

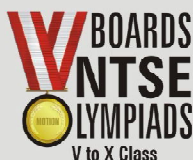
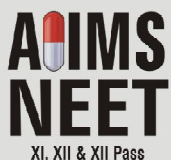
हमारा विश्वास... हर एक विद्यार्थी है स्वास

**JEE
MAIN
JAN
2020**

PAPER WITH SOLUTION

7th January 2020 _ SHIFT - 2

CHEMISTRY



24000+
SELECTIONS SINCE 2007

JEE (Advanced)

5392

(Under 50000 Rank)

JEE (Main)

16241

NEET / AIIMS

1305

(since 2016)

NTSE / OLYMPIADS

1158

(5th to 10th class)

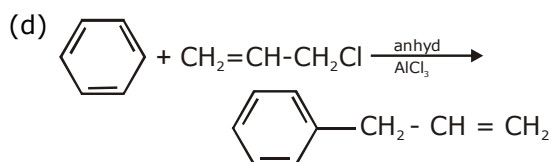
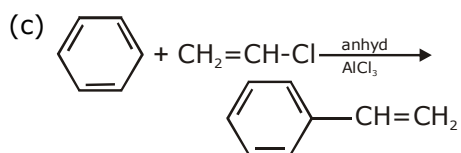
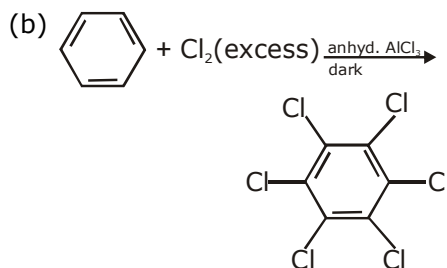
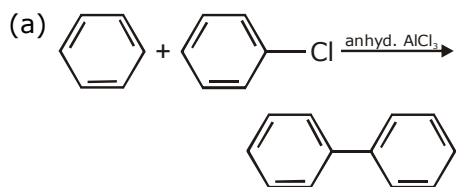
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1. Consider the following reactions :



Which of these reactions are possible ?

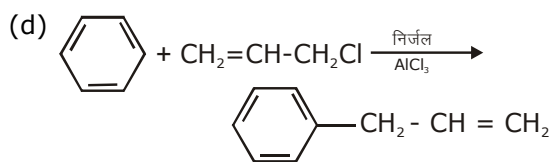
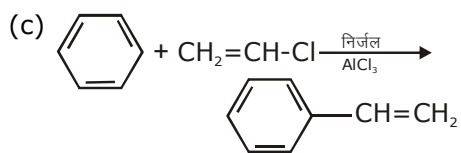
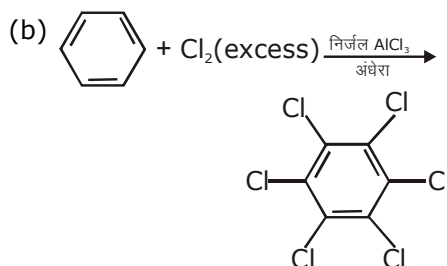
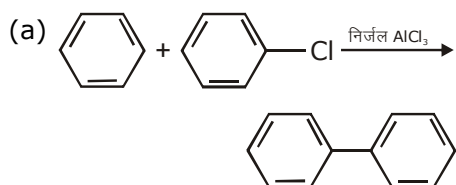
(1) (a) and (b)

(2) (b) and (d)

(3) (b), (c) and (d)

(4) (b) and (d)

1. निम्नलिखित अभिक्रियाओं पर विचार कीजिए :



इन अभिक्रियाओं में से कौन सी संभव है ?

(1) (a) तथा (b)

(2) (b) तथा (d)

(3) (b), (c) तथा (d)

(4) (b) तथा (d)

24000+
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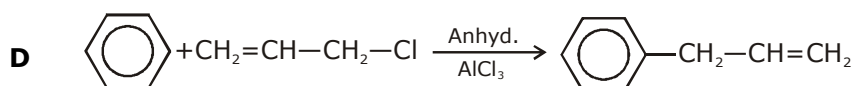
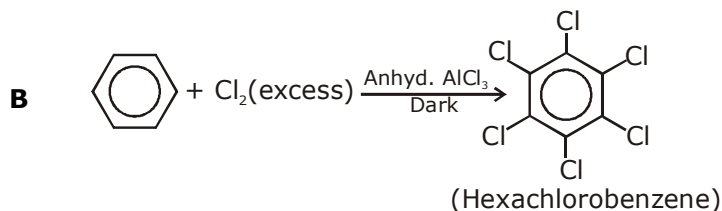
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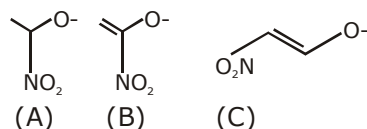
Sol. 4 (B,D)



