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JEE (MAIN) 2026

MEMORY BASED QUESTIONS & TEXT SOLUTION

SHIFT-2

DATE & DAY: 28 January 2026 & Wednesday

PAPER-1

Duration: 3 Hrs.
Time: 03:00 PM – 06:00 PM

SUBJECT: CHEMISTRY

Selections in JEE (Advanced)/ IIT-JEE Since 2002	Selections in JEE (Main)/ AIEEE Since 2009	Selections in NEET (UG)/ AIPMT/AIIMS Since 2012
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Target: JEE (Advanced) | JEE (Main) | NEET (UG) | PCCP (Class V to X)

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PART : CHEMISTRY

1. The plot of $\log_{10}$ K vs $\frac{1}{T}$ gives a straight line. The intercept and slope respectively are

(1) $c = \log A, m = -\frac{E_a}{2.303R}$ (2) $c = -\frac{E_a}{2.303R}, m = \log A$

(3) $c = -\log A, m = -\frac{E_a}{2.303R}$ (4) $c = \log A, m = \frac{E_a}{2.303R}$

Ans. **(1)**

2. Consider the following electromagnetic waves

Wavelength of A = 400 nm

Frequency of B = 10^{16} sec^{-1}

Wave number of C = 10^4 cm^{-1}

Order of energies is:

(1) $A > B > C$ (2) $B > A > C$ (3) $C > A > B$ (4) $C > A > B$

Ans. **(2)**

3. Which of the following order is correct.

(1) $HF > HI > HBr > HCl$ (Boiling point) (2) $HF > HI > HBR > HCl$ (Melting point)

(3) $HI > HF > HBr > HCl$ (Boiling point) (4) $HI > HBr > HF > HCl$ (Melting point)

Ans. **(1)**

4. Consider a reaction $A \rightleftharpoons B$. At'T'K, the equilibrium concentration of A and B are 0.3 M and 0.315 M . Now, 0.1 mol of A is added to the flask of 1 L, then equilibrium constant and equilibrium concentration of B are

(1) 1.05,0.35M (2) 0.95,0.37M (3) 1.05,0.37M (4) 0.95,0.35M

Ans. **(3)**

5. The sum of valence e^- in element with most and least metallic character among the following is : Na, P, Cl, S, O and F

Ans. **(8)**

6. Match the isostructural species

	Column-I		Column-II
(a)	XeO_3	(p)	BrF_5
(b)	XeF_2	(q)	NH_3
(c)	XeO_2F_2	(r)	I_3^-
(d)	$XeOF_4$	(s)	SF_4

(1) $a-q, b-r, c-s, d-p$ (2) $a-p, b-q, c-s, d-p$

(3) $a-q, b-r, c-p, d-s$ (4) $a-p, b-q, c-r, d-s$

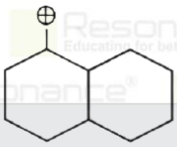
Ans. **(1)**

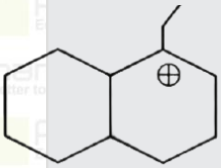
7. In ' S ' estimation, 0.314 g of organic compound gave 0.4813 g of barium sulphade. What is % of ' S ' in organic compound? [Nearest integer].

Ans. **(21)**

8. Which pair have same hyper conjugation

(I) 

(II) 

(III) 

(IV) 

(1) I, III, IV (2) IV, II, I (3) I, II, III (4) II, III, IV

Ans. **(1)**

9. Diamagnetic species among the following complexes

(1) $[Ni(CN)_4]^{2-}$ (2) $[MnBr_4]^{2-}$ (3) $[Cu(H_2O)_6]^{2+}$ (4) $[Ni(H_2O)_6]^{2+}$

Ans. **(1)**

10. Correct statement about $-NO_2$ group is $-NO_2$ is

(A) Ring deactivating group in electrophilic substitution

(B) Ring activating group in electrophilic substitution

(C) Activating for aromatic nucleophilic substitution in Aryl halides

(D) Deactivating for aromatic nucleophilic substitution in Aryl halides.

