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EdLoop EAPCET

CHEMISTRY · EAPCET (EAMCET)

Hydrocarbons

Previous Year Questions with answers

293 questions · **142** papers · **2010–2026** · newest paper first

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What is in this PDF: every Hydrocarbons question we hold from past AP and TS EAPCET (called EAMCET until 2020 in Andhra Pradesh and 2023 in Telangana) papers, with its options and answer. Where an answer comes from a source other than the official final key, it says so next to the answer.

Step-by-step solutions for every question are free in the EdLoop EAPCET app (Google Play) and on app.edloop.in. More chapters: pyq.edloop.in/free-pdfs/

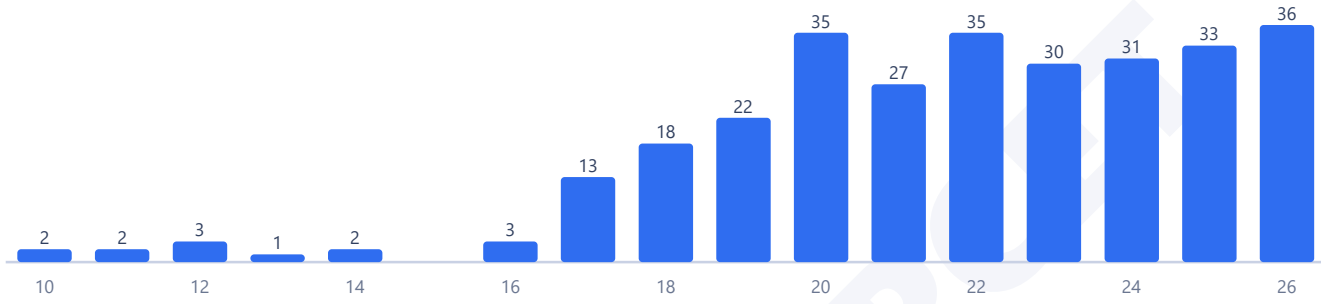
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Chapter at a glance

5.4%	293	76 of 77	293 / 0
of Chemistry questions, 2022–2026	questions, 2010–2026	papers asked it, 2022–2026	MCQ / numerical, 2010–2026

Trend. Steady: 2.2 questions per paper in 2024–2026 against 2.1 in 2022–2023.

Questions per year



Counts are the questions we hold: 293 in 142 papers. No question in this chapter was found repeated across papers.

Most-asked topics in this chapter (2010–2026)

Alkenes	98
Aromatic Hydrocarbons	92
Alkanes	55
Alkynes	48

How often it comes up

Hydrocarbons is a major heavyweight in the organic chemistry curriculum, commanding rank 4 among all 31 chemistry chapters during the 2022 to 2026 examination span. Across our complete repository of entrance papers spanning 2010 through 2026, the chapter contributed 293 questions across 149 papers, appearing in 142 of those tests to capture 4.9 percent of all chemistry questions with an average of 2.0 questions per paper. In the modern five-year timeframe from 2022 to 2026, it provided 165 questions across 77 sittings, featuring in 76 papers to post 2.1 questions per paper and a 5.4 percent subject share.

The chapter has appeared in every exam year since 2022, though it was absent from a single sitting across that five-year period. Across the state breakdown between 2022 and 2026, AP examinations yielded 95 questions across 48 papers (appearing in 47 papers, 2.0 questions per paper, 4.9 percent share), while TS examinations generated 70 questions across 29 papers (appearing in all 29 papers, 2.4 questions per paper, 6.0 percent share).

Earlier testing from 2010 through 2021 featured 128 questions across 72 sittings (appearing in 66 tests), which represented 1.8 questions per paper and a 4.4 percent subject share. Over the last three testing cycles from 2024 to 2026, question writers set 100 questions across 46 sittings (with 45 papers containing questions), yielding 2.2 questions per test and 5.4 percent share. Long-term trend analysis indicates that the share early versus the last three years is up, while the share recent versus the last three years is about the same. Every sitting presents two to three hydrocarbon problems.

Most-asked topics

Questions in this branch distribute across all four fundamental hydrocarbon classes:

- **Aromatic Hydrocarbons** leads recent testing with 92 questions overall and 54 in the modern window through 2026. Frequent problem formats focus on electrophilic aromatic substitution of benzene and toluene (halogenation, nitration, sulphonation, Friedel-Crafts alkylation and acylation), activating ortho-para directing versus deactivating meta-directing substituent influences, aromatic side-chain oxidation using hot alkaline potassium permanganate, and benzylic halogenation.
- **Alkenes** is the second major pillar with 98 questions overall and 53 during the recent timeframe through 2026. Core themes explore Markovnikov addition of hydrogen halides, anti-Markovnikov peroxide Kharasch effect with hydrogen bromide, ozonolysis followed by reductive zinc cleavage to deduce precursor structures, catalytic hydrogenation, and Baeyers cold dilute alkaline permanganate test for unsaturation.
- **Alkanes** contributed 55 questions across the archive, with 29 occurring between 2022 and 2026. Topics include free radical chlorination mechanisms and reactivity-selectivity ratios, Wurtz coupling, Kolbe electrolytic decarboxylation, decarboxylation of carboxylic acid salts with sodalime, and conformations of ethane (staggered versus eclipsed).
- **Alkynes** accounts for 48 questions in total, with 29 appearing from 2022 to 2026. Items center on acidity of terminal acetylenic protons, formation of heavy metal acetylides with ammoniacal cuprous chloride or silver nitrate, mercury-catalysed hydration of alkynes yielding carbonyl compounds, and cyclic polymerization of ethyne to benzene in red-hot iron tubes.

What the questions look like

Reaction cascades are the signature pattern in hydrocarbons. A representative question traces propene reacting with hydrogen bromide in the presence of benzoyl peroxide to form 1-bromopropane, which then reacts with benzene in the presence of anhydrous aluminium chloride to yield an alkylbenzene, requiring candidates to recognize that primary propyl carbocations rearrange to isopropyl carbocations.

Another frequent question format gives the ozonolysis cleavage products of an unknown alkene and asks you to reconstruct the original alkene structure. For alkynes, questions often test Markovnikov additions where propyne reacts with excess hydrogen bromide to yield 2,2-dibromopropane as the sole geminal dihalide product, or test terminal alkyne salt formation with sodium amide.

How to practise it

Practice determining electrophilic aromatic substitution products by categorizing substituents into activating ortho-para directors (amino, hydroxy, alkoxy, alkyl) and deactivating meta directors (nitro, cyano, formyl, acyl, carboxyl, sulphonic acid). Remember the halogen anomaly: halogens are deactivating due to strong inductive electron withdrawal, but ortho-para directing due to lone pair resonance donation.

For alkene reactions, distinguish clearly between ionic Markovnikov addition and free radical anti-Markovnikov addition. The peroxide effect applies exclusively to hydrogen bromide: it fails for hydrogen chloride because the chlorine radical propagation step is endothermic, and fails for hydrogen iodide because iodine radicals couple to form molecular iodine rather than adding across double bonds.