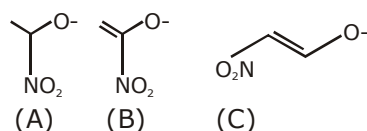
2. For the reaction $2\text{H}_2(\text{g}) + 2\text{NO}(\text{g}) \rightarrow \text{N}_2(\text{g}) + 2\text{H}_2\text{O}(\text{g})$ the observed rate expression is, rate = $K_f(\text{NO})^2[\text{H}_2]$. The rate expression for the reverse reaction is :
- (1) $K_b[\text{N}_2][\text{H}_2\text{O}]^2/[\text{NO}]$ (2) $K_b[\text{N}_2][\text{H}_2\text{O}]^2$
(3) $K_b[\text{N}_2][\text{H}_2\text{O}]$ (4) $K_b[\text{N}_2][\text{H}_2\text{O}]^2/[\text{H}_2]$
2. अभिक्रिया $2\text{H}_2(\text{g}) + 2\text{NO}(\text{g}) \rightarrow \text{N}_2(\text{g}) + 2\text{H}_2\text{O}(\text{g})$ के लिए प्रेक्षित दर व्यंजक, दर = $K_f(\text{NO})^2[\text{H}_2]$ है। उल्टा अभिक्रिया के लिए दर व्यंजक है :
- (1) $K_b[\text{N}_2][\text{H}_2\text{O}]^2/[\text{NO}]$ (2) $K_b[\text{N}_2][\text{H}_2\text{O}]^2$
(3) $K_b[\text{N}_2][\text{H}_2\text{O}]$ (4) $K_b[\text{N}_2][\text{H}_2\text{O}]^2/[\text{H}_2]$

Sol. bonus

3. The correct order of stability for the following alkoxides is :



- (1) (B) > (C) > (A) (2) (B) > (A) > (C)
(3) (C) > (B) > (A) (4) (C) > (A) > (B)
3. निम्नलिखित ऐल्कोक्साइडों के लिए स्थायित्व का सही क्रम है :



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

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उत्कर्ष
15 JAN 2020

percentile between 97.0 to 98.99
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Below 97 percentile in JEE Main (Jan-2020)
Tenure: 62 Days | Schedule: 5 Classes Per Day

Fees - ₹ 27500 Including GST

उत्थान
17 JAN 2020

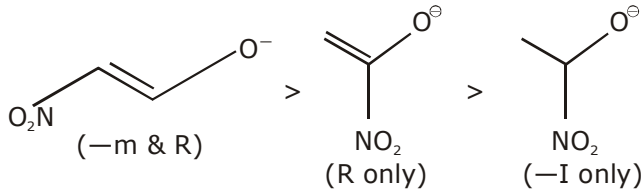
99 percentile and above
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Fees - ₹ 11000 score 160-200 | Fees - ₹ 5500 score 200-240 | Fees - ₹ 0 score above 240

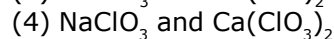
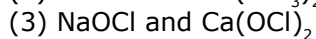
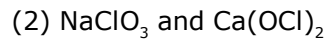
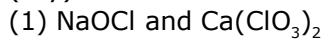
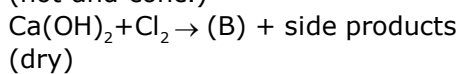
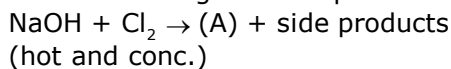
Sol. 3

C > B > A

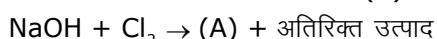
Correct order of stability is :



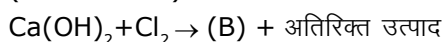
4. In the following reaction products (A) and (B) respectively, are :



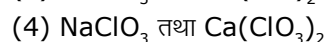
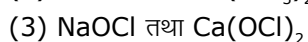
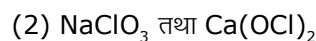
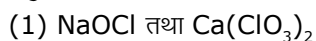
4. निम्नलिखित अभिक्रियाओं में, उत्पाद (A) तथा (B) क्रमशः है :



(उष्ण तथा सान्द्र)

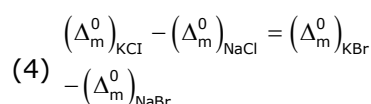
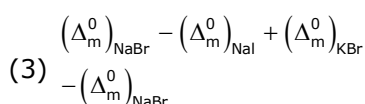
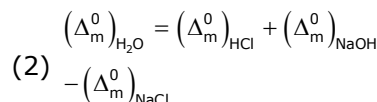
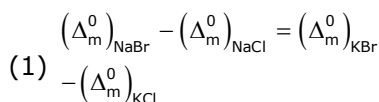


(शुष्क)

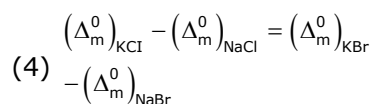
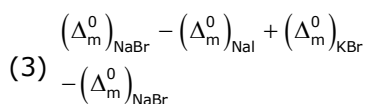
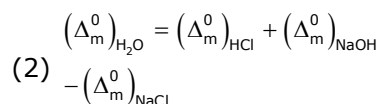
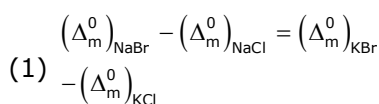


Sol. 2

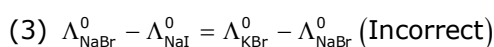
5. The equation that is incorrect is :



5. वह समीकरण जो गलत है, है :



Sol. 3



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6. The bond order and the magnetic characteristics of CN^- are :

- (1) $2\frac{1}{2}$, diamagnetic (2) $2\frac{1}{2}$, paramagnetic
(3) 3, paramagnetic (4) 3, diamagnetic

6. CN^- के आबंध क्रम तथा चुम्बकीय अभिलक्षण :

- (1) $2\frac{1}{2}$, प्रतिचुम्बकीय (2) $2\frac{1}{2}$, अनुचुम्बकीय
(3) 3, अनुचुम्बकीय (4) 3, प्रतिचुम्बकीय

Sol. 4

7. The number of possible optical isomers for the complexes MA_2B_2 with sp^3 and dsp^2 hybridized metal atom, respectively, is :

Note : A and B are unidentate neutral and unidentate monoanionic ligands, respectively.

