCO₃ dissociates as in a closed vessel.

CaCO₃ (s) \rightleftharpoons CaO (s) + CO₂ (g); ΔH = 110 KJ

The reaction is endothermic and the pressure of CO₂ increases if temperature is raised.

65. The structure of tetracyanoethylene is as:

\[ \text{N} = \text{C} \]

\[ \text{C} = \text{C} \]

\[ \text{C} \quad \text{N} \]

Hence, there are 9σ and 9π bonds are present.
66. (3)

\[
\begin{align*}
58 \text{ g } N_2 \times \frac{56}{28} &= 2 \text{ mol } \\
44 \text{ g } CO_2 \times \frac{44}{44} &= 1 \text{ mol } \\
16 \text{ g } CH_4 \times \frac{16}{16} &= 1 \text{ mol }
\end{align*}
\]

Partial pressure of \( CH_4 \) = \( \frac{n_{CH_4}}{n_{N_2} + n_{CO_2} + n_{CH_4}} \times P \) = \( \frac{1}{2 + 1 + 1} \times 720 \) = 180 mm

67. (3)

Sodium chloride is the salt of strong acid and strong base. The solution of NaCl in contact with atmosphere has a pH of about 7.

68. (3)

\( CH_3COCH_2CICH_2CH_3 \) (2-pentanone) gives positive iodoform test while \( CH_3CH_2COCH_2CH_3 \) (3-pentanone) does not give iodoform test.

69. (2)

70. (3)

\[
\begin{array}{c}
\text{Adipic acid} \\
\text{Adipic anhydride}
\end{array}
\]

71. (4)

The acidity of halogenated acid increases with increase in electronegativity of the halogen present. Hence, the correct order of the acidity is as:

\( FCH_2COOH > CICHH_2COOH > BrCH_2COOH > CIH_2COOH \)

72. (3)

\( LiAlH_4 \) reduces both ester and carbonyl group. 
\( NaBH_4/CH_3OH \) reduces only carbonyl group.
73. (4)

\[
\begin{align*}
\text{CH}_2\text{CHCH}_2\text{NH}_2 & \rightarrow \text{CH}^\text{O} \text{NH}_2 \\
\text{H}_2\text{O} & \rightarrow \text{H} \text{N}
\end{align*}
\]

74. (3)

Oral contraceptive drugs contain both mestranol and norethindrone.

75. (4)

Aspirin is a non-narcotic drug. It is the most common analgesic with antipyretic properties.

76. (1)

77. (1)

The amide bonds in nylon are hydrolysed by acid on base.

78. (2)

\[
\begin{align*}
\text{Cu}^+ + \text{Cu}^+ & \rightarrow \text{Cu} + \text{Cu}^{2+} \\
 n = 1 \\
\Sigma^n \text{cell} &= \frac{0.0591}{n} \log k \\
0.36 &= \frac{0.0591}{1} \log k \\
\log k &= 6.0914 \\
k &= \text{Antilog} \ 6.0914 = 1.2 \times 10^6
\end{align*}
\]

79. (2)

\[
\begin{align*}
\text{wt. of Ca} &= \frac{\text{Eq. wt. of Ca}}{\text{Eq. Wt. of Al}} \\
\text{wt. of Al} &= \frac{\text{Eq. Wt. of Al}}{\frac{40}{27}} \\
\frac{40}{27} &= \frac{49.8}{27} \\
\text{Wt. of Al} &= 18 \text{ kg}
\end{align*}
\]

80. (2)

81. (2)

H$_2$O and HSO$_4^-$ accept protons hence they are conjugate bases.
82. (2)
\[
\begin{align*}
1\text{M} \text{H}_2\text{SO}_4 & = 2\text{NH}_2\text{SO}_4 \\
\text{N}_1\text{V}_1 & = \text{N}_2\text{V}_2 \\
2 \times \text{V}_1 & = 10 \times 1 \\
\text{V}_2 & = 5.0 \text{ ml}
\end{align*}
\]

83. (4)
\[
\text{KMnO}_4 + \text{HCl} \rightarrow \text{Cl}_2 + \text{MnCl}_2 + \text{KCl} + \text{H}_2\text{O}
\]
Oxidation number of Mn decreases, hence KMnO\text{4} has been reduced to MnCl\text{2}. Thus, the reduced product is MnCl\text{2}.

