# ENTHUSIAST, LEADER & ACHIEVER COURSE

## PHASE : ALL ENTHUSIAST, MLA, B, C, E, P, Q, R, S, T, U, V, MAZA, ZB, ZC, ZD, ZE,ZF, ZN, ZP, ZQ, ZR, ZV, ZX, ZY, ZK, MAPA, MAPB, MSP1, MSP2, LAKSHYA

## TARGET : PRE-MEDICAL 2024

Test Type : **MAJOR** Test Pattern : **NEET (UG)**

## TEST DATE : 08-04-2024

## ANSWER KEY

| Q. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A. | 2 | 1 | 1 | 3 | 3 | 3 | 3 | 1 | 1 | 3 | 4 | 2 | 4 | 2 | 4 | 3 | 3 | 4 | 3 | 3 | 2 | 4 | 4 | 3 | 4 | 2 | 3 | 3 | 2 | 2 |
| Q. | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| A. | 2 | 4 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 2 | 2 | 3 | 3 | 3 | 1 | 1 | 3 | 4 | 2 | 1 | 3 | 1 | 3 | 4 | 4 | 1 | 2 | 2 | 3 | 3 |
| Q. | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| A. | 1 | 3 | 2 | 3 | 2 | 1 | 1 | 3 | 4 | 2 | 1 | 3 | 3 | 3 | 1 | 1 | 2 | 4 | 4 | 3 | 3 | 1 | 3 | 3 | 1 | 1 | 1 | 4 | 1 | 2 |
| Q. | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| A. | 4 | 3 | 4 | 3 | 4 | 1 | 2 | 1 | 1 | 3 | 4 | 1 | 1 | 3 | 4 | 3 | 4 | 4 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 4 | 2 | 1 | 1 | 1 |
| Q. | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 |
| A. | 1 | 1 | 2 | 2 | 4 | 1 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 3 | 1 | 4 | 3 | 3 | 3 | 2 | 1 | 1 | 3 | 1 | 4 | 3 | 4 | 2 | 2 | 4 |
| Q. | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 |
| A. | 4 | 2 | 3 | 2 | 2 | 3 | 1 | 4 | 3 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 2 | 1 | 4 | 1 | 4 | 2 | 2 | 4 | 1 | 1 | 2 | 4 | 4 | 4 |
| Q. | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | | | | | | | | | | |
| A. | 2 | 1 | 3 | 1 | 3 | 3 | 1 | 3 | 2 | 4 | 3 | 1 | 3 | 1 | 1 | 2 | 2 | 4 | 2 | 2 | | | | | | | | | | |

## HINT – SHEET

### SUBJECT : PHYSICS

#### SECTION-A

**1. Ans ( 2 )**

Universal behaviour is diamagnetic behaviour.

**2. Ans ( 1 )**

Work done in rotating a dipole from $\theta_1$ to $\theta_2$ from the field direction :-

$W = MB(\cos\theta_1 - \cos\theta_2)$

$= MB(\cos 30° - \cos 45°)$

$= 4 \times 5 \times 10^{-4}\left(\frac{\sqrt{3}}{2} - \frac{1}{\sqrt{2}}\right) = 3.2\times10^{-4}J$

**3. Ans ( 1 )**

$\vec{F}_{CAD} = \vec{F}_{CD} = \vec{F}_{CED}$

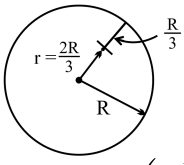
$\therefore$ Net force on frame $= 3\vec{F}_{CD} = (3)(2)(1)(4)$ $(F = ilB)$

$= 24$ N

**4. Ans ( 3 )**

As velocity is perpendicular to B, so electron performs uniform circular motion.

