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1. Correct option is (1)
Solution:
Soft Iron is an example of soft ferromagnet. So Magnetic permeability is high and retentivity and coercive force are small.

2. \[ f = ma = 4 \times 5 = 20 \]
\[ W = f \times s = 20 \times \frac{1}{2} \times 5 \times 4 = 200 J \]

3. Correct option is (1)
Solution:
we know \( \tau = \frac{L}{R_{eq}} \) \( \ldots (1) \)

\[ R_{eq} = \frac{R \times 500}{R + 500} \Rightarrow \text{By eqn } (1) \]

\[ \Rightarrow 10 \times 10^{-6} = \frac{4 \times 10^{-3}}{R(500)} \]

\[ \Rightarrow R = 2000 \, \Omega = 2 \, \text{K} \Omega \]

4. \[ m_1 = M = \frac{4}{3} \pi r_1^3 \rho \]
\[ m_2 = 8M = \frac{4}{3} \pi r_2^3 \rho \]

\[ V_1 = \frac{r_1^2}{r_2^2} \Rightarrow \frac{1}{n} = \frac{1}{4} \Rightarrow n = 4 \]

5. Correct option is (3)
Solution:
Here intensity, \( I = \frac{\text{power}}{\text{area}} \)

\[ = \frac{100 \times 2.5}{4 \pi (3)^2 \times 100} = \frac{2.5}{36 \pi} \, \text{W/m}^2 \]

We know, \[ I = \frac{1}{2} \varepsilon_0 E_0^2 C \]

or \[ E_0 = \sqrt{\frac{2I}{\varepsilon_0 C}} = \sqrt{\frac{2 \times \frac{2.5}{36 \pi}}{\frac{1}{4 \pi \times 9 \times 10^{-9} \times 3 \times 10^8}}} = 4.08 \, \text{V/m} \]
6. \[ 8T = 140\text{N} \quad (1) \]

7. **Correct option is (2)**

**Solution:**

For an open organ pipe, \( f = \frac{v}{2L} = 480 \text{Hz} \)

For closed organ pipe, \( f = \frac{v}{4L'} = 480 \text{Hz} \)

Therefore, \( 2L = 4L' \Rightarrow L' = \frac{L}{2} \)

8. \[ \lambda = \frac{h}{m} \Rightarrow K_{E_1} = \frac{150}{\lambda} \Rightarrow K_{E_2} - K_{E_1} = \frac{(150 - 150)}{2} = 450\text{J} \]

9. \[ \nu = \frac{3PV}{m} = \frac{3 \times 2.4 \times 10^4 \times 10 \times 10^{-3}}{20 \times 10^{-3}} = 600\text{m/s} \]

10. The absolute zero is the temperature at which motion of all molecules ceases.

11. \[ \Delta l = \frac{F \ell}{AY} \]

\[ \frac{l_1}{l_2} = \frac{l_1 r_2^2}{r_1^2 l_2} = \frac{1}{2} \quad \Rightarrow \quad \frac{l}{4} = \frac{1}{8} \quad (3) \]
12. Correct option is (1)  
**Solution:**  
\[ t_1 = \sqrt{\frac{2(50)}{g}} = \frac{10}{\sqrt{g}} \]  
\[ t_2 = t - t_1 = \sqrt{\frac{2(100)}{g}} - \sqrt{\frac{2(50)}{g}} = \frac{10}{\sqrt{g}}(\sqrt{2} - 1) \]  
\[ t_s = \frac{1}{\sqrt{2} - 1} = \sqrt{2} + 1 \]

13.  
\[ \rho_{t} = \frac{\rho}{\rho_{f}} = \left( \frac{m}{3} \right) \left( 100 \right) = \frac{m}{3} - \frac{m}{3} \left( 100 \right) + \frac{m}{3} \left( v \right) \]  
\[ \vec{v} = 300 \hat{i} \text{ m/s} \]

14. Correct option is (3)  
**Solution:**  
\[ \tan \theta = \frac{4H}{R} = \frac{4(4)}{12} = \frac{4}{3} \quad \Rightarrow \theta = 53^\circ \]  
\[ H = \frac{u^2 \sin^2 \theta}{2g} \]  
\[ u^2 = \frac{2gH}{\sin^2 \theta} = \frac{2(g)(4)}{\sin^2 53^\circ} = \frac{8 g}{\frac{16}{25}} = \frac{25 g}{2} \]  
\[ u = 5 \sqrt{\frac{g}{2}} \]