- (1) 0 and 0 (2) 2 and 2 (3) 0 and 1 (4) 0 and 2

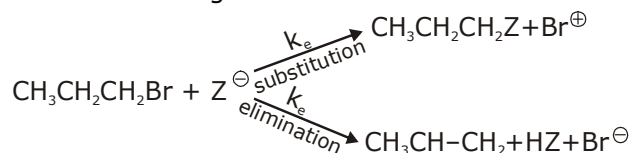
7. sp^3 तथा dsp^2 संकरित धातुओं के साथ संकुल MA_2B_2 के लिए संभावित ध्रुवण समावयवों की संख्या है :

नोट : A तथा B क्रमशः एक दंतुर उदासीन तथा एक दंतुर एक-आयनिक संलग्नी हैं।

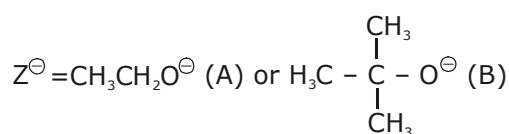
- (1) 0 तथा 0 (2) 2 तथा 2 (3) 0 तथा 1 (4) 0 तथा 2

Sol. 1

8. For the following reactions



where,



K_s and K_e , are respectively, the rate constants for substitution and elimination and $\mu = \frac{k_s}{k_e}$ the

correct options is

- (1) $\mu_B > \mu_A$ and $K_e(\text{B}) > K_e(\text{A})$ (2) $\mu_B > \mu_A$ and $K_e(\text{A}) > K_e(\text{B})$
(3) $\mu_A > \mu_B$ and $K_e(\text{B}) > K_e(\text{A})$ (4) $\mu_A > \mu_B$ and $K_e(\text{A}) > K_e(\text{B})$

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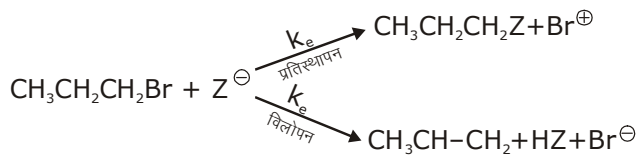
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17 JAN 2020

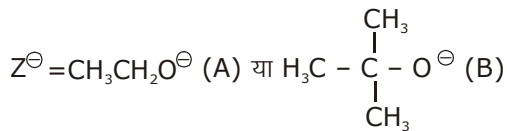
99 percentile and above
in JEE Main (Jan-2020)

Fees - ₹ 11000 score 160-200 | Fees - ₹ 5500 score 200-240 | Fees - ₹ 0 score above 240

8. निम्नलिखित अभिक्रिया पर विचार कीजिए।



जहाँ,

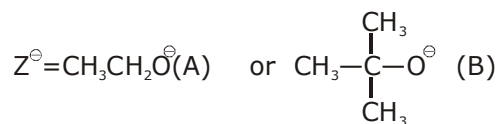


K_s तथा K_e , क्रमशः प्रतिस्थापन एवं विलोपन के लिये वेग स्थिरांक है, और $\mu = \frac{k_s}{k_e}$ है, सही विकल्प है _____।

- (1) $\mu_B > \mu_A$ तथा $K_e(B) > K_e(A)$ (2) $\mu_B > \mu_A$ तथा $K_e(A) > K_e(B)$
 (3) $\mu_A > \mu_B$ तथा $K_e(B) > K_e(A)$ (4) $\mu_A > \mu_B$ तथा $K_e(A) > K_e(B)$

Sol. 3

$$\mu_A > \mu_B \text{ and } K_{e(B)} > K_{e(A)}$$

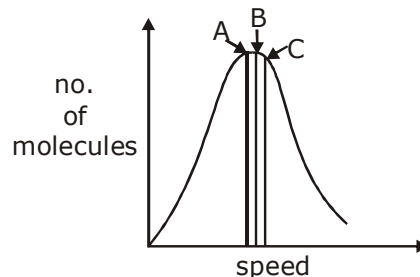


$$\mu = \frac{K_s}{K_e}$$

Substitution will be fast when z = (A) $\text{CH}_3\text{CH}_2\text{O}^\ominus$

and elimination will be fast when z = (B) $\text{CH}_3 - \begin{array}{c} \text{CH}_3 \\ | \\ \text{C} - \text{O}^\ominus \\ | \\ \text{CH}_3 \end{array}$

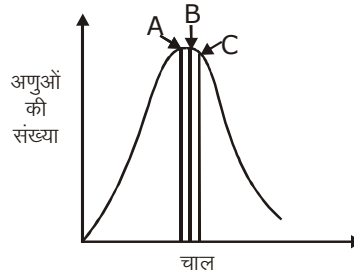
9. Identify the correct labels of A, B and C in the following graph from the options given below :



Root mean square speed (V_{rms}); most probable speed (V_{mp}); Average speed (V_{av})