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Q1 AP EAPCET 2026 · 18 May · Shift 1 MCQ

An alkyne X (C_4H_6) does not form sodium alkynide. Reaction of X with HBr gave Y. Another reaction of X with $Na/liq.NH_3$ gave Z. Identify Y and Z

(A) Y = geminal dibromide ; Z = non-polar compound
(B) Y = geminal dibromide ; Z = polar compound
(C) Y = vicinal dibromide ; Z = polar compound
(D) Y = vicinal dibromide ; Z = non-polar compound

Answer: (A) Y = geminal dibromide ; Z = non-polar compound · The council's preliminary key

Q2 AP EAPCET 2026 · 18 May · Shift 1 MCQ

Identify the end product Z in the given sequence of reactions

(Anhy = anhydrous)

$$C_3H_6 \xrightarrow[(C_6H_5CO)_2O_2]{HBr} X \xrightarrow[\text{Anhy. } AlCl_3]{C_6H_6} Y \xrightarrow[\text{(iii) } NaOH/CaO,\Delta]{\text{(i) } KMnO_4/OH^-,\ \text{(ii) } H_3O^+} Z$$

(A) Toluene
(B) Cumene
(C) Benzene
(D) Xylene

Answer: (C) Benzene · The council's preliminary key

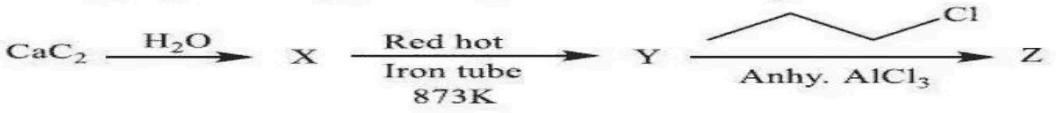
Q3 AP EAPCET 2026 · 18 May · Shift 2 MCQ

The ratio of number of sp^3 hybrid orbitals to number of sp^2 hybrid orbitals in the major product (Z) of the given reaction sequence is

(see the figure above)

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The ratio of number of sp^3 hybrid orbitals to number of sp^2 hybrid orbitals in the major product (Z) of the given reaction sequence is



ఇచ్చిన చర్యాక్రమంలో ప్రధాన ఉత్పన్నం (Z) నందలి sp^3 సంకర ఆర్బిటాళ్ళ సంఖ్యకు, sp^2 ఆర్బిటాళ్ళ సంఖ్యకు గల నిష్పత్తి



Options :

1. 3 : 5
2. 3 : 2
3. 2 : 3
4. 3 : 4

(A) $3:5$
(B) $3:2$
(C) $2:3$
(D) $3:4$

Answer: (C) $2:3$ · The council's preliminary key

Q4 AP EAPCET 2026 · 15 May · Shift 1 MCQ

An alkene (X) with formula C_5H_{10} on ozonolysis gives butanone and methanal. X with HBr in the presence of organic peroxide gives Y as major product. When Y is subjected to Wurtz reaction gives Z. The number of 1°, 2° and 3° carbons in Z respectively are

(A) 4, 4, 2
(B) 4, 2, 4
(C) 3, 3, 4
(D) 5, 3, 2

Answer: (A) 4, 4, 2 · The council's preliminary key

Q5 AP EAPCET 2026 · 15 May · Shift 1 MCQ

What are A and C in the following sequence of reactions?

(Peroxide; catalyst; quinoline)

$$C_2H_2 \xrightarrow{A} B \xrightarrow[350-370\ K,\ 1000-2000\ atm]{Peroxide\ (catalyst)} C$$

(A) Pd/H_2 ; LDP

(B) Pd/H_2 ; HDP

(C) H_2, Pd/C – quinoline ; LDP

(D) H_2, Pd/C – quinoline ; HDP

Answer: (C) H_2, Pd/C – quinoline ; LDP · The council's preliminary key

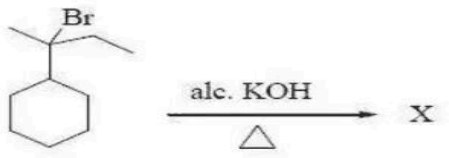
Q6 AP EAPCET 2026 · 15 May · Shift 1 MCQ

The number of α – hydrogens present in the major product (X) in the given reaction is

(see the figure above)

The number of α – hydrogens present in the major product (X) in the given reaction is

ఇచ్చిన చర్యలో ప్రధాన ఉత్పన్నం (X) నందు గల α – హైడ్రోజన్ ల సంఖ్య



Options :

1. 3
2. 5
3. 7
4. 9

(A) 3

(B) 5

(C) 7

(D) 9

Answer: (D) 9 · The council's preliminary key

Q7 AP EAPCET 2026 · 15 May · Shift 1 MCQ

Which of the following does not form benzoic acid on oxidation with alkaline $KMnO_4$ followed by acidification?

(A) 1-phenylpropane
(B) 2-phenylpropane
(C) Acetophenone
(D) 2-methyl-2-phenylpropane

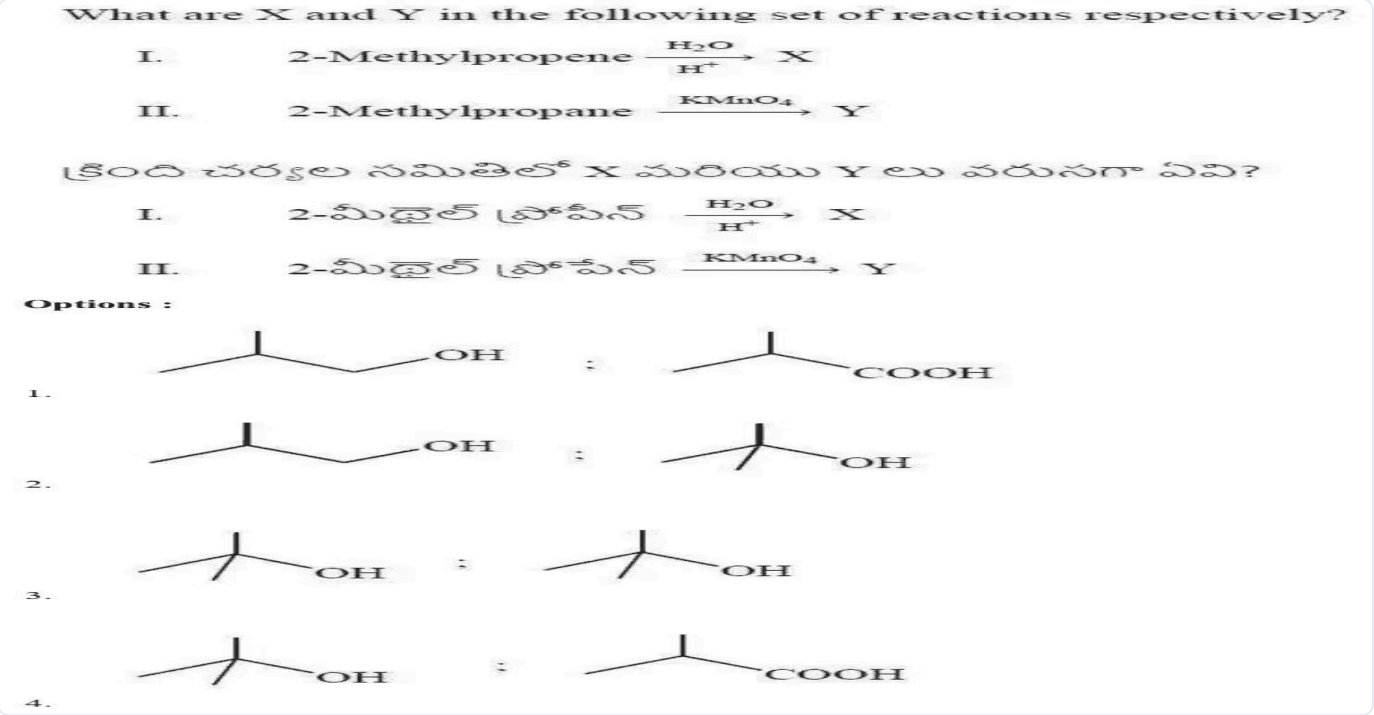
Answer: (D) 2-methyl-2-phenylpropane · The council's preliminary key

Q8 AP EAPCET 2026 · 14 May · Shift 1 MCQ

What are X and Y in the following set of reactions respectively?