15.  
\[ P_i = P_f \Rightarrow (m_i + m_f) \vec{v} = m_i \vec{v}_i + m_f \vec{v}_f \]  
\[ \begin{align*} \text{(3)} \end{align*} \]

16. Correct option is (3)  
**Solution:**  
\[ v = \sqrt{Rg} = \sqrt{20 \times 10} = \sqrt{200} \text{ m/s} \]

17.  
\[ \int_{V}^{v} dB = \int_{B}^{v} d\vec{v} \Rightarrow \begin{align*} \int_{v}^{V} dB &= \int_{B}^{v} d\vec{v} \end{align*} = -40V. \]  
\[ \begin{align*} \text{(2)} \end{align*} \]
18. 
$$V_{rel} = V_1 + V_2, \quad a_{rel} = a_1 + a_2$$

For relative motion: 
$$V_{rel}^2 = v_1^2 + 2 a_{rel} S_{rel}$$

For max. initial separation: 
$$V_{rel} = 0$$

$$\left( V_1 + V_2 \right)^2 + 2 \left( - \left( a_1 + a_2 \right) \right) \Delta x_{max} = 0$$

$$\Delta x_{max} = \frac{\left( V_1 + V_2 \right)^2}{2 \left( a_1 + a_2 \right)} \quad (2)$$

19. 
$$\gamma = (\vec{A} + \vec{B}) \cdot (\vec{A} + \vec{B})$$

$$= (\vec{A} + \vec{B}) \cdot (\vec{A} + \vec{B}) = \vec{A} \vec{A} + \vec{A} \vec{B} + \vec{B} \vec{A} + \vec{B} \vec{B}$$

$$= \vec{0} + \vec{A} \vec{B} + \vec{B} \vec{A}$$

= XOR \quad (3)$$

20. Correct option is (3)

Solution:

<table>
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<th>Isothermal</th>
<th>Adiabatic</th>
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<td>PV = Constant</td>
<td>PV = Constant</td>
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<td>p ↑ V ↓</td>
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And slope of adiabatic is more, therefore A is adiabatic and B is isothermal.

21. 
$$h = 2 \cdot \frac{1}{2} \cdot \text{cos} \theta \cdot \frac{1}{3} \cdot \frac{1}{2} \cdot \frac{1}{2} \Rightarrow h \propto \text{cos} \theta \quad (4)$$

22. Correct option is

Solution:

$$V = \frac{dS}{dt} = 2N t^3$$

at t = 1 sec, $$V_1 = 2N$$

23. 
$$\tan \theta = \frac{V_2}{g} \Rightarrow \tan \theta = \frac{V_2}{10} \Rightarrow V = 30 \text{ m/s} \quad (4)$$
24. Correct option is (4)
Solution:
Area = \( \frac{1}{2} (20 \times 10^3) (4 \times 10^3) = \frac{1}{2} (v - u) \)
v = 80 m/s

25.
\[ pV = RT \]
Here \( T \) is constant \( \therefore pV = \text{Constant} \)

26.
\[ v = \frac{u^2}{a} \]
\[ \frac{m}{v^2} = \frac{\mu}{2} \]
\[ \mu = \frac{p^2}{4v^2} \]
\[ m = \frac{p^2}{2v^2} \]

27. Solution:
\( W_g + W_{air} = \Delta KE \)
\( U_i - U_f + W_{air} = KE_f - KE_i \)
\( 0 - (1)(10)(18) + W_{air} = 0 - \frac{1}{2}(1)(20)^2 \)
\( -180 + W_{air} = -200 \)
\( W_{air} = -20 \text{ J} \)

28. \[ I = MK^2 \Rightarrow KE = \frac{1}{2} MK^2 = \frac{1}{2} Mr^2 \Rightarrow K = \sqrt{\frac{1}{4} \cdot 4} \]

29. From graph, \( F = -\frac{27\pi}{3} \Rightarrow \omega = -9 \pi \)
\( \omega^2 = 9 \Rightarrow \omega = 3 \Rightarrow T = \frac{2\pi}{3} \text{ s} \)