- (1) A - V_{mp} ; B - V_{av} ; C - V_{rms} (2) A - V_{mp} ; B - V_{rms} ; C - V_{av}
 (3) A - V_{av} ; B - V_{rms} ; C - V_{mp} (4) A - V_{rms} ; B - V_{mp} ; C - V_{av}

9. नीचे दिये गये विकल्पों में से निम्नलिखित आलेख में A, B तथा C के सही लेबल को पहचानिए :



वर्ग माध्य मूल चाल (V_{rms}); प्रायिकतम चाल (V_{mp}); औसत चाल (V_{av})

- (1) A - V_{mp} ; B - V_{av} ; C - V_{rms} (2) A - V_{mp} ; B - V_{rms} ; C - V_{av}
 (3) A - V_{av} ; B - V_{rms} ; C - V_{mp} (4) A - V_{rms} ; B - V_{mp} ; C - V_{av}

Sol. 1

We know that

$$V_{rms} > V_{avg} > V_{mp}$$

$$C \rightarrow V_{rms}$$

$$B \rightarrow V_{Avg}$$

$$A \rightarrow V_{mp}$$

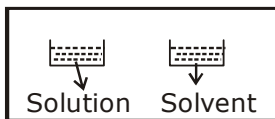
10. Two open beakers one containing a solvent and the other containing a mixture of that solvent with a non volatile solute are together sealed in a container. Over time :

- (1) The volume of solution does not change and the volume of the solvent decreases.
 (2) The volume of the solution increases and the volume of the solvent decreases.
 (3) The volume of the solution decreases and the volume of the solvent increases.
 (4) The volume of the solution and the solvent does not change.

10. दो खुले बीकर, एक जिसमें एक विलायक है तथा दूसरा जिसमें एक अवाष्पशील विलेय के साथ उस विलायक का मिश्रण है, को एक साथ पात्र के अन्दर बन्द किया गया है, कुछ समय के बाद :

- (1) विलयन के आयतन में कोई परिवर्तन नहीं होता है तथा विलायक का आयतन कम हो जाता है।
 (2) विलयन का आयतन बढ़ जाता है तथा विलायक का आयतन कम हो जाता है।
 (3) विलयन का आयतन कम हो जाता है तथा विलायक का आयतन बढ़ जाता है।
 (4) विलयन तथा विलायक दोनों के आयतन में कोई परिवर्तन नहीं होता है।

Sol. 1



$$P_{solvent}^0 > P_{Solution}^0 \quad \text{Hence}$$

Volume of solvent decrease & Volume of solution increases

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in JEE Main (Jan-2020)

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score 160-200

Fees - ₹ 5500
score 200-240

Fees - ₹ 0
score above 240

11. The redox reaction among the following is :

- (1) reaction of $[\text{Co}(\text{H}_2\text{O})_6]\text{Cl}_3$ With AgNO_3
- (2) formation of ozone from atmosphere oxygen in the presence of sunlight.
- (3) combination of dinitrogen with dioxygen at 2000 K
- (4) reaction of H_2SO_4 with NaOH .

निम्नलिखित में से रेडॉक्स अभिक्रिया है :

- (1) $[\text{Co}(\text{H}_2\text{O})_6]\text{Cl}_3$ की AgNO_3 के साथ अभिक्रिया
- (2) सूर्य के प्रकाश की उपस्थिति में वायुमंडलीय ऑक्सीजन से ओजोन का बनना
- (3) डाइनाइट्रोजन का डाइऑक्सीजन के साथ 2000 K पर संयोजन
- (4) H_2SO_4 की NaOH के साथ अभिक्रिया

Sol. 3

12. A chromatography column, packed with silica gel as stationary phase, was used to separate a mixture of compounds consisting of (A) benzanilide (B) aniline and (C) acetophenone. When the column is eluted with a mixture of solvents, hexane : ethylacetate (20:80), the sequence of obtained compounds is :

- (1) (B), (C) and (A)
- (2) (B), (A) and (C)
- (3) (A), (B) and (C)
- (4) (C), (A) and (B)

यौगिकों (A) बेन्जनाइलाइड (B) ऐनिलीन तथा (C) ऐसीटोफिनोन के एक मिश्रण को पथक करने के लिए एक स्थिर प्रावस्था में सिलिका जैल से भरे क्रोमोटोग्राफिक कालम का उपयोग किया जाता है। जब कालम को विलायको हेक्सेन-एथिल ऐसीटेट, (20:80) के मिश्रण के साथ क्षालित किया गया तो प्राप्त यौगिकों का अनुक्रम है :

- (1) (B), (C) तथा (A)
- (2) (B), (A) तथा (C)
- (3) (A), (B) तथा (C)
- (4) (C), (A) तथा (B)

Sol. 3

13. The refining method used when the metal and the impurities have low and high melting temperatures, respectively, is :

- (1) vapour phase refining
- (2) liquation
- (3) zone refining
- (4) distillation

जब धातु तथा अपद्रव्यों के गलन ताप क्रमशः निम्न तथा उच्च होते हैं, तो निम्नलिखित में से किस परिष्करण विधि का उपयोग किया जाता है :

- (1) वाष्प प्रावस्था परिष्करण
- (2) गलनिक पथक्करण
- (3) मंडल परिष्करण
- (4) आसवन

Sol. 2

14. Which of the following statements is correct ?

- (1) Gluconic acid is obtained by oxidation of glucose with (HNO_3)
- (2) Gluconic acid is a dicarboxylic acid.
- (3) Gluconic acid can form cyclic (actetal/hemiacetal) structure
- (4) Gluconic acid is a partial oxidation product of glucose

निम्नलिखित में से कौन सा कथन सही है ?