**5. Ans ( 3 )**




$B.2\pi r = \mu_0\left(\frac{I}{\pi R^2}\right)\pi r^2$

$\Rightarrow B = \frac{\mu_0 Ir}{2\pi R^2}$ $(\because r = \frac{2R}{3})$

$B = \frac{\mu_0 I}{3\pi R}$

**6.** **Ans ( 3 )**

$\vec{B}_1 = \frac{\mu_0 I}{4\pi\frac{r}{2}}(-\hat{i})$ semi-infinite

$\vec{B}_2 = \frac{\mu_0 I}{4\pi\frac{r}{2}}\pi\hat{k}$ semi-circle

$\vec{B}_3 = \frac{\mu_0 I}{4\pi\frac{r}{2}}(+\hat{k})$ semi-infinite

$\vec{B} = \vec{B}_1 + \vec{B}_2 + \vec{B}_3$

$\vec{B} = \frac{\mu_0 I}{2\pi r}(-\hat{i} + \pi\hat{k} + \hat{k})$

$\vec{B} = \frac{\mu_0 I}{2\pi r}[(\pi+1)\hat{k} - \hat{i}]$

**7.** **Ans ( 3 )**

$P_{out} = P_{in}$

$24 = V_P I_P = 240 \times I_P$

$I_P = \frac{1}{10} = 0.1$ Amp.

**8.** **Ans ( 1 )**

$q = CV$

$= 10 \times 10^{-6} \times [vB\ell]$

$= 10 \times 10^{-6}\,[2 \times 4 \times 1]$

$q = 80\mu C$

P will be higher potential end

so $q_A = 80\ \mu C$ ; $q_B = -80\ \mu C$

**10.** **Ans ( 3 )**

$I \sin\phi = \sqrt{3}$

$2 \sin\phi = \sqrt{3}$ ($\because I_{rms} = 2A$)

$\sin\phi = \frac{\sqrt{3}}{2}$

$\phi = 60°$

Power factor $= \cos\phi = \frac{1}{2}$

**11.** **Ans ( 4 )**

V = 75 volt means condition of resonance

So, $X_L = X_C$

$\omega = \frac{1}{\sqrt{LC}}$ or $f = \frac{1}{2\pi\sqrt{LC}}$

$\Rightarrow C = \frac{1}{4\pi^2 L f^2}$

$\Rightarrow C = \frac{1}{4 \times (3.14)^2 \times 10 \times 10^{-3} \times (500)^2}$

$\Rightarrow C = 10\ \mu F$

**12.** **Ans ( 2 )**

$V = \sqrt{(V_L - V_C)^2 + V_R^2}$

$= \sqrt{(60-30)^2 + (40)^2}$

$= 50$ V

**13.** **Ans ( 4 )**

$f = \frac{2\pi \times 10^6}{2\pi} = 10^6 Hz$

$\lambda = \frac{2\pi}{\pi \times 10^{-2}} = 200m$

**14.** **Ans ( 2 )**

$i_d = C\frac{dV}{dt}$

**15.** **Ans ( 4 )**

$\because$ Length of telescope (दूरदर्शी की लम्बाई)

$L = f_0 + f_e$

Means (अर्थात्) $50 = f_0 + f_e$ ...(1)

Magnifying power (आवर्धन क्षमता)

$M = \frac{-f_0}{f_e} = -9$ or $f_0 = 9\ f_e$ ...(2)

from (1) & (2) $f_0 = 45$ cm & $f_e = 5$ cm

**16.** **Ans ( 3 )**

$m = m_o \times m_e \Rightarrow m = m_o \times \left(1 + \frac{D}{f_e}\right)$

$\Rightarrow 100 = 10 \times \left(1 + \frac{25}{f_e}\right) \Rightarrow f_e = \frac{25}{9}$ cm

**17.** **Ans ( 3 )**

$P_1 = +\frac{100}{f_1} = -5P$

$P_2 = +\frac{100}{f_2} = +10D$

$P = P_1 + P_2 = 5D$

**18.** **Ans ( 4 )**

$m = \frac{f}{f+u} \Rightarrow -2 = \frac{+20}{+20+u}$

$u = -30$ cm

**19.** **Ans ( 3 )**

$\mu = 1.6$, $R_1 = +60$ cm, $R_2 = \infty$

$\frac{1}{f} = (\mu - 1)\left(\frac{1}{R_1} - \frac{1}{R_2}\right)$

$\frac{1}{f} = (1.6 - 1) \times \frac{1}{60} = 0.6 \times \frac{1}{60} \Rightarrow f = 100$