30. Solution:
Case 1: \( E' = \frac{E}{10} \frac{10}{10} \ell_0 \)
Case 2: \( E' = \frac{E}{1 + 9 + 5} \frac{5}{10} \ell = \frac{E}{15} \frac{5}{10} \ell \)
31. \[ \frac{E}{10} \frac{\ell}{20} = \frac{E}{5} \frac{\ell}{15} \]

\[ \ell = \frac{20}{E} \frac{\ell}{10} = \frac{15}{E} \frac{\ell}{5} = 1.5 \ell \]

32. Parallel wires having current in same direction attract each other. \[ F_{BC} > F_{BA} \] (2)

33. Correct option is (3)

Solution:

\[ v = \frac{1}{t} = \frac{1}{2} \text{ m/s} \]
(34) \[ \Delta K.E. = \Delta P.E. \]
\[ \frac{1}{2} m v^2 = \frac{m g h}{(1+\gamma/R)} \]
\[ \Rightarrow \frac{1}{2} \frac{G M}{R} = \frac{G M}{R^2} \left( \frac{h}{1+\gamma/R} \right) \Rightarrow R + h = 2h \]
\[ \Rightarrow h = R \]  
(35) Power factor \[ \cos \phi = \frac{V_R}{V_{tot}} = \frac{80}{\sqrt{(80)^2 + (100-40)^2}} \]
\[ = 0.8 \]  
(36) Distance between the first dark fringes on either side of central maxima = width of central maxima
\[ \frac{d}{2} = \frac{2\pi D}{\lambda} = \frac{2\times \lambda_0}{\lambda_0} \times \frac{1 \times 10^{-3}}{1 \times 10^{-3}} \]
\[ = 2.4 \text{ mm} \]  
(37) \[ M_p = \frac{f_e}{f_0} \left( 1 + \frac{D^2}{D} \right) = \frac{100}{10} \left( 1 + \frac{10}{25} \right) = -1.4 \]  
(38) There is no flux change through loop
(39) For sliding cylinder \[ a_s = \alpha \sin \theta \]
(40) For rolling cylinder \[ a_r = \frac{2 \sin \theta}{1 + \sqrt{2}} \]
(41) Electric field lines do not form closed loop.

(47) \[ 0.12V + 0.12 \times 1.5 = 0.12 \times 3 \]
\[ \Rightarrow 0.18V = 0.12 \times 1.5 \]
\[ V = \frac{0.12 \times 1.5}{0.18} \]
43. \[ y = \frac{y_1 y_2}{y_1 - y_3} \Rightarrow (x_1 = x_2) \]  

44. \[ \frac{hc}{\lambda_A} = k_a + w \Rightarrow \frac{hc}{2\lambda_B} = k_a + w \]
\[ \frac{hc}{\lambda_B} = 2k_a + 2w \]  
\[ k_B = k_a + w \]  
\[ 2k_a + 2w = k_B + w \]
\[ k_B - k_a = \frac{w}{2} \]
\[ k_a < k_B \]

45. 
\[ \omega = 2\pi \times 10^6 \Rightarrow f = 10^6 \text{Hz} \quad \text{and} \quad k = \frac{\pi \times 10^2}{200 \text{m}} \]

46. (4) 
\[ P = \frac{1}{3} m u^2 \]
\[ P = \frac{n \mu e}{n \mu e} \left( \frac{N_9}{1000} \right) \times 2 \times 2 = 8 \]

47. (3) 
For 4P electron \[ n = 4 \]
\[ l = 1 \]
\[ m = -1, 0, +1 \]
\[ m_s = \pm \frac{1}{2} \]

As \( l = 1 \), \( m \) cannot be equal to 2. Therefore set (c) of quantum number is not possible.
48. (4)

One unit cell of NaCl contains 4 NaCl units i.e. has mass

\[
\frac{4 \times 58.5}{6.02 \times 10^{23}} \text{ g}
\]

Number of unit cells in 1g

\[
\frac{6.02 \times 10^{23}}{4 \times 58.5} = 2.57 \times 10^{21}
\]

49. (3)

Due to appearance of aromaticity, the enol form shows maximum stability.

50. (4)

\[
\begin{align*}
\text{K}_2\text{Cr}_2\text{O}_7 & \rightarrow 2\text{K}_2\text{CrO}_4 + \text{Cr}_2\text{O}_3 + \frac{7}{2} \text{O}_2 \\
2\text{KClO}_3 & \rightarrow 2\text{KCl} + 3\text{O}_2 \\
\text{(NH}_4)_2\text{Cr}_2\text{O}_7 & \rightarrow \text{N}_2 + 2\text{Cr}_2\text{O}_3 + 2\text{H}_2\text{O} \\
2\text{Pb(NO}_3)_2 & \rightarrow 2\text{PbO} + 4\text{NO}_3 + \text{O}_3 \\
2\text{AgNO}_3 & \rightarrow \text{2Ag} + 2\text{NO}_2 + \text{O}_2
\end{align*}
\]

51. (2)

52. (2)

BF₃ has sp² hybridization and 120° bond angle (maximum). Its structure is planar.