(1) A, C are correct statement (2) B, D are correct

(3) A, D are correct (4) B, C are correct

Ans. **(1)**

11. Among $Sc^{3+}, Cr^{2+}, Mn^{3+}, Co^{3+}$ number of isoelectronic species are 'n'.

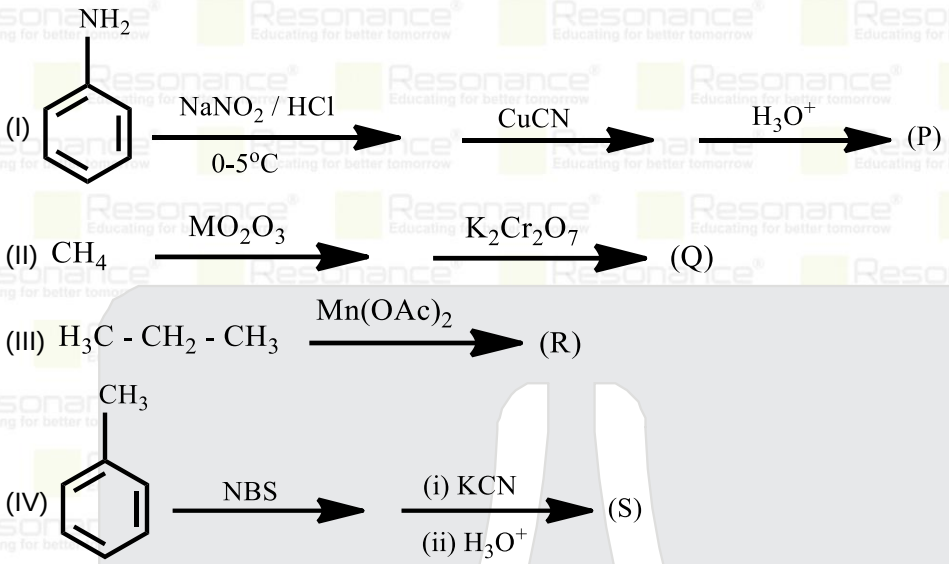
'n' moles of AgCl is obtained upon reaction with excess of $AgNO_3$ with 1 mol of $Co(en)_2NH_3Cl_3$. Number of t_{2g} electrons in the complex are

Ans. **(6)**

12. An alpha particle and proton are accelerated in a discharge tube under same potential difference of 200 KeV. The debroglie wavelength of proton is $x\sqrt{2}$ times of debroglie wavelength of α-particle. The value of x is

Ans. **(2)**

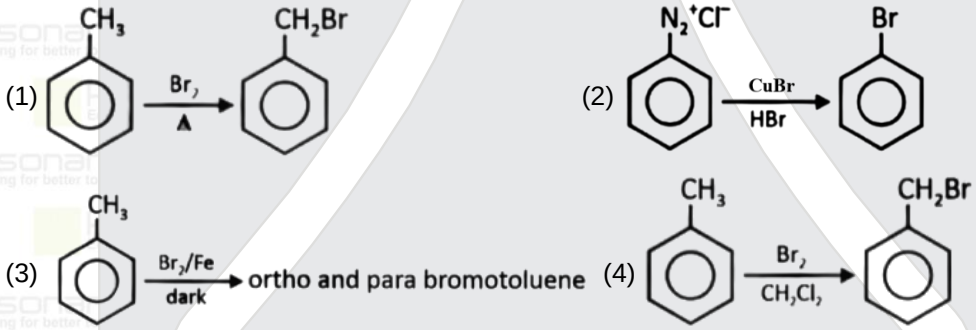
13. Find correct order of acidic strength in the following reaction products P, Q, R and S is



(1) P > Q > R > S (2) Q > P > S > R (3) Q > S > P > R (4) R > S > P > Q

Ans. (2)

14. The major organic product of which of the following reaction is incorrectly represented?



Ans. (2)

15. Total number of compounds react with Heinsberg reagent and formed product is insoluble in base

(A) N - methyl aniline

(B) N -phenyl aniline

(C) N, N-di-methyl aniline

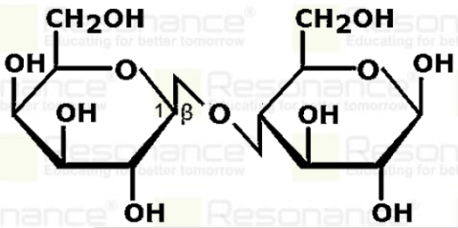
(D) Aniline

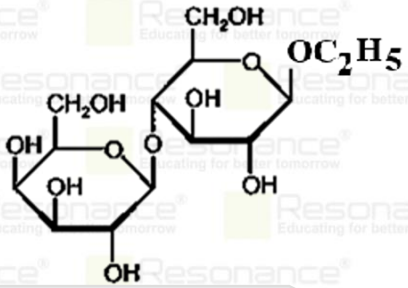
(E) Methanamine

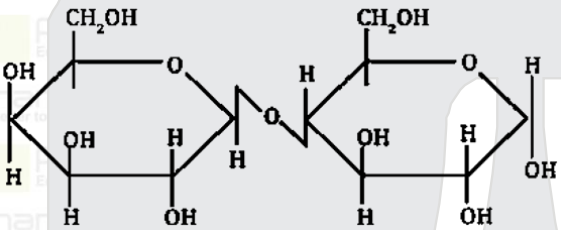
(F) N - methyl ethanamine

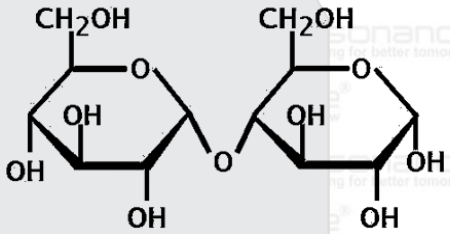
Ans. (3)

16. Which one is non-reducing carbohydrate

(1) 

(2) 

(3) 

(4) 

Ans. (2)