**20.** **Ans ( 3 )**

$\delta_{min} = 2i - A = 2(38°) - 40° = 36°$

**21. Ans ( 2 )**

$$\frac{1}{v}+\frac{1}{u}=\frac{1}{f}$$

$\because$ R = 22 cm

$\therefore$ f = 11 cm

Now, $\frac{1}{v}+\frac{1}{u}=\frac{1}{f}$

$$\frac{1}{v}+\frac{1}{-14}=\frac{1}{11}$$

v = +6.16 [Back side of mirror]

**22. Ans ( 4 )**

$\lambda_{sound} > \lambda_{light}$

**24. Ans ( 3 )**

Change in angular momentum

$$\Delta L = L_2 - L_1 = \frac{n_2 h}{2\pi} - \frac{n_1 h}{2\pi}$$

$$= \frac{6.6\times10^{-34}}{2\times3.14}\times(5-4)$$

$$= 1.05\times10^{-34}\ \text{J.S}$$

**25. Ans ( 4 )**

For 4 g deutron

$E_1 \longrightarrow 3.2\ \text{MeV}\times N_A$

For 2000 g deutron

$$E_2 \longrightarrow \frac{3.2}{4}\times 2000\text{MeV}\times N_A$$

$$= 1.6\times10^{9}\times6\times10^{23}\ \text{eV}$$

$$\approx 10^{33}\ \text{eV}$$

**26. Ans ( 2 )**

$[E_B + 80\times8] - [200\times7.5] = 120$

$\Rightarrow$ $E_B = 120 + 200\times7.5 - 80\times8$

$= 980$ MeV

**27. Ans ( 3 )**

$$\lambda = \frac{h}{qBr} = \frac{6.6\times10^{-34}}{1.6\times10^{-19}\times0.625\times6.6\times10^{-3}}$$

$= 0.01$ Å

**28. Ans ( 3 )**

$$\lambda = \frac{h}{P} = \frac{h}{\sqrt{2mE}}$$

$$E = \frac{h^2}{2m\lambda^2}$$

$$E = \frac{(6.6\times10^{-34})^2}{2\times9.1\times10^{-31}\times(2\times10^{-10})^2}\text{J}$$

$$E = \frac{(6.6\times10^{-34})^2}{2\times9.1\times10^{-31}\times(2\times10^{-10})^2\times1.6\times10^{-19}}\text{ eV}$$

E = 37.5 eV

**30. Ans ( 2 )**

$$100 = n\times\frac{hc}{\lambda} = \frac{n\times6.67\times10^{-34}\times3\times10^{8}}{5000\times10^{-10}}$$

$$100 = \frac{n\times20\times10^{-26}}{5\times10^{-7}}$$

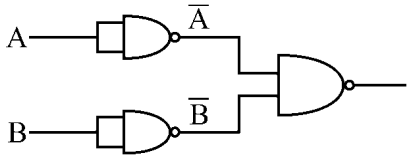
$$25\times10^{19} = n$$

$$2.5\times10^{20} = n$$

**OR**

$$n = \frac{5000\times100}{12400\times1.6\times10^{-19}} = 10^{20}$$

**31. Ans ( 2 )**




$Y = \overline{\overline{A}\cdot\overline{B}} = \overline{\overline{A}} + \overline{\overline{B}} = A + B$ OR gate

**32. Ans ( 4 )**

$$I_L = \frac{V_z}{R_L} = \frac{10}{1500}\text{A}$$

$$I = \frac{V - V_z}{R} = \frac{15-10}{500} = \frac{5}{100}\text{A}$$

$$I_Z = I - I_L = \frac{5}{100} - \frac{10}{1500} = 3.33\text{mA}$$

**33. Ans ( 1 )**

$$\frac{I_e}{I_h} = \frac{\frac{3}{4}I}{\frac{1}{4}I} = \frac{3}{1} \ \&\ \frac{V_{de}}{V_{dh}} = \frac{5}{2}$$

$$\Rightarrow \frac{n_e\, e\, A\, V_{de}}{n_h\, e\, A\, V_{dh}} = \frac{3}{1}$$

$$\Rightarrow \frac{n_e}{n_h} = \frac{3}{1}\times\frac{V_{dh}}{V_{de}} = \frac{3}{1}\times\frac{2}{5} = \frac{6}{5}$$