I. 2-Methylpropene $\xrightarrow[H^+]{H_2O}$ X

II. 2-Methylpropane $\xrightarrow{KMnO_4}$ Y



(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · The council's preliminary key

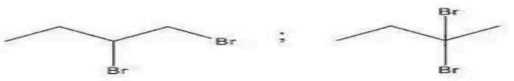
Q9 AP EAPCET 2026 · 14 May · Shift 1 MCQ

An isomer of C_4H_8 (A) exhibits cis-trans isomerism. Reaction of A with Br_2/CCl_4 gave B. Another organic compound C_4H_6 (C) forms sodium derivative with $NaNH_2$. Reaction of C with HBr gave D. what are B and D respectively?

An isomer of C_4H_8 (A) exhibits cis-trans isomerism. Reaction of A with Br_2/CCl_4 gave B. Another organic compound C_4H_6 (C) forms sodium derivative with $NaNH_2$. Reaction of C with HBr gave D. what are B and D respectively?

C_4H_8 యొక్క ఒక సాదృశ్యకం (A) సిస్-ట్రాన్స్ సాదృశ్యాన్ని ప్రదర్శిస్తుంది. Br_2/CCl_4 తో A చర్య నొంది B ను ఇచ్చింది. వేరొక కర్బన సమ్మేళనం C_4H_6 (C) $NaNH_2$ తో సోడియం ఉత్పన్నాన్ని ఏర్పరుస్తుంది. HBr తో C చర్య నొంది D ను ఇచ్చింది. B మరియు D లు వరుసగా ఏవి?

Options :

1.  ;
2.  ;
3.  ;
4.  ;

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (A) · The council's preliminary key

Q10 AP EAPCET 2026 · 14 May · Shift 2 MCQ

Observe the following set of reactions

$$Y \xleftarrow{Na/NH_3\ (l)} C_2H_2 \xrightarrow{H_2/Pt} X$$

Hybridization of carbon in X and Y respectively is

(A) sp^2, sp^2

(B) sp^3, sp^3

(C) sp^2, sp^3

(D) sp^3, sp^2

Answer: (D) sp^3, sp^2 · The council's preliminary key

Q11 AP EAPCET 2026 · 14 May · Shift 2 MCQ

An isomer of C_4H_8 is X, which exhibits cis-trans isomerism. Y is the chain isomer of X. Products obtained from ozonolysis of Y are

(A) $CH_3CHO + CH_3CHO$

(B) $CH_3CH_2CHO + HCOOH$

(C) $CH_3COCH_3 + HCHO$

(D) $CH_3CH_2COOH + CO_2$

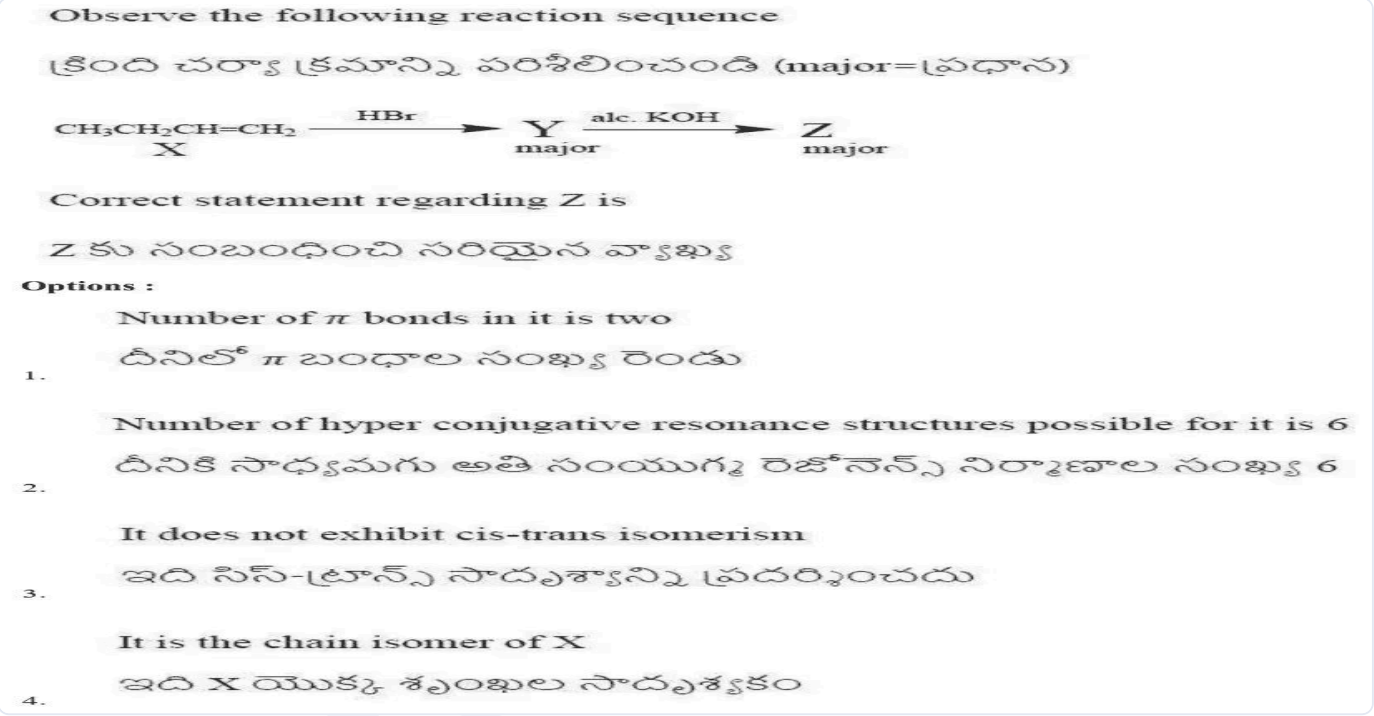
Answer: (C) $CH_3COCH_3 + HCHO$ · The council's preliminary key

Q12 AP EAPCET 2026 · 14 May · Shift 2 MCQ

Observe the following reaction sequence (major = major product)

(see the figure above)

Correct statement regarding Z is



(A) Number of π bonds in it is two

(B) Number of hyper conjugative resonance structures possible for it is 6

(C) It does not exhibit cis-trans isomerism

(D) It is the chain isomer of X

Answer: (B) Number of hyper conjugative resonance structures possible for it is 6 · The council's preliminary key

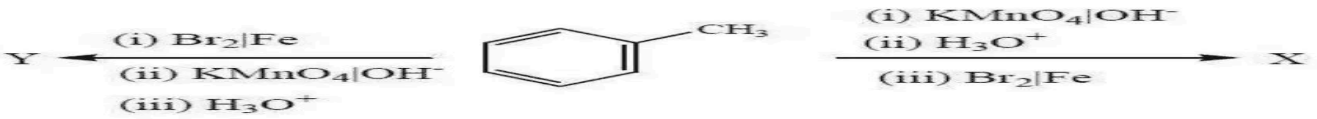
Q13 AP EAPCET 2026 · 13 May · Shift 1 MCQ

What are X and Y in the following set of reactions?

(see the figure above)

What are X and Y in the following set of reactions?

క్రింది చర్యల సమితిలో X మరియు Y లు వరుసగా ఏవి?



Options :

1. 

2. 

3. 

4. 

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (B) · The council's preliminary key

Q14 AP EAPCET 2026 · 13 May · Shift 2 MCQ

What are A and B respectively in the following set of reactions?

(see the figure above)

(liq = liquid; dil = dilute; quinoline = quinoline)

What are A and B respectively in the following set of reactions?

But-2-yne $\xrightarrow{A}$ X (polar)

But-2-ene $\xrightarrow{B}$ Y (acid)

క్రింది చర్యల సమితిలో A మరియు B లు వరుసగా ఏవి?