- (1) ग्लूकोनिक अम्ल को ग्लूकोस के (HNO_3) के साथ ऑक्सीकरण द्वारा बनाया जा सकता है।
- (2) ग्लूकोनिक अम्ल एक डाइकार्बोक्सिलिक अम्ल है।
- (3) ग्लूकोनिक अम्ल चक्रीय ऐसीटैल/हैमीऐसीटैल बना सकता है।
- (4) ग्लूकोनिक अम्ल ग्लूकोस का एक आंशिक उपचयन उत्पाद है।

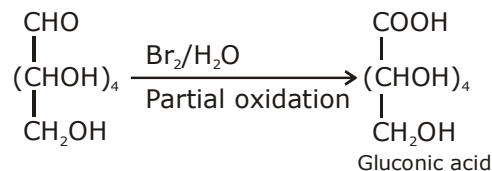
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Sol. 4

Gluconic acid is a partial oxidation product of Glucose



15. Within each pair of elements F & Cl, S & Se, and Li & Na, respectively, the elements that release more energy upon and electron gain are :

- (1) Cl, Se and Na (2) F, Se and Na
(3) Cl, S and Li (4) F, S and Li

15. तत्वों के प्रत्येक युग्म क्रमशः F & Cl, S & Se, तथा Li & Na में तत्व जो एक इलेक्ट्रॉन-लब्धि पर अधिक ऊर्जा विमोचित करते हैं, हैं :

- (1) Cl, Se तथा Na (2) F, Se तथा Na
(3) Cl, S तथा Li (4) F, S तथा Li

Sol. 3

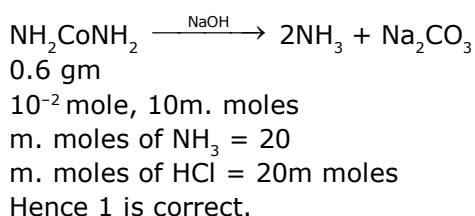
16. The ammonia (NH₃) released on quantitative reaction of 0.6 g urea (NH₂CONH₂) with sodium hydroxide (NaOH) can be neutralized by :

- (1) 100 ml of 0.2 N HCl (2) 200 ml of 0.4 N HCl
(3) 200 ml of 0.02 N HCl (4) 100 ml of 0.1 HCl

16. 0.6 g यूरिया (NH₂CONH₂) के सोडियम हाइड्रॉक्साइड (NaOH) के साथ एक मात्रात्मकतः अभिक्रिया से निकलने वाली अमोनिया (NH₃) को निम्न में से जिससे उदासीन किया जा सकता है, हैं :

- (1) 0.2 N HCl का 100 ml (2) 0.4 N HCl का 200 ml
(3) 0.02 N HCl का 200 ml (4) 0.1 HCl का 100 ml

Sol. 1



17. Among statements (a)-(d), the correct ones are :

- (a) Decomposition of hydrogen peroxide gives dioxygen.
(b) Like hydrogen peroxide, compounds, such as KClO₃, Pb(NO₃)₂ and NaNO₃ when heated liberate dioxygen.
(c) 2-Ethylanthraquinone is useful for the industrial preparation of hydrogen peroxide.
(d) Hydrogen peroxide is used for the manufacture of sodium perborate.
(1) (a),(b) and (c) only (2) (a), (c) and (d) only
(3) (a) and (c) only (4) (a),(b),(c) and (d)

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17. कथनों (a)-(d) में, सही कथन है :

(a) हाइड्रोजन परॉक्साइड का विघटन डाइऑक्सीजन देता है।

(b) हाइड्रोजन परॉक्साइड की तरह, यौगिक जैसे $KClO_3$, $Pb(NO_3)_2$ तथा $NaNO_3$ को जब गर्म करते हैं डाइऑक्सीजन निकलता है।

(c) 2-ऐथिलअन्थाक्विनोन को हाइड्रोजन परॉक्साइड के औद्योगिक निर्माण के लिए उपयोग में लाया जाता है।

(d) हाइड्रोजन परॉक्साइड का उपयोग सोडियम परबोरेट के उत्पादन में किया जाता है।

(1) (a),(b) तथा (c) मात्र

(2) (a), (c) तथा (d) मात्र

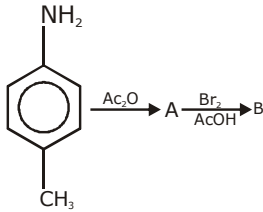
(3) (a) तथा (c) मात्र

(4) (a),(b),(c) तथा (d)