**34. Ans ( 2 )**

$\sigma = n_i e (\mu_e + \mu_n)$

$= (1.6 \times 10^{10}) \times (1.6 \times 10^{-19}) [1500 + 500]$

$= 5.12 \times 10^{-6} (\Omega\ cm)^{-1}$

**35. Ans ( 3 )**

$R = \frac{\Delta V}{\Delta I} = \frac{2.2 - 2}{(800 - 400) \times 10^{-3}}$

$= \frac{1}{2} = 0.5\,\Omega$

**SECTION-B**

**36. Ans ( 1 )**

$\frac{\text{Current senstivity}}{\text{Voltage senstivity}} =$

Resistance of moving coil galvanometer

$\frac{\left(\frac{S_I}{S_V}\right)_2}{\left(\frac{S_I}{S_V}\right)_1} = \frac{R_2}{R_1} = \frac{14}{10} = 1.4$

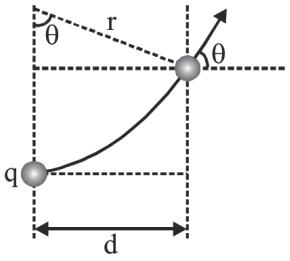
**37. Ans ( 2 )**

According to following figure $\sin\theta = \frac{d}{r}$

also $r = \frac{\sqrt{2mE}}{qB} = \frac{1}{B}\left(\sqrt{\frac{2mV}{q}}\right)$

$\therefore \sin\theta = 0.5 \times 0.1\sqrt{\frac{1.6 \times 10^{-19}}{2 \times 1.6 \times 10^{-27} \times 500 \times 10^3}}$

$= \frac{1}{2} \Rightarrow \theta = 30^\circ$




**38. Ans ( 3 )**

$V_A - V_B = \frac{LdI}{dt} + IR$

$0.5 = L8 + 0.5 \times 0.2$

$L = \frac{0.5 - 0.1}{8} = 0.05\,H$

**39. Ans ( 4 )**

$\frac{U}{V} = \frac{1}{2}\frac{B^2}{\mu_0} \Rightarrow U = \frac{1}{2}\frac{B^2}{\mu_0}V$

Here $B = \frac{2\sqrt{2}\,\mu_0 I}{\pi a}$

**40. Ans ( 2 )**

$F = \frac{2IA}{C}$

**41. Ans ( 2 )**

$\frac{U}{V} = \frac{I}{C} = \frac{B_0^2}{2\mu_0}$

$\Rightarrow B_0 = \sqrt{\frac{2\mu_0 I}{C}}$

$\Rightarrow B_{rms} = \sqrt{\frac{\mu_0 I}{C}}$

**43. Ans ( 3 )**

$r = \frac{h}{\sqrt{\mu^2 - 1}} = \frac{1}{\sqrt{\frac{16}{9} - 1}} \Rightarrow \boxed{r = \frac{3}{\sqrt{7}}\ m}$

Diameter $= 2r = \frac{6}{\sqrt{7}}\ m$

**44. Ans ( 3 )**

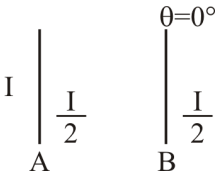
$(\mu_1 - 1)t_1 = (\mu_2 - 1)t_2$

$0.5 \times 1.8\mu m = 1.5t_2$

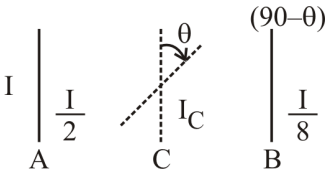
$t_2 = 0.6\mu m$

**45. Ans ( 1 )**

Case-(1)




Case-(2)




$I_C = \frac{I}{2}\cos^2\theta$ .....(i)

Also $\frac{I}{8} = I_C\cos^2(90-\theta)$ .....(ii)

from (i) and (ii)