Higher the electronegativity of central atom (in sp² hybridized) larger the bond angle but presence of lone pair of electrons decreases the bond angle. Greater the number of lone pair of electrons lower the bond angle.

53. (3)

54. (2)

As the size of the central atom M in HₓM decreases from O to Te, the H-M bond becomes weaker and breaks easily on heating. Hence, H₂O is most stable and H₂Te is least stable.
55. (4)
DMG gives red precipitate with Ni$^{2+}$ ions but not with Ni metal.

56. (1)
In K$_3$CoF$_6$, the hybrid state of Co is sp$^3$d$^$ giving a high spin complex.

57. (1)
![Chemical Structure](image)

OT$_5$H$_2$C-SC$_5$ is a better leaving group

58. (3)
Polyhydroxy butyrate - CQ - B - hydroxy valerate (PHBV) is a biodegradable polymer.

59. (2)
Norethindrone is not a pheromone. It is a progestin hormone. It is used for treating certain menstrual and uterine problems.

60. (3)

61. (1)
CCl$_4$ molecule being symmetrical has zero dipole moment.

![Chemical Structures](image)

CH$_3$Cl ($\mu = 1.03$ D)  

CH$_2$Cl$_2$ ($\mu = 1.62$ D)  

CHCl$_3$ ($\mu = 1.03$ D)
62. (2)
Both CN⁻ and N₂ molecules have the same MO diagrams but differ only in bond polarity. Thus N₂ is inert due to absence of bond polarity while CN⁻ ion is reactive due to presence of bond polarity.

63. (3)
0.05 M solution of A = 3 x 0.05 M ions = 0.15 M ions
0.1 M solution of B (non-electrolyte) has osmotic pressure = 2P
∴ 0.15 M solution will have osmotic pressure
\[ \frac{2P}{0.1} \times 0.15 = 3P \]

64. (3)

\[ \Delta G^\circ = -RT \ln K \] and
\[ \Delta G^\circ = \Delta H^\circ - T \cdot \Delta S^\circ \]

Hence,
\[ RT \ln K = T \cdot \Delta S^\circ - \Delta H^\circ \]

or
\[ \ln K = \frac{T \cdot \Delta S^\circ - \Delta H^\circ}{RT} \]

65. (4)
\[ \Delta_{298} = 4 - 3 = 1 \]
\[ K_p = \frac{1}{K_c (RT)^{\Delta H}} \]
\[ 0.05 = K_c (1000 \, \text{R}) \]

or
\[ K_c = \frac{5 \times 10^{-5}}{\text{R}} \]

66. (2)

67. (1)
Ni combines with CO at 323 K to form Ni (CO)₄ which decomposes thermally at 423 K to give pure Ni metal.
\[ \text{Ni(CO)}_4 \xrightarrow{\Delta_{298} \text{K}} \text{Ni} + 4 \text{CO} \uparrow \]
68. Isehypospheric acid ($H_4P_2O_8$)

Diphosphorus acid ($H_2P_2O_4$)

Diphosphoric acid ($H_4P_2O_7$)

Hypophosphoric acid ($H_4P_2O_6$)

69. Number of corner atom ($A$) = $8 \times \frac{1}{8} = 1$

Number of face centre atom ($B$) = $6 \times \frac{1}{2} = 3$

Hence, formula of the compound is $AB_3$.