బ్యూట్-2-ఐన్ $\xrightarrow{A}$ X (ధ్రువ)

బ్యూట్-2-ఈన్ $\xrightarrow{B}$ Y (ఆమ్లం)

(liq = ద్రవ; dil = విలీన; quinoline = క్వినోలిన్)

Options :

1. $Na/liq\ NH_3$; $KMnO_4/H^+$
2. $Na/liq\ NH_3$; dil. $KMnO_4$, 273K
3. H_2 /Pd- quinoline ; dil. $KMnO_4$, 273K
4. H_2 /Pd- quinoline ; $KMnO_4/H^+$

(A) $Na/liq\ NH_3$; $KMnO_4/H^+$

(B) $Na/liq\ NH_3$; dil. $KMnO_4$, 273K

(C) H_2/Pd-quinoline ; dil. $KMnO_4$, 273K

(D) H_2/Pd-quinoline ; $KMnO_4/H^+$

Answer: (D) H_2/Pd-quinoline ; $KMnO_4/H^+$ · The council's preliminary key

Q15 AP EAPCET 2026 · 13 May · Shift 2 MCQ

What are X and Y in the following set of reactions?

(see the figure above)

What are X and Y in the following set of reactions?

Cumene (major product) $\xleftarrow{Y}$ anhy. $AlCl_3$ C_6H_6 $\xrightarrow{X}$ $C_6H_6Cl_6$

క్రింది చర్యల సమితిలో X మరియు Y లు ఏవి?

క్యూమీన్ (ప్రధాన ఉత్పన్నం) $\xleftarrow{Y}$ అన్‌హ్రై $AlCl_3$ C_6H_6 $\xrightarrow{X}$ $C_6H_6Cl_6$

Options :

1. Cl_2/anhy $AlCl_3$, dark : 
   Cl_2/ అన్‌హ్రై $AlCl_3$, చీకటి : 
2. Cl_2/ dark : 
   Cl_2/ చీకటి : 
3. Cl_2/ UV light : 
   Cl_2/ అతినీలలోహిత కాంతి :
4. Cl_2/anhy $AlCl_3$: 
   Cl_2/ అన్‌హ్రై $AlCl_3$: 

(A) X: Cl_2/anhy $AlCl_3$, dark ; *(see the figure above)* zig-zag structure of 1-chloropropane (n-propyl chloride) as Y

(B) X: Cl_2/ dark ; *(see the figure above)* 2-chloropropane (isopropyl chloride) skeleton as Y

(C) X: Cl_2/ UV light ; *(see the figure above)* zig-zag structure of 1-chloropropane (n-propyl chloride) as Y

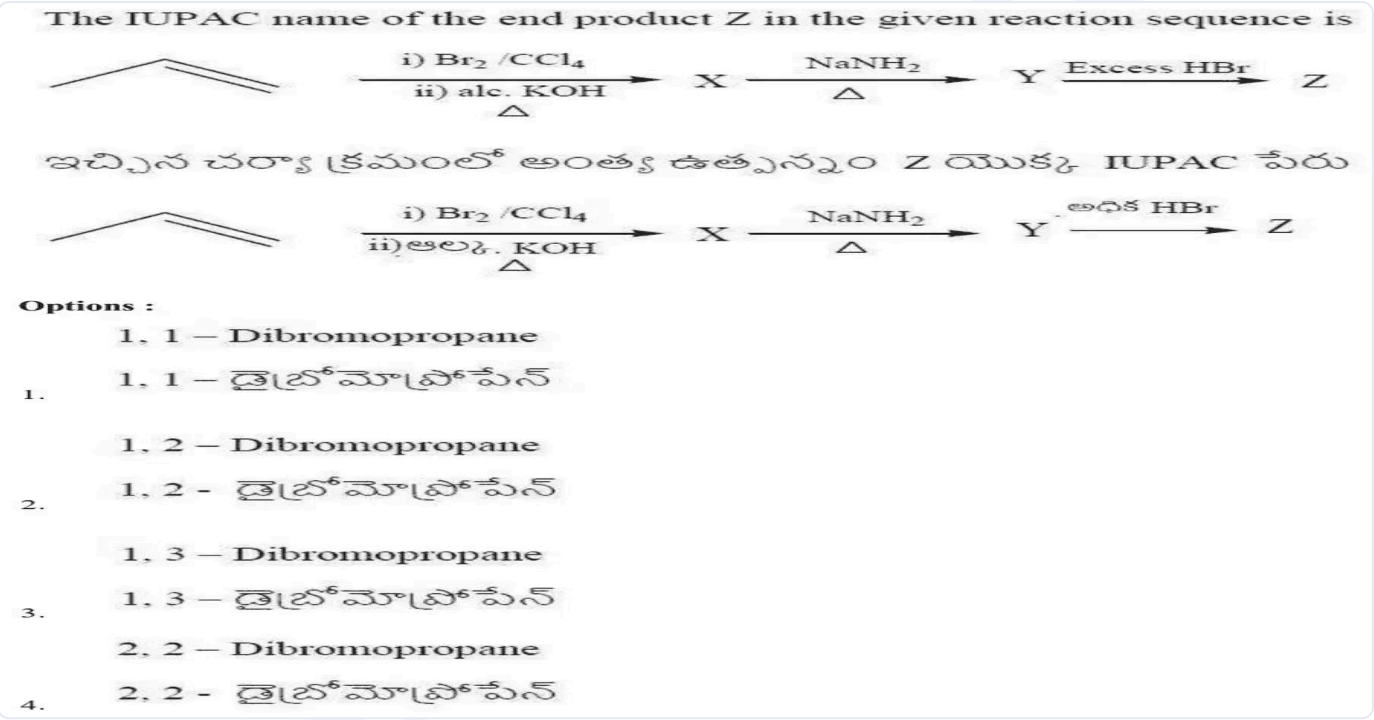
(D) X: Cl_2/anhy $AlCl_3$; *(see the figure above)* 2-chloropropane (isopropyl chloride) skeleton as Y

Answer: (C) X: Cl_2/ UV light ; *(see the figure above)* **zig-zag structure of 1-chloropropane (n-propyl chloride) as Y** · The council's preliminary key

Q16 AP EAPCET 2026 · 12 May · Shift 1 MCQ

The IUPAC name of the end product Z in the given reaction sequence is

(see the figure above)



(A) 1, 1 – Dibromopropane

(B) 1, 2 – Dibromopropane

(C) 1, 3 – Dibromopropane

(D) 2, 2 – Dibromopropane

Answer: (D) 2, 2 – Dibromopropane · The council's preliminary key

Q17 AP EAPCET 2026 · 12 May · Shift 1 MCQ

Reaction of toluene with reagent 'A' gave X which reacts with $NaHCO_3$ and liberates CO_2. In another reaction with reagent 'B' toluene gave Y which gives 2,4 – DNP test. What are A and B respectively?