$\frac{I}{8} = \frac{I}{2}\cos^2\theta\cos^2(90-\theta)$

$\cos\theta\sin\theta = \frac{1}{2}$

or $2\sin\theta\cos\theta = 1$

$\sin2\theta = 1$

$2\theta = 90^\circ$

$\theta = 45^\circ$

**50.** **Ans ( 1 )**

$eV_s = KE_{max} = E - \phi$ ....(1)

from the graph

$V_A < V_B < V_C$

Because E is same for all metals therefore

$\phi_A > \phi_B > \phi_C$

## SUBJECT : BOTANY

### SECTION-A

**51.** **Ans ( 3 )**
NCERT-XII Page No. – 101,100

**52.** **Ans ( 1 )**
NCERT-XII, Page No. # 117,113

**53.** **Ans ( 3 )**
NCERT-XII Page No. # 106

**54.** **Ans ( 4 )**
NCERT XII Page-No.90

**55.** **Ans ( 4 )**
NCERT XII, Page # 97

**56.** **Ans ( 1 )**
NCERT XII Pg # 92

**57.** **Ans ( 2 )**
NCERT-XII Pg. No. # 99

**58.** **Ans ( 2 )**
NCERT-XII, Pg. # 181, Para-10.1

**59.** **Ans ( 3 )**
NCERT-XII Pg. No. # 187

**60.** **Ans ( 3 )**
NCERT-XII, Page # 183

**61.** **Ans ( 1 )**
NCERT-XII, Page # 184

**62.** **Ans ( 3 )**
NCERT XII Pg. No :-263

**63.** **Ans ( 2 )**
NCERT XII Pg. # 265

**64.** **Ans ( 3 )**
NCERT-XII Pg. # 266

**65.** **Ans ( 2 )**
NCERT-XII, Pg.#261

**66.** **Ans ( 1 )**
NCERT-XII Pg.# 265 (E)

Quagga, Chichlid fish are both extinct species or group of species from Africa.

**67.** **Ans ( 1 )**
NCERT-XII, Pg. # 228

**68.** **Ans ( 3 )**
NCERT XII Pg#232

**69.** **Ans ( 4 )**
NCERT-XII Pg.: 237

**70.** **Ans ( 2 )**
NCERT-XII Page No. # 77

**71.** **Ans ( 1 )**
NCERT-XII Pg # 101, 103

**72.** **Ans ( 3 )**
NCERT-XII Pg. No. # 104

**73.** **Ans ( 3 )**
NCERT-XII Pg # 187

**74.** **Ans ( 3 )**
NCERT XII Pg. # 237

**75.** **Ans ( 1 )**
NCERT-XII, Pg. # 232

**76.** **Ans ( 1 )**
NCERT XII, Pg. # 237-238

**77.** **Ans ( 2 )**
NCERT-XII Pg # 224

**78.** **Ans ( 4 )**
NCERT-XII Pg. # 247

**80.** **Ans ( 3 )**
NCERT-XII Pg.# 231

81. **Ans ( 3 )**
NCERT-XII Page No. # 267

82. **Ans ( 1 )**
NCERT XII, Page No. 266,267

83. **Ans ( 3 )**
Only (d) is incorrect
NCERT XII Page No. # 246

84. **Ans ( 3 )**
NCERT-XII Pg. # 85

85. **Ans ( 1 )**
NCERT-XII, Pg. # 105

**SECTION-B**

86. **Ans ( 1 )**
NCERT-XII, Page No. # 83, 89

87. **Ans ( 1 )**
NCERT XII Pg # 72

88. **Ans ( 4 )**
NCERT XII Pg # 70

89. **Ans ( 1 )**
NCERT XII Page No. 85

90. **Ans ( 2 )**
NCERT-XII Page No. # 238

91. **Ans ( 4 )**
NCERT-XII, Pg. # 237

92. **Ans ( 3 )**
NCERT-XII, Pg # 235

93. **Ans ( 4 )**
NCERT-XII, Pg. # 234, 235

94. **Ans ( 3 )**
NCERT-XII Pg. No. 247

95. **Ans ( 4 )**
NCERT-XII, Pg. # 245, 247

96. **Ans ( 1 )**
NCERT-XII Pg : 223

97. **Ans ( 2 )**
NCERT-XII, Pg. # 90

98. **Ans ( 1 )**
NCERT-XII, Pg. # 82 & 83

99. **Ans ( 1 )**
NCERT-XII Pg. # 266-267

100. **Ans ( 3 )**
NCERT-XII Pg. # 71

## SUBJECT : ZOOLOGY

**SECTION-A**

102. **Ans ( 1 )**
NCERT Pg # 159

103. **Ans ( 1 )**
NCERT XII Page No. # 146 (E), 160 (H)