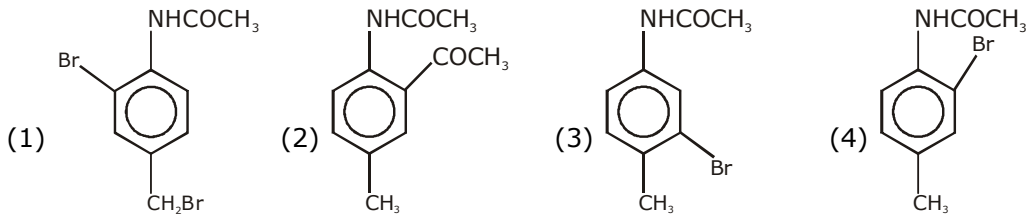
Sol. 4

2-anthraquinone should be 2-anthraquinol

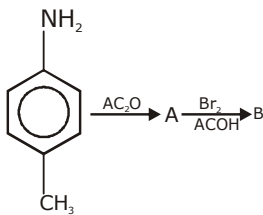
18. In the following reaction sequence,



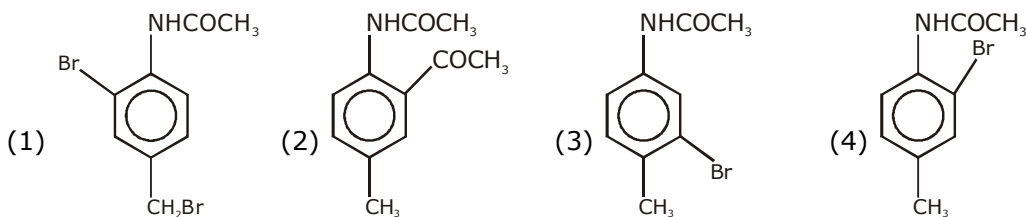
The major product B is :



18. निम्नलिखित अभिक्रिया अनुक्रम में,



मुख्य उत्पाद B है :



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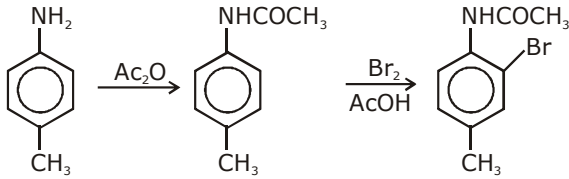
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Sol. 1



19. Among the statements(a)-(d) the incorrect ones are :

- (a) Octahedral CO(III) complexes with strong fields ligands have very high magnetic moments.
 (b) When $\Delta_0 < P$, the d-electron configuration of Co(III) in an octahedral complex is $t_{eg}^4 e_g^2$
 (c) Wavelength of light absorbed by $[Co(en)_3]^{3+}$ is lower than that of $[CoF_6]^{3-}$
 (d) If the Δ_0 for an octahedral complex of CO(III) is $18,000 \text{ cm}^{-1}$, the Δ_r for its tetrahedral complex with the same ligand be $16,000 \text{ cm}^{-1}$

- (1) (c) and (d) only (2) (a) and (b) only
 (3) (b) and (c) only (4) (a) and (d) only

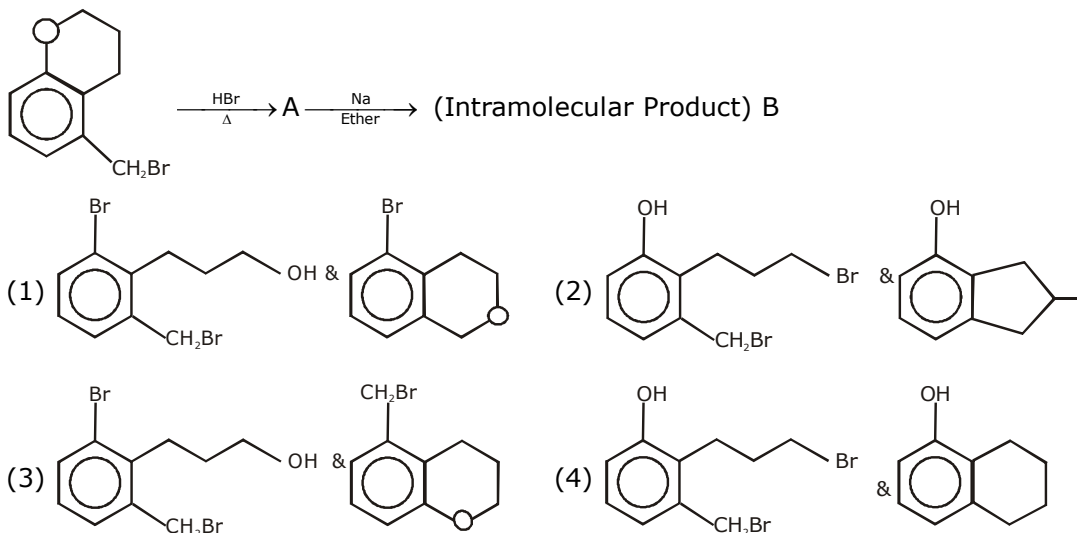
19. (a)-(d) में दिये गये कथनों में, गलत है :

- (a) प्रबल क्षेत्र संलग्नी के साथ अष्टफलकीय Co(III) संकर का चुम्बकीय आघूर्ण बहुत उच्च होता है।
 (b) जब $\Delta_0 < P$ हो तो एक अष्टफलकीय संकर में Co(III) का d-इलेक्ट्रॉन विन्यास है $t_{eg}^4 e_g^2$
 (c) $[CoF_6]^{3-}$ की तुलना में $[Co(en)_3]^{3+}$ द्वारा अवशोषित प्रकाश का तरंगदैर्घ्य कम है।
 (d) यदि Co(III) के एक अष्टफलकीय संकर के लिए Δ_0 $18,000 \text{ cm}^{-1}$ है, तो इसके चतुष्फलकीय संकर के लिये उसी संलग्नी के साथ Δ_t होगा $16,000 \text{ cm}^{-1}$