(A) $KMnO_4/OH^-$, H_3O^+ ; $CrO_3/(CH_3CO)_2O$, H_3O^+

(B) $Cl_2/h\nu$, H_2O; CrO_3/H^+

(C) CrO_2Cl_2, H_3O^+ ; $KMnO_4/OH^-$, H_3O^+

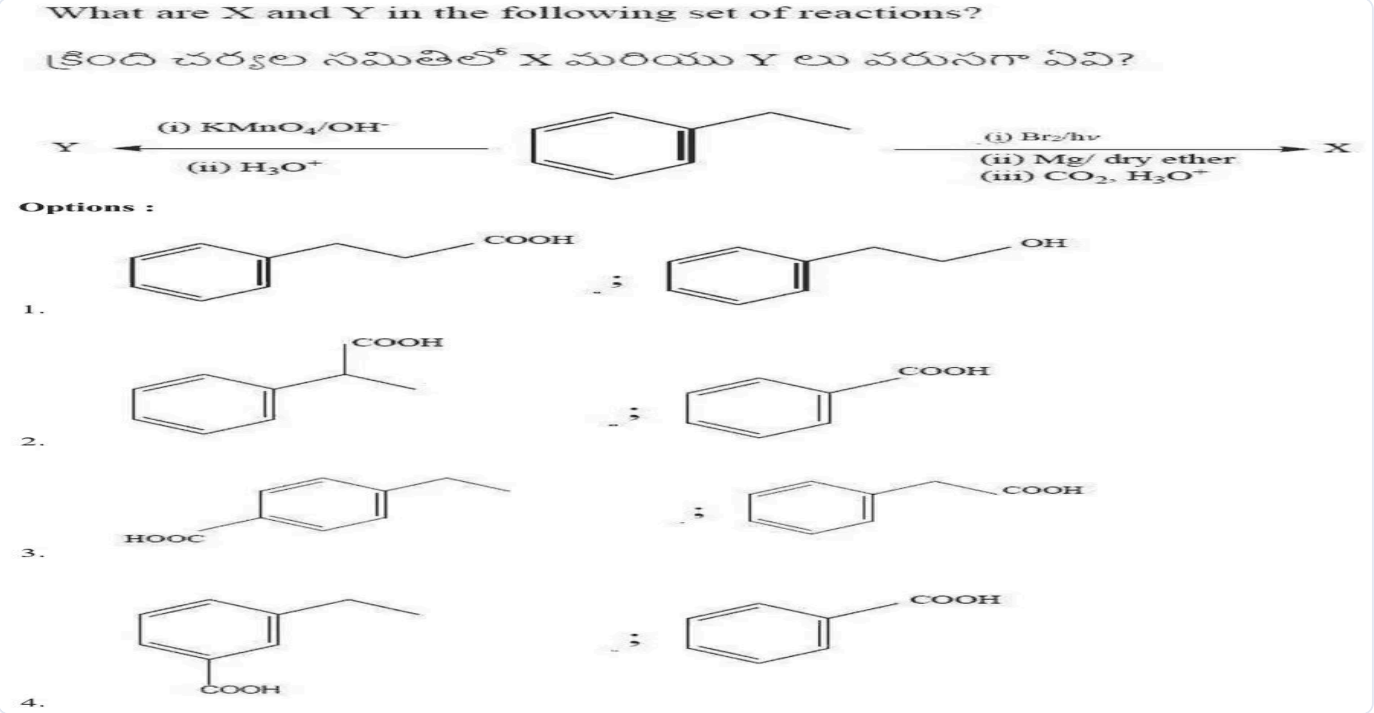
(D) $KMnO_4/OH^-$, H_3O^+ ; PCC

Answer: (A) $KMnO_4/OH^-$, H_3O^+ ; $CrO_3/(CH_3CO)_2O$, H_3O^+ · The council's preliminary key

Q18 AP EAPCET 2026 · 12 May · Shift 1 MCQ

What are X and Y in the following set of reactions?

(see the figure above)



(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (B) · The council's preliminary key

Q19 AP EAPCET 2026 · 12 May · Shift 2 MCQ

Consider the given sequence of reactions

$$CH_3 - C \equiv CH \xrightarrow{HBr} X \xrightarrow{HBr} Y$$

Total number of isomers possible for the product Y is

(A) 1
(B) 2
(C) 4
(D) 3

Answer: (C) 4 · The council's preliminary key

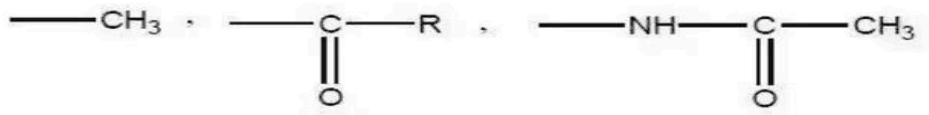
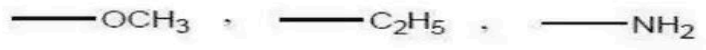
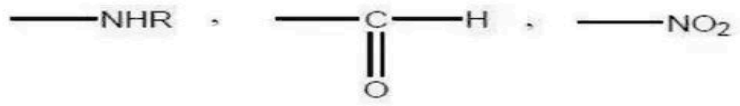
Q20 AP EAPCET 2026 · 12 May · Shift 2 MCQ

Identify the set with only meta directing groups

Identify the set with only meta directing groups

మెటా స్థాన నిర్దేశక సమూహాలను మాత్రమే కలిగి ఉన్న సమితిని గుర్తించుము

Options :

1. 
2. 
3. 
4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

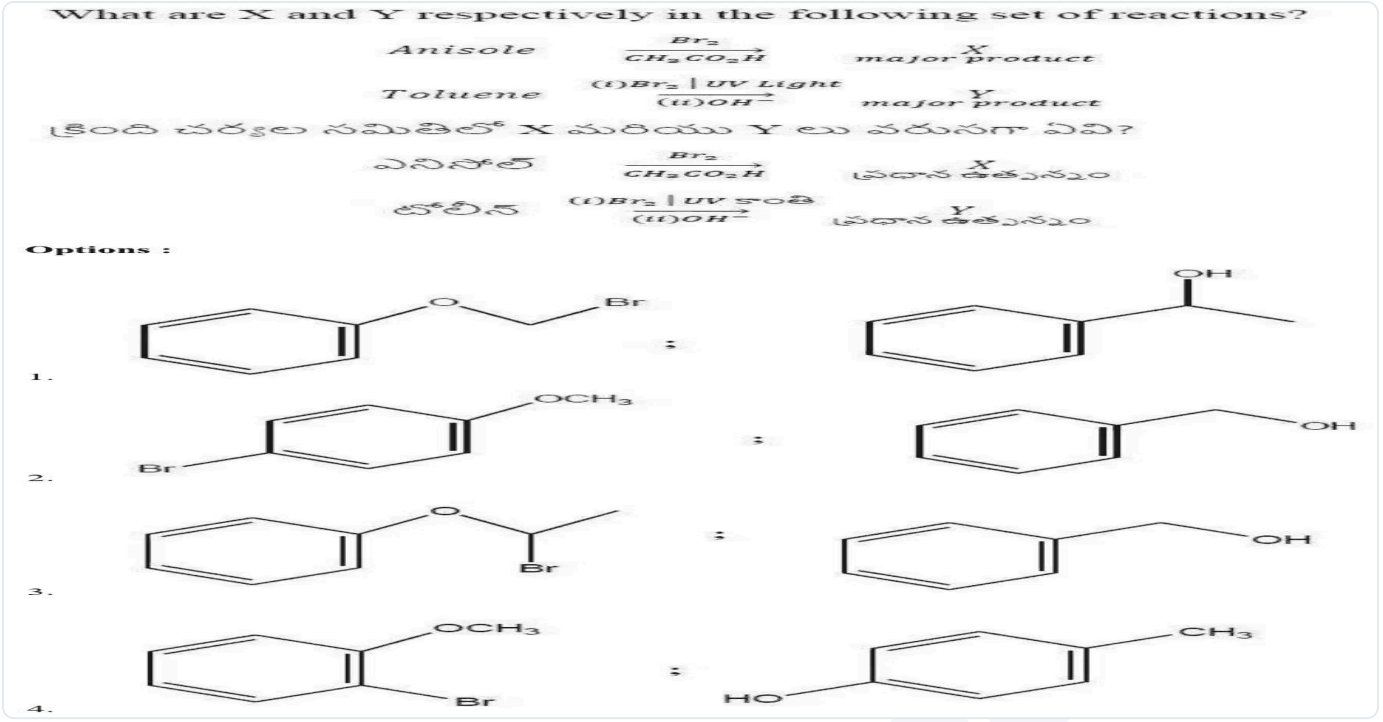
Answer: (B) · The council's preliminary key