84. (4)
Ferrocene is a sandwich complex compound in which all the five C-atoms of cyclopentadiene anion are linked to the metal through π-bonds.

85. (4)
Yellow chromates are converted to orange dischromates on adding acid and vice-versa when alkali is added to dischromates.
\[
2\text{CrO}_4^{2-} + 2\text{H}^+ \rightarrow \text{Cr}_2\text{O}_7^{2-} + \text{H}_2\text{O}
\]

86. (3)
C\text{6} \text{H}_{10} has six cyclic isomers.

87. (3)

88. (4)
P = \text{NO}_2 \rightarrow \text{C}_6\text{H}_5 - \text{CH}_3 is the most stable carbanion since electron withdrawing \text{NO}_2 group stabilizes the carbanion by dispersal of the negative charge.
Enzymes are active outside the cell also

In marginal placentation ovule are arranged also the ventral suture at single unilocular avary

Quasifluid means semifluid cell. Membrane allows lateral movement at the proteins

Middle lamellae works as cementing maternal between two cells and consists of mg-pectate and Ca – pectate

In anaphase one homologous chromosomes gets separated

Crossing over occurs in pachyfene phase of prophase - I

Due to positive root pressure in late night water ooze out from hydathode in the form at droplet called guttation

In chemi-osmosis due to the movement of proton across the membrane, ATP gets generated

Endergonic – Energy consuming

Photochemical – Light reaction

Anabalic – Synthesis

Reductive process – Reduction of CO₂

As O₂ final electron acceptor water in forms at the end of ETS.

In pruning auxin arialibility is lers and cytokinin induces the branching

Linkage can only from due to presence at gene close together (Complete linkage)

According to chargaffs rule, purins and pyrimidine ratio in same of a species

Lactose or alolactose works as inducer in lac – operon

In MOET cattle is administered with FSH to induce super ovulation

Key stone species influences many other species alone

ET nino effect is warming up of pacific ocean

Fasciola being a flatworm is Triploblastic

XI NCERT pg 213 2nd last para

XI NCERT pg 55,table

XII NCERT pg 201 last line

XI NCERT pg 57, all are bony fishes

XI NCERT supplementary material

XI NCERT pg 58, lateral line system is in aquatic vertebrates to detect pressure changes
148. XI NCERT collagen present in outermost layer to provide little toughness. Elastin is in tunica media.
149. XI NCERT pg 102, diagram
150. XII NCERT pg 170, 1st para last line
151. XI NCERT pg 305
152. XII NCERT pg 158, Smack means heroin which is a depressant and not a hallucinogen.
153. XI NCERT pg 145 second figure
154. XII NCERT pg 154 last line. Asthma is a respiratory disorder, an allergy
155. XI NCERT pg Biomolecules. Nucleotides with increasing mol wt.
156. XII NCERT pg 136, 137. It's a type of genetic drift.
157. XI NCERT pg 159, 2nd last para last line
158. XII NCERT pg 141
159. XI NCERT pg 263, 1st para, last line
160. XII NCERT pg 134, 137, Natural selection acts via differential reproduction.
161. XI NCERT pg 265, 2nd para
162. XII NCERT pg 63, 1st para
163. XI NCERT pg 273
164. XI NCERT pg 323, Nose in brief
165. XI NCERT pg 274, 2nd para. Oxygenation needs high PO2
166. XI NCERT pg 334, Grave's disease is hyperthyroidism that causes increased BMR, hence low body wt.
167. XI NCERT pg 283
168. XII NCERT pg 53, 1st para
169. XI NCERT pg 282
170. XII NCERT pg 50. Bleeding is due to reduced progesterone as corpus luteum regresses into corpus albicans.
171. XI NCERT pg 291, 1st para, last line
172. XII NCERT pg 46, 2nd para. First line. Vagina is internal secondary sex organ
173. XI NCERT pg 293 last para
174. XI NCERT pg 333, 2nd para last line, XII NCERT pg 50, 51
175. XI NCERT pg 308
176. XI NCERT pg 337
177. XI NCERT pg 320 figure
178. XI NCERT pg 297
179. XI NCERT Neural control
180. XI NCERT pg 317