70. $P = XAP^0$

$X_A = \frac{P}{P^0} = \frac{0.60}{0.80} = 0.75$

$X_B = 1 - 0.75 = 0.25$

71. $E_{\text{cell}}^0 = 0.80 \text{ V}$

$\Delta G = -nF E_{\text{cell}}^0$

$= -2 \times 96500 \times (-0.80) \text{ J} = +154.4 \text{ KJ}$

72. $Zn + Cu^{2+} \rightarrow Zn^{2+} + Cu$

$E_{\text{red}} = E_{\text{cell}}^0 = -\frac{0.0591}{2} \log \left[ \frac{[Zn^{2+}]}{[Cu^{2+}]} \right]$

i.e. $0.0591 = -\frac{0.0591}{2} \log \frac{C_1}{C_2}$

$log \frac{C_1}{C_2} = -2$

$\frac{C_1}{C_2} = \text{Antilog}^2 = 10^{-2}$
73. (4)
\[ \text{[Cr(NH}_3\text{)}_5\text{NO}_2\text{]Cl}_2 \] Nitropentaamine chromium III chloride exhibits linkage isomerism as \(-\text{NO}_2\) is ambidentate ligand.
Isomer is \[ \text{[Cr(NH}_3\text{)}_3\text{ONO]}\text{Cl}_2 \]

74. (2)
\[ \text{Ionic radii } = \frac{1}{2} \]
The values of Z for different elements are as
Yb = 70, Pm = 61, Ce = 68, La = 57

75. (2)
Alum is widely used to purify water since it coagulates the mud particles.

76. (3)

77. (1)
\[ 0.12 \text{ PPM} = 0.12 \text{ g ln } 10^4 \text{ mL} \]
\[ [H^+] = [SO_4^{2-}] \]
\[ \therefore [H_2SO_4] = \frac{0.12}{64} \times 10^{-9} \text{ m} \]
\[ \text{pH} = 5.7 \]

78. (1)
\[ \text{NaOH} + \text{AgNO}_3 \rightarrow \text{AgOH} + \text{NaNO}_3 \]
(Decomposes)
White crystal
\[ 2\text{AgOH} \rightarrow \text{Ag}_2\text{O} + \text{H}_2\text{O} \]
(brown)
(X) is a powerful cauterity and breaks down the proteins of skin flesh to a pasty mass i.e. X is caustic soda.

79. (2)
Larger the value of ‘a’, greater the attractive forces.
80. (3)
Carbon monoxide has the structure;
\[ \text{C} = \text{O} \]
If forms metal-carbon bond and thus donate its lone pair on carbon to metal in metal carbenyls and behaves as a Lewis base.

81. (1)
\[ \begin{align*}
\text{VO}_3^+ & \rightarrow \text{VO}_2^{+5} \\
\text{MnO}_4^- & \rightarrow \text{Mn}_2^{+5} \\
\text{5VO}_3^{+2} & = 1\text{MnO}_4^- \\
1\text{VO}_3^{+2} & = \frac{1}{5}\text{MnO}_4^- = 0.2
\end{align*} \]

82. (2)
On comparing the equation of K with
\[ K = A e^{-\frac{Q}{RT}} \]
\[ \frac{E_a}{RT} = \frac{29000K}{T} \]
\[ E_a = (29000 K)R = 241 \text{ KJ mol}^{-1} \]

83. (1)

84. (2)
Carbon molecule is diamagnetic in nature because it has all the electrons paired.
\[ C_2 : KK \sigma (2s)^2 \sigma^*(2s)^2 \pi (2p)^2 \pi (2p)^2 \]

85. (4)
\[ \Delta S = \frac{\Delta H_f}{T_f} = \frac{6000}{273} = 21.98 \text{ JK}^{-1}\text{mol}^{-1} \]

86. (3)
\[ \text{pH} = 12 \text{ means } [\text{H}^+] = 10^{-12} \]
or \[ [\text{OH}^-] = 10^{-2} \text{ M} \]
or \[ [\text{NaOH}] = 10^{-2} \text{ M} \]
\[ = \frac{M}{100} \]
\[ = \frac{1}{100} \times 40 \text{ gL}^{-1} = 0.4 \text{ gL}^{-1} \]

87. (1)

88. (4)
A colloidal solution of cellulose nitrate in ethyl alcohol is called collodion.