Q21 AP EAPCET 2026 · 12 May · Shift 2 MCQ

What are X and Y respectively in the following set of reactions?

$$\text{Anisole} \xrightarrow[CH_3CO_2H]{Br_2} \underset{\text{major product}}{X}$$

$$\text{Toluene} \xrightarrow[\text{(ii) } OH^-]{\text{(i) } Br_2 \mid \text{UV Light}} \underset{\text{major product}}{Y}$$



(A) X: *(see the figure above)* phenyl ether C6H5-O-CH2-Br (bromomethyl phenyl ether); Y: *(see the figure above)* 1-phenylethanol (benzene ring attached to CH(OH)CH3)

(B) X: *(see the figure above)* 4-bromoanisole (benzene ring with OCH3 and Br para); Y: *(see the figure above)* benzyl alcohol (benzene ring attached to CH2OH)

(C) X: *(see the figure above)* phenyl ether C6H5-O-CH(Br)CH3 (1-bromoethyl phenyl ether); Y: *(see the figure above)* benzyl alcohol (benzene ring attached to CH2OH)

(D) X: *(see the figure above)* 2-bromoanisole (benzene ring with OCH3 and Br ortho); Y: *(see the figure above)* 4-methylphenol (p-cresol; benzene ring with CH3 and HO para)

Answer: (B) X: *(see the figure above)* **4-bromoanisole (benzene ring with OCH3 and Br para); Y:** *(see the figure above)* **benzyl alcohol (benzene ring attached to CH2OH)** · The council's preliminary key

Q22 TS EAPCET 2026 · 11 May · Shift 1 MCQ

1 mole of a hydrocarbon A(C_5H_{10}) on ozonolysis gives two compounds X and Y. Both X and Y respond to iodoform test. X gives test with ammonical $AgNO_3$ solution but not with Y. What are X and Y respectively?

(A) CH_2O ; $CH_3COC_2H_5$

(B) CH_3CHO; $(CH_3)_2CO$

(C) $(CH_3)_2C=O$; $CH_3CH=O$

(D) CH_3COOH ; $(CH_3)_2C=O$

Answer: (B) CH_3CHO; $(CH_3)_2CO$ · The council's preliminary key

Q23 TS EAPCET 2026 · 11 May · Shift 1 MCQ

Identify the pair of alkanes which undergo aromatization from the following

I. n-Hexane

II. Isopentane

III. n-Heptane

IV. Neohexane

(only)

(A) I & II only

(B) I & III only

(C) II & III only

(D) III & IV only

Answer: (B) I & III only · The council's preliminary key

Q24 TS EAPCET 2026 · 11 May · Shift 2 MCQ

An alkene, X (C_5H_{10}) exhibits cis/trans isomerism. Bromination of 'X' followed by reaction with reagent/s (Y) gave the product 'Z'. What are 'Y' and 'Z'?

(A) $NaNH_2$; $(CH_3)_2CHC \equiv CH$

(B) KOH (aq) ; $CH_3CH_2CH_2C \equiv CH$

(C) alc.KOH, $NaNH_2$; $CH_3CH_2C \equiv CCH_3$

(D) alc.KOH, $NaNH_2$; $CH_3CH_2CH_2C \equiv CH$

Answer: (C) alc.KOH, $NaNH_2$; $CH_3CH_2C \equiv CCH_3$ · The council's preliminary key

Q25 TS EAPCET 2026 · 11 May · Shift 2 MCQ

An alkene, C_4H_8 (X) on reaction with HBr gives a compound Y. Hydrolysis of Y follows S_N1 mechanism. The ozonolysis products of X are

(A) CH_3CH_2CHO, CH_2O

(B) CH_3CHO, CH_3CHO

(C) CH_3CH_2OH, CH_3CHO

(D) CH_3COCH_3, CH_2O

Answer: (D) CH_3COCH_3, CH_2O · The council's preliminary key

Q26 TS EAPCET 2026 · 11 May · Shift 2 MCQ

Observe the following reaction sequence and the statements given about the product Y (dry ether, anhy)

$$C_3H_6 \xrightarrow[(ii)\ Na\ /\ dry\ ether]{(i)\ HBr\ /\ (C_6H_5CO)_2O_2,\ O_2} X \xrightarrow[(ii)\ CH_3Cl\ /\ anhy.\ AlCl_3]{(i)\ V_2O_5,\ 773\ K,\ 10\text{-}20\ atm} Y$$

I. Reaction of 'Y' with Br_2 / UV light forms aryl bromide

II. Reaction of 'Y' with CrO_3 / $(CH_3CO)_2O$ followed by hydrolysis gives a compound which is acidic in nature

The correct answer is

(A) Both statements I and II are correct
(B) Both statements I and II are not correct
(C) Statement I is correct, but statement II is not correct
(D) Statement I is not correct, but statement II is correct

Answer: (B) Both statements I and II are not correct · The council's preliminary key

Q27 TS EAPCET 2026 · 11 May · Shift 2 MCQ

Bromination of toluene in the presence of anhydrous $AlCl_3$ gave X and bromination of cyclohexene in the presence of light yielded Y. X and Y respectively are

(A) Aryl bromide, Allyl bromide
(B) Benzyl bromide, Allyl bromide
(C) Aryl bromide, Vinyl bromide
(D) Benzyl bromide, Vinyl bromide

Answer: (A) Aryl bromide, Allyl bromide · The council's preliminary key

Q28 TS EAPCET 2026 · 11 May · Shift 2 MCQ

Identify the sets in which A, B and C of the following reaction sequence are in correct order

$$(CH_3)_3COH \xrightarrow{A} X \xrightarrow[(ii)\ C]{(i)\ B} (CH_3)_2CHCH_2OH\ (\text{Major product})$$

I. H_2SO_4; HBr; OH^-

II. $Cu/573\,K$; $HBr/(C_6H_5CO)_2O_2$; OH^-

III. $20\%\ H_3PO_4/358\,K$; $(BH_3)_2$; H_2O_2/OH^-

IV. $20\%\ H_3PO_4/358\,K$; HBr; OH^-

Correct answer is

(A) III, IV only
(B) II, III, IV only
(C) I, II, III only
(D) II, III only

Answer: (D) II, III only · The council's preliminary key

Q29 TS EAPCET 2026 · 11 May · Shift 2 MCQ

What are X and Y respectively in the following reaction sequence?

(see the figure above)

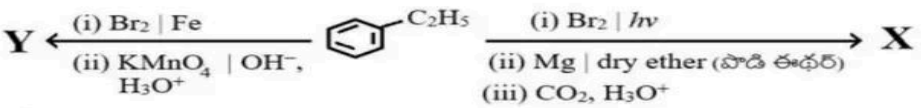
EdLoop EAPCET

Yes

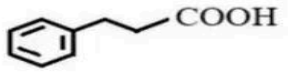
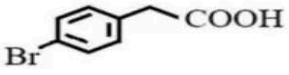
Correct Marks : 1 Wrong Marks : 0

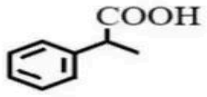
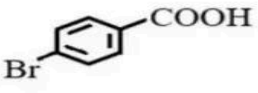
What are X and Y respectively in the following reaction sequence?