104. **Ans ( 3 )**
NCERT XII, Pg. # 153

105. **Ans ( 4 )**
NCERT, Pg # 140

106. **Ans ( 3 )**
NCERT Pg. # 159

107. **Ans ( 4 )**
NCERT (XII) Pg. # 63, Para-4.4

108. **Ans ( 4 )**
NCERT XII Pg. # 153-154

110. **Ans ( 3 )**
NCERT Pg # 156

113. **Ans ( 3 )**
NCERT Pg # 135(E), 146(H)

114. **Ans ( 2 )**
NCERT XIIth Pg.#140,141

117. **Ans ( 2 )**
NCERT Pg. # 118

119. **Ans ( 1 )**
NCERT XII Pg # 127

120. **Ans ( 1 )**
NCERT (XII) Pg#137/148(H) para 7.7

**121. Ans ( 1 )**

NCERT Pg. No. 208 CLASS XII

**127. Ans ( 2 )**

NCERT Page No. # 202

**129. Ans ( 3 )**

NCERT Pg. # 150

**130. Ans ( 2 )**

NCERT Pg # 210

**134. Ans ( 3 )**

NCERT Pg. No. 182

**135. Ans ( 1 )**

NCERT XII Pg # 210(E), 228(H)

**SECTION-B**

**137. Ans ( 3 )**

NCERT (E) Pg # 154

**142. Ans ( 1 )**

NCERT (XII) Pg#129/141(H) para 7.3

**143. Ans ( 3 )**

NCERT XI Pg. # 140 Para 7.9

**144. Ans ( 1 )**

NCERT Pg. # 199

**146. Ans ( 3 )**

NCERT XII, Pg. # 195, 196 (E)

215 (H)

**148. Ans ( 2 )**

NCERT Page No. # 209

**149. Ans ( 2 )**

NCERT XII, Page # 212 & 213

## SUBJECT : CHEMISTRY

**SECTION-A**

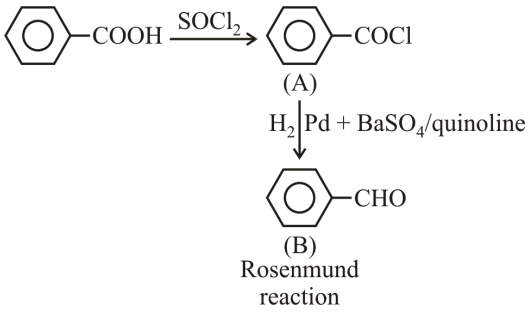
**151. Ans ( 4 )**

o, m and para product form by this method.

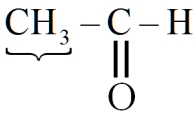
**153. Ans ( 3 )**

NCERT-XII, Pg. # 398

**154. Ans ( 2 )**

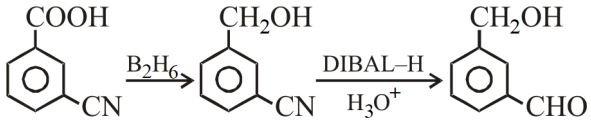



**156. Ans ( 3 )**




Responsible for formation of iodoform.

**157. Ans ( 1 )**




**159. Ans ( 3 )**

NCERT XII, Pg. # 264, Part - 2

**160. Ans ( 2 )**

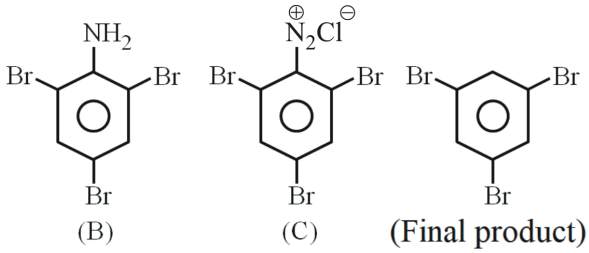
B.P. depends on H-bonding,

H-bonding probability $\Rightarrow 1° > 2° > 3°$ (not possible)

**161. Ans ( 3 )**

1° amines give carbylamine test positive.

**162. Ans ( 4 )**




**163. Ans ( 4 )**

4th option is reduction and BDC produced benzene.

**164. Ans ( 4 )**

NCERT-XII, Pg. # 442

**166. Ans ( 4 )**

Most stable carbocation formed by 4th.