- (1) (c) तथा (d) मात्र (2) (a) तथा (b) मात्र
 (3) (b) तथा (c) मात्र (4) (a) तथा (d) मात्र

Sol. 4

20. In the following reactions sequence, structure of A and B respectively will be :



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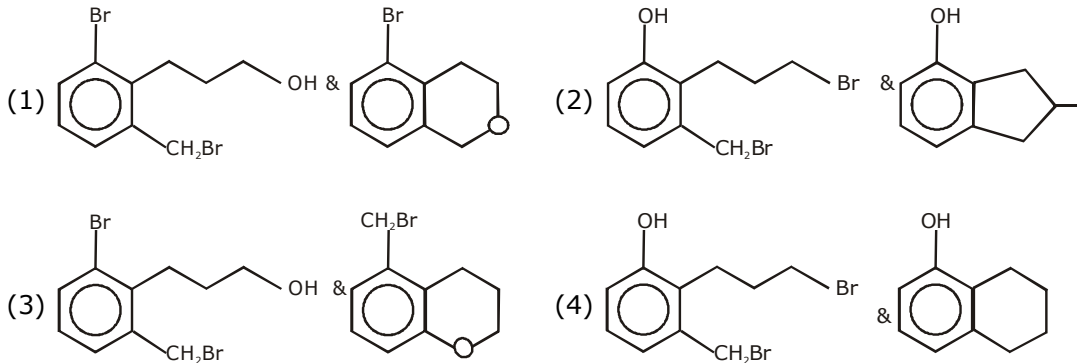
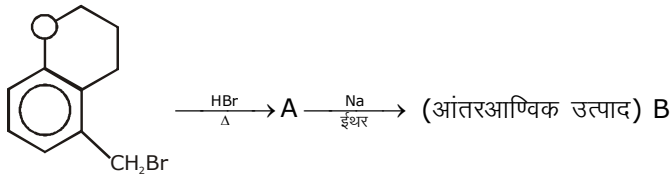
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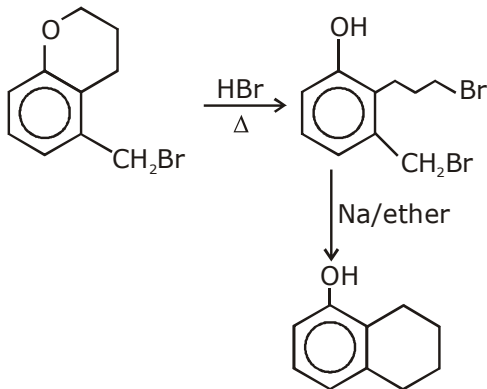
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20. निम्नलिखित अभिक्रिया अनुक्रम में A तथा B की संरचनाएँ क्रमशः होंगी :



Sol. 4

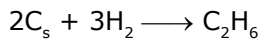


So, the correct answer is (4)

21. The standard heat of formation ($\Delta_f H_{298}^0$) of ethane (in kJ/mol), if the heat of combustion of ethane, hydrogen and graphite are - 1560, -393.5 and -286 KJ/mol, respectively is

21. यदि इथेन, हाइड्रोजन तथा ग्राफाइट की दहन उष्मायें क्रमशः - 1560, -393.5 तथा -286 KJ/mol हैं, तो इथेन की मानक संभवन उष्मा ($\Delta_f H_{298}^0$) है _____।

Sol. -192.5 kJ



$$\Delta_f H_{C_2H_6}^0 = \Delta_f H_C^0 \text{ Reactant} - \Delta_f H_C^0 \text{ product}$$

$$= 2\Delta_f H_C^0 C_s + 3\Delta_f H_C^0 H_2 - \Delta_f H_C^0 C_2H_6$$

$$= 2 \times -286 + 3 \times (-393.5) + 1560$$

$$= -572 - 1180.5 + 1560$$

$$= -1752.5 + 1560 = -192.5 \text{ kJ}$$

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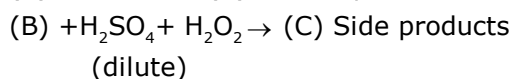
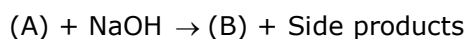
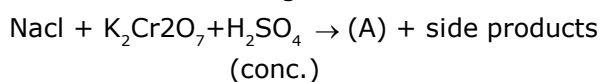
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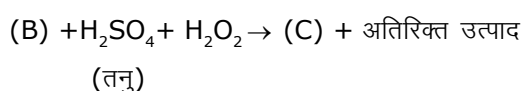
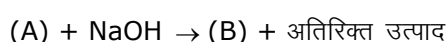
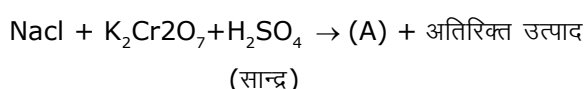
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22. Consider the following reactions :



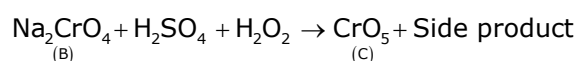
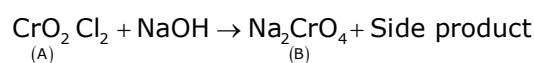
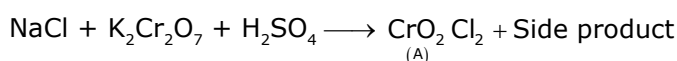
The sum of the total number of atoms in one molecule each of (A) and (B) and (C) is

22. निम्नलिखित अभिक्रियाओं पर विचार कीजिए :



(A), (B) तथा (C) प्रत्येक के एक अणु में तत्वों की कुल संख्या का योग है _____ ।

Sol. 18.00



23. 3 g of acetic acid is added to 250 mL of 0.1 M HCL and the solution made up to 500 mL. To 20 ML of this solutions $\frac{1}{2}$ ml. of 5 M NaOH is added. The pH of the solution is

[Given : pka of acetic acid = (4)75, molar mass of acetic of acid = 60 g/mol, log 3 = 0.4771]
Neglect any changes in volume.