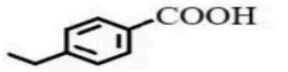
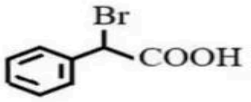
క్రింది చర్యాక్రమంలో X మరియు Y లు వరుసగా ఏవి?

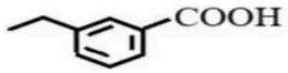
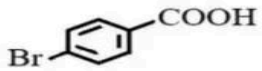


Options :

1.  ; 

2.  ; 

3.  ; 

4.  ; 

Prep Your Personal Exams

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (B) · The council's preliminary key

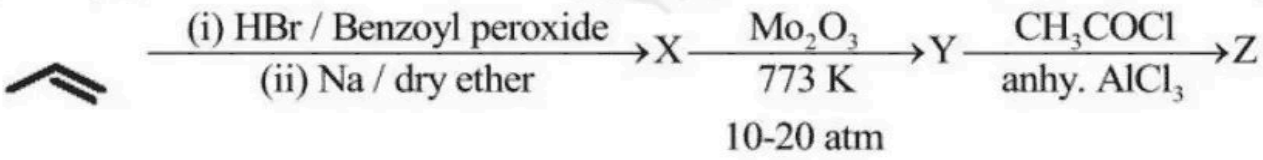
Q30 TS EAPCET 2026 · 10 May · Shift 1 MCQ

What is 'Z' in the given sequence of reactions?

(Benzoyl peroxide = benzoyl peroxide; dry ether = dry ether; anhy = anhydrous)

(see the figure above)

What is 'Z' in the given sequence of reactions?
క్రింద ఇవ్వబడిన చర్యల క్రమంలో 'Z' ఏది?
(Benzoyl peroxide = బెంజోయిల్ పెరాక్సైడ్; dry ether = పొడి ఈథర్; anhy = అనార్ద్ర)



Options :

1. C_6H_5COCl
2. $C_6H_5COCH_3$
3. $C_6H_5OCH_3$
4. $C_6H_5COCH_2CH_3$

(A) C_6H_5COCl
(B) $C_6H_5COCH_3$
(C) $C_6H_5OCH_3$
(D) $C_6H_5COCH_2CH_3$

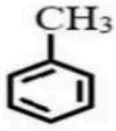
Answer: (B) $C_6H_5COCH_3$ · The council's preliminary key

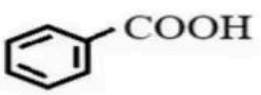
Q31 TS EAPCET 2026 · 10 May · Shift 2 MCQ

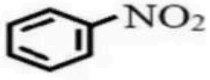
The compound that is most reactive towards electrophilic nitration is

The compound that is most reactive towards electrophilic nitration is
ఎలక్ట్రోఫిలిక్ నైట్రేషన్ పట్ల అత్యధిక చర్యాశీలతగల సమ్మేళనం

Options :

1. 

2. 
3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (A) · The council's preliminary key

Q32 TS EAPCET 2026 · 10 May · Shift 2 MCQ

What is Z in the given sequence of reactions? (conc = conc, Quinoline = Quinoline)

$$\text{Propyne} \xrightarrow[\text{Pd-C, Quinoline}]{\text{H}_2/} X \xrightarrow{\text{H}_2\text{O}|\text{H}^+} Y \xrightarrow[443\ \text{K}]{\text{Conc. H}_2\text{SO}_4} Z$$

(A) Ether
(B) Aldehyde
(C) Carboxylic Acid
(D) Alkene

Answer: (D) Alkene · The council's preliminary key

Q33 TS EAPCET 2026 · 9 May · Shift 1 MCQ

Which of the following reagent(s) will convert n-propylbromide to alkane with same number of carbon atoms?

I. $\text{Zn} \mid \text{H}^+$

II. $\text{Na} \mid \text{dry ether}$

III. (*i*) alc.KOH (*ii*) $\text{H}_2 \mid \text{Pt}$

The correct answer is

(A) I only
(B) II, III only
(C) I, III only
(D) II only

Answer: (C) I, III only · The council's preliminary key

Q34 TS EAPCET 2026 · 9 May · Shift 1 MCQ

Observe the following reaction sequence and sets (I to IV) given for X, Y, Z and choose the correct set(s)

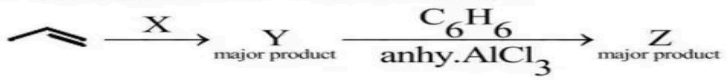
(anhy = anhydrous, major product = major product)

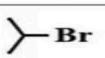
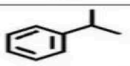
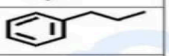
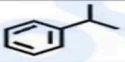
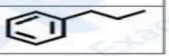
(see the figure above)

The correct answer is (only = only)

EdLoop EAPCET

Observe the following reaction sequence and sets (I to IV) given for X, Y, Z and choose the correct set(s)
క్రింది చర్యా క్రమాన్ని మరియు X, Y, Z లకు ఇవ్వబడిన సమితులు (I నుండి IV) పరిశీలించి సరైన సమితి(ల)ను ఎన్నుకొనుము
(anhy = అనార్ద్ర, major product = ప్రధాన ఉత్పన్నం)



	X	Y	Z
I	HBr		
II	HBr | $(C_6H_5CO)_2O_2$		
III	HBr | $(C_6H_5CO)_2O_2$		
IV	HBr		

The correct answer is
సరియైన సమాధానం (only = మాత్రమే)

Options :

1. I only
2. I, III only
3. I, II only
4. III, IV only

(A) I only
(B) I, III only
(C) I, II only
(D) III, IV only

Answer: (B) I, III only · The council's preliminary key

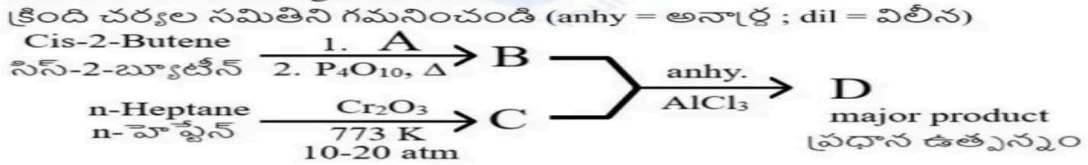
Q35 TS EAPCET 2026 · 9 May · Shift 2 MCQ

Observe the following set of reactions

(see the figure above)

What are A and D?

Observe the following set of reactions
క్రింది చర్యల సమితిని గమనించండి (anhy = అనార్ద్ర ; dil = విలీన)



What are A and D?
A మరియు D లు ఏవి?

Options :

1. $KMnO_4 | H^+$; 

2. dil. $KMnO_4$; 

3. $KMnO_4 | H^+$; 

4. $H_2O | H^+$; 

(A) $KMnO_4|H^+$; *(see the figure above)* para-substituted benzene ring with CH_3 at the top and $COCH_3$ at the bottom

(B) dil. $KMnO_4$; *(see the figure above)* meta-substituted benzene ring with $COCH_3$ and CH_3

(C) $KMnO_4|H^+$; *(see the figure above)* benzene ring with a $COCH_3$ substituent

(D) $H_2O|H^+$; *(see the figure above)* benzene ring with a CH_2CH_3 substituent

Answer: (A) $KMnO_4|H^+$; *(see the figure above)* **para-substituted benzene ring with CH_3 at the top and $COCH_3$ at the bottom** · The council's preliminary key

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Q36 TS EAPCET 2026 · 9 May · Shift 2 MCQ

Observe the following reaction sequence

$$\underset{(A)}{C_4H_6} \xrightarrow{B} C \xrightarrow[(ii)\ Zn+H_2O]{(i)\ O_3} D$$

Compound (A) forms sodium derivative with $NaNH_2$. What are B and D respectively?