**167. Ans ( 2 )**

Compound containing Nitrogen and Sulphur shows blood red colour.

**170. Ans ( 1 )**

NCERT Pg # 252

dien is tridentate ligand

**174. Ans ( 4 )**

$Br^-$ does not interfere with the chromyl chloride test, because $Br^-$ converted into $Br_2$ and liberated which leaves NaOH solution colourless.

**176. Ans ( 1 )**

Only d block cations gives Borax Bead test.

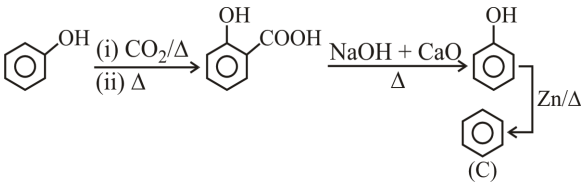
**181. Ans ( 2 )**

Colour of $BaCrO_4$ is yellow

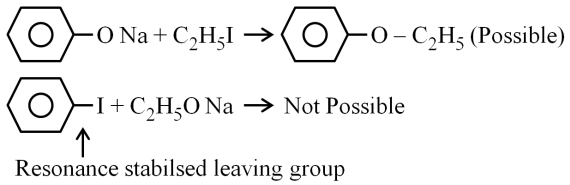
$H_2S$ is a weak acid it does not produce free $S^{2-}$ ion

**SECTION-B**

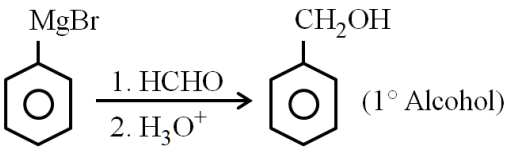
**186. Ans ( 3 )**




**187. Ans ( 1 )**



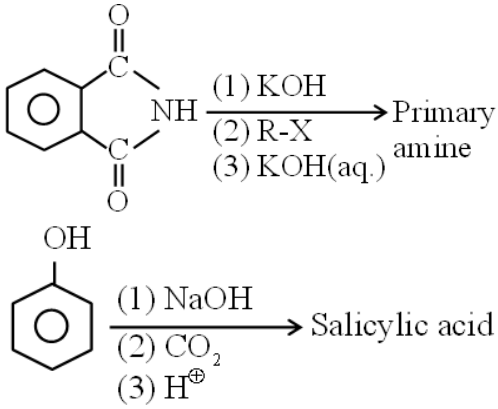

**188. Ans ( 3 )**



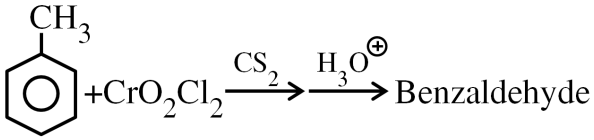

**189. Ans ( 2 )**

Both aldehyde and ketone form alcohol with Grignard's reagent.

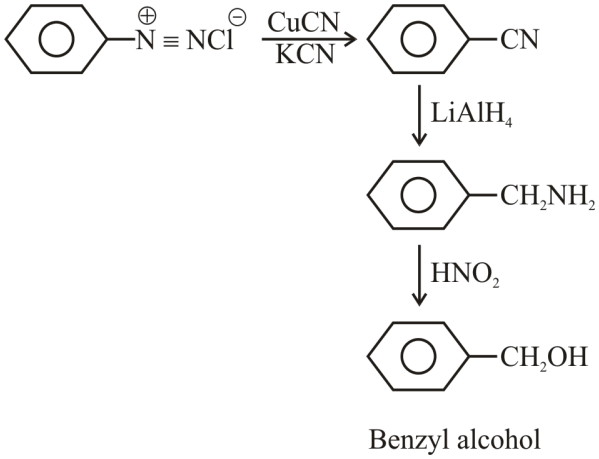
**190. Ans ( 4 )**




$RO^{\ominus} + R\text{–}X \rightarrow$ Ether




**191. Ans ( 3 )**




Benzyl alcohol

**193. Ans ( 3 )**

Kjeldahl method cannot be used in detection of nitrogen in compound with nitro group, azo group and nitrogen in ring.

**195. Ans ( 1 )**

On moving T to B higher o.s. stability

**197. Ans ( 2 )**

Eu, Sm, Yb = + 2