89. (1)

90. (4)
91. Living world – NCERT Pg – 13
92. Biological classification – NCERT Pg – 26
93. Biological classification – NCERT Pg – 25
94. Plant kingdom – NCERT Pg – 32, 33
95. Plant kingdom – NCERT Pg – 38
96. Cell the unit of life – NCERT Pg – 130
97. Cell division – NCERT Pg – 167
98. Cell division – NCERT Pg – 163
100. Morphology – NCERT Pg – 68
101. Morphology – NCERT Pg – 81
102. Morphology – NCERT Pg – 77
103. Anatomy – NCERT Pg – 87
104. Anatomy – NCERT Pg – 96
105. Transport in plants – (As Electrolytes dissociate into their component ions, the increased no. of dissolved particles as compared to non-electrolyte
106. Transport in plants – Water lost in guttation is in liquid phase, thus mixed with salts
107. Mineral nutrition – NCERT Pg – 195
108. Mineral nutrition – NCERT Pg – 199
109. Photosynthesis – NCERT Pg – 214
110. Photosynthesis – NCERT Pg – 217
111. Photosynthesis – NCERT Pg – 223
112. Respiration – NCERT Pg – 233
113. Respiration – NCERT Pg – 237
114. Respiration – NCERT Pg – 232
115. Plant growth & Development – NCERT Pg – 245
116. Plant growth & Development – NCERT Pg – 246
117. Plant growth & Development – NCERT Pg – 247
118. Reproduction in organism – NCERT Pg – 9
119. Sexual reproduction in flowering plants – NCERT Pg – 22
120. Sexual reproduction in flowering plants – NCERT Pg – 22
121. Sexual reproduction in flowering plants – NCERT Pg – 28
122. Principles of Inheritance and Variation – Rrtextrrt
   F1 : RrTt; RrTt
   50%Tall with red fruit
123. Principles of Inheritance and Variation – 9 Genotypes of mendelian dihybrid cross are :
   RRyy ; RrYy ; RrYy ; RrYy ;
   RrYy ; RrYy ; rryy
124. Principles of Inheritance and Variation – The given pedigree is autosomal recessive trait
125. Principles of Inheritance and Variation – Parents are Heterozygous
   Aa × Aa
   The possible combination of progeny are : AA;Aa;aa
   1/3 is homozygous normal
126. Molecular basis of inheritance – NCERT Pg – 99
127. Molecular basis of inheritance – NCERT Pg – 115
128. Molecular basis of inheritance – NCERT Pg – 119
129. Strategies for Enhancement in Food Production – NCERT Pg – 173
130. Strategies for Enhancement in Food Production – NCERT Pg – 176
131. Microbes in human welfare – NCERT Pg –
132. Organisms and Populations – NCERT Pg – 229
133. Organisms and Populations – NCERT Pg – 235
134. Ecosystem – NCERT Pg – 254
135. Ecosystem – Producer – DEER – Lion
   20J
   2J
   0.2J
136. Cyclostomes are vertebrates that are jawless.
137. Pleurobrachia being a Ctenophores are exclusively marine.
139. Enterogastrone or GIP secreted by G cells of duodenum that inhibits secretion of gastric juice and stomach motility.
141. Calcium is the essential mineral for contraction.
142. Lactose on hydrolysis yields glucose and galactose.
147. Cerebrum is part of Forebrain. Cerebellum part of hindbrain and has arbor vitae.
150. Rennin is a proteolytic enzyme secreted in gastric juice of infants.
155. Adenylic acid is a nucleotide made of adenine, ribose sugar and phosphate group.
160. Life originated as per Theory of chemical evolution only when Earth’s atmosphere was reducing.
162. Secondary oocyte matures ie completes its meiosis in fallopian tube during fertilization.
168. Breathing and exchange of gases, NCERT pg 271, figures (easy)
169. Chemical control and coordination, NCERT pg 333, Simmond’s disease – Adults, Acromegaly- hypersecretion of GH, Diabetes insipidus is due to ADH deficiency which is hormone of posterior lobe of pituitary (medium)
170. Chemical control and coordination, NCERT, pg 337, 2nd para, Cortisol is a glucocorticoid and not a mineralocorticoid.(medium)
171. Biomolecules, NCERT pg 144 (easy)
172. Digestion and absorption, NCERT, pg 257, (easy)
173. Neural control and coordination, NCERT Cornea- Curved transparent membrane for refraction of light.(difficult)
174. Body fluids and circulation, NCERT, pg 284,285 (medium)
175. Locomotion and movement, NCERT, pg 326 1st para (easy)
176. Neural control and coordination, NCERT, pg 326, 1st para (easy)
177. Excretory products and their elimination, NCERT pg 295, 296.(medium)
178. Breathing and exchange of gases, NCERT pg 272, table (easy)
179. Animal kingdom, NCERT pg 54, Ophiura- Brittle star (medium)
180. Neural control and coordination, NCERT, Occipital lobe- Vision, Foramen magnum- Ethmoid bone, Pneumotaxic centre- Pons. (difficult)