23. 0.1 M HCl के 250 mL में 3 g ऐसीटिक अम्ल मिलाया गया और विलयन को 500 mL तक किया गया। इस विलयन के 20 mL में 5 M NaOH के $\frac{1}{2}$ mL को मिलाया गया। विलयन का pH है _____ ।

[दिया गया है : ऐसीटिक अम्ल का pKa = 4.75, ऐसीटिक अम्ल का मोलर संहति = 60 g/mol, log 3 = 0.4771]
आयतन में किसी प्रकार के परिवर्तन की उपेक्षा करें।

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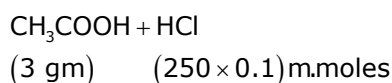
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score 160-200

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score 200-240

Fees - ₹ 0
score above 240

Sol. 5.23



$$\text{m. moles of CH}_3\text{COOH} = \frac{3 \times 1000}{60} = 50$$

$$\text{m. moles of HCl} = 25$$

$$\text{m. moles of CH}_3\text{COOH in 20 ml} = \frac{50}{500} \times 20 = 2$$

$$\text{m. moles of HCl} = \frac{25}{500} \times 20 = 1$$



$$\begin{array}{cc} 2.5 & 1 \\ 1.5 & 0 \end{array}$$



$$\begin{array}{ccc} 2 & 1.5 & \\ 0.5 & 0 & 1.5 \end{array}$$

$$\text{pH} = \text{pKa} + \log \frac{1.5}{0.5}$$

$$= 4.75 + \log 3$$

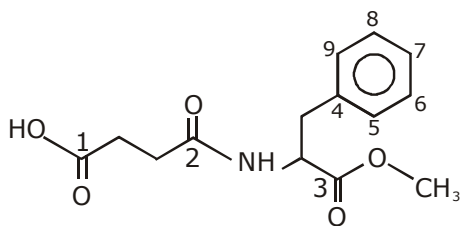
$$= 4.75 + 0.4771 = 5.23$$

24. The number of sp² hybridised carbons present in "Aspartame" is

24. "ऐस्पार्टेम" में उपस्थित sp² संकरित कार्बनों की संख्या है _____ ।

Sol. 9

Structure of Aspartame is:



No. of sp² hybridised carbon atom is : 9

25. The flocculation value of HCl for arsenic sulphide sol. is 30 m mol L⁻¹. If H₂SO₄ is used for the flocculation of arsenic sulphide, the amount, in grams of H₂SO₄ in 250 ml required for the above purpose is

(molecular mass of H₂SO₄ = 98g/mol)

25. आर्सेनिक सल्फाइड विलयन के लिए HCl के उर्जन का मान 30 m mol L⁻¹ है। यदि आर्सेनिक सल्फाइड के उर्जन के लिए H₂SO₄ का उपयोग किया जाए तो उपर्युक्त उद्देश्य के लिए 250 mL में आवश्यक H₂SO₄ की मात्रा (ग्राम में) होगी _____ ।

(H₂SO₄ की अणु संहति = 98g/mol)

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1158

(Under 50000 Rank)

(since 2016)

(5th to 10th class)

H.O. : 394, Rajeev Gandhi Nagar, Kota

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हमारा विश्वास... हर एक विद्यार्थी है खास

MOTIONTM
Nurturing potential through education

Sol. 0.37 gm

m. moles of HCl required for 1 lit. = 30

m. moles of H₂SO₄ 1 lit. = 15

m. moles of H₂SO₄ in 250 ml = $\frac{15}{4}$

weight of H₂SO₄ = $\frac{15}{4} \times 10^{-3} \times 98$

= 0.37 gm

**Increase Your Score
for JEE Main April'2020**

उत्कर्ष
15 JAN 2020

percentile between 97.0 to 98.99
in JEE Main (Jan-2020)

Fees - ₹ 22000 Including GST

उन्नति
17 JAN 2020

Below 97 percentile in JEE Main (Jan-2020)
Tenure: 62 Days | Schedule: 5 Classes Per Day

Fees - ₹ 27500 Including GST

उत्थान
17 JAN 2020

99 percentile and above
in JEE Main (Jan-2020)

Fees - ₹ 11000
score 160-200

Fees - ₹ 5500
score 200-240

Fees - ₹ 0
score above 240

कर लो अब पूरी तैयारी

चूक ना जाये इस बारी

INCREASE YOUR SCORE for JEE Main April 2020

उत्थान 17th JAN 2020

99 percentile and above
in JEE Main (Jan-2020)

उत्कर्ष 15th JAN 2020

percentile between 97.0 to 98.99
in JEE Main (Jan-2020)

उन्नति 17th JAN 2020

Below 97 percentile
in JEE Main (Jan-2020)

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