(A) $H_2 \,|\, Ni$; $CH_3CH_2CHO + HCHO$

(B) $H_2 \,|\, Ni$; $CH_3CHO + CH_3CHO$

(C) $H_2 \,|\, Pd - C,\ quinoline$; $CH_3CH_2CHO + HCHO$

(D) $H_2 \,|\, Pd - C,\ quinoline$; $CH_3CHO + CH_3CHO$

Answer: (C) $H_2 \,|\, Pd - C,\ quinoline$; $CH_3CH_2CHO + HCHO$ · The council's preliminary key

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Q37 AP EAPCET 2025 · 27 May · Shift 1 MCQ

Consider the sets I, II and III. Identify the set(s) which is (are) correctly matched. (only)

I. Staggered ethane > eclipsed ethane ..... torsional strain.

II. 2, 2-Dimethylbutane > 2-methylpentane ..... boiling point

III. cis-But-2-ene > trans-But-2-ene ..... dipole moment

(A) I, II only
(B) II, III only
(C) III only
(D) I, II, III

Answer: (C) III only · The council's preliminary key

Q38 AP EAPCET 2025 · 27 May · Shift 1 MCQ

What are B and C respectively in the following set of reactions ?

$$C \xleftarrow[\Delta]{Zn} 1,2\text{-dibromopropane} \xrightarrow[(ii)\ NaNH_2]{(i)\ alc.KOH} A \xrightarrow[Catalyst]{Lindlar} B$$

What are B and C respectively in the following set of reactions ?

$C \xleftarrow[\Delta]{Zn} 1,2-$ dibromopropane $\xrightarrow[(ii)\,NaNH_2]{(i)\ alc.KOH} A \xrightarrow[Catalyst]{Lindlar} B$

క్రింద ఇవ్వబడిన చర్యల సమితిలో B మరియు C లు వరుసగా ఏవి ?

$C \xleftarrow[\Delta]{Zn} 1,2-$ డైబ్రోమోప్రోపేన్ $\xrightarrow[(ii)\,NaNH_2]{(i)\ \text{ఆల్కహాలిక్ KOH}} A \xrightarrow[\text{ఉత్ప్రేరకం}]{\text{లిండ్లార్}} B$

Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (A) · The council's preliminary key

Q39 AP EAPCET 2025 · 27 May · Shift 1 MCQ

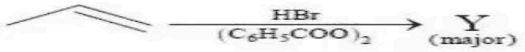
What are X and Y respectively in the following sets of reactions ? (major = major product)

I. *(see the figure above)* $\xrightarrow{PBr_3}$ X

II. *(see the figure above)* $\xrightarrow[(C_6H_5COO)_2]{HBr}$ Y (major)

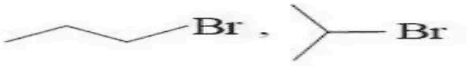
What are X and Y respectively in the following sets of reactions ?
క్రింది చర్యల సమితిలలో X మరియు Y లు ఏవి ? (major = ప్రధాన)

I. 

II. 

Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · The council's preliminary key

Q40 AP EAPCET 2025 · 26 May · Shift 1 MCQ

Match the following

List-I (Use)	List-II (Substance)
A) Electrodes in batteries	I) Polypropylene
B) Welding of metals	II) Polyacetylene
C) Toys	III) Oxyacetylene

The correct answer is

(A) A-III, B-II, C-I
(B) A-II, B-III, C-I
(C) A-II, B-I, C-III
(D) A-I, B-II, C-III

Answer: (B) A-II, B-III, C-I · The council's preliminary key

Q41 AP EAPCET 2025 · 26 May · Shift 1 MCQ

What is 'Z' in the following reaction sequence ? (alcohol; colourless)

$$C_3H_6 \xrightarrow[CCl_4]{Br_2} \underset{\text{(colourless)}}{X} \xrightarrow[\text{(ii) } NaNH_2,\ \Delta]{\text{(i) KOH/alcohol}} Y \xrightarrow[Hg^{2+},H^+]{H_2O\ (333\ K)} Z$$

(A) Acetone
(B) Propanal
(C) Propanol-2
(D) Methoxy ethane

Answer: (A) Acetone · The council's preliminary key

Q42 AP EAPCET 2025 · 26 May · Shift 1 MCQ

An alcohol $X(C_5H_{12}O)$ on dehydration gives Y (major product). Reaction of Y with HBr gave $Z(C_5H_{11}Br$, major product). Z undergoes nucleophilic substitution in two steps. What are X and Y ?

An alcohol $X(C_5H_{12}O)$ on dehydration gives Y (major product). Reaction of Y with HBr gave $Z(C_5H_{11}Br$, major product). Z undergoes nucleophilic substitution in two steps. What are X and Y ?
ఒక ఆల్కహాల్ $X(C_5H_{12}O)$ నిర్జలీకరణంలో Y (ప్రధాన ఉత్పన్నం)ను ఇచ్చింది. HBr తో Y చర్యనొంది $Z(C_5H_{11}Br$, ప్రధాన ఉత్పన్నం)ను ఇచ్చింది. రెండు అంచెలలో Z న్యూక్లియోఫిలిక్ ప్రతిక్షేపణ చెందుతుంది. X మరియు Y లు ఏవి ?

Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (B) · The council's preliminary key

Q43 AP EAPCET 2025 · 26 May · Shift 2 MCQ

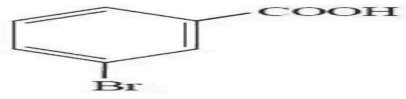
What are the major products X and Y respectively in the following set of reactions?

(see the figure above)

What are the major products X and Y respectively in the following set of reactions?
(క్రింది చర్యల సమితిలో ప్రధాన ఉత్పన్నాలు X మరియు Y లు వరుసగా ఏవి ? (dark = చీకటి)



Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (D) · The council's preliminary key

Q44 AP EAPCET 2025 · 26 May · Shift 2 MCQ

Which of the following will undergo methylation with CH_3Cl / anhy. $AlCl_3$?

a) Aniline b) Chlorobenzene c) Benzoic acid d) Anisole

(A) a, d
(B) b, c
(C) b, d
(D) a, c

Answer: (C) b, d · The council's preliminary key

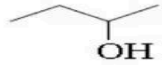
Q45 AP EAPCET 2025 · 24 May · Shift 1 MCQ

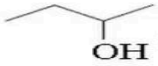
An alcohol $X(C_4H_{10}O)$ on dehydration gave alkene (C_4H_8) as major product, which on bromination followed by treatment with Y gave alkyne C_4H_6. Alkyne C_4H_6 does not react with sodium metal. What are X and Y ?

An alcohol $X(C_4H_{10}O)$ on dehydration gave alkene (C_4H_8) as major product, which on bromination followed by treatment with Y gave alkyne C_4H_6. Alkyne C_4H_6 does not react with sodium metal. What are X and Y ?

ఒక ఆల్కహాల్ $X(C_4H_{10}O)$ ను నిర్జలీకరణం చేయగా ఆల్కీన్ (C_4H_8) ను ప్రధాన ఉత్పన్నంగా ఇచ్చింది. దానిని బ్రోమినేషన్ చేసి తరువాత Y తో చర్యనొందించగా ఆల్కైన్ C_4H_6 ను ఇచ్చింది. ఆల్కైన్ C_4H_6 సోడియం లోహంతో చర్యనొందదు. X మరియు Y లు ఏవి ? (alc. = ఆల్క, aq. = జల)

Options :

1.  ; aq. KOH

2.  ; (i) alc.KOH (ii) $NaNH_2$

3.  ; alc. KOH

4.  ; (i) alc.KOH (ii) $NaNH_2$

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (B) · The council's preliminary key

Q46 AP EAPCET 2025 · 24 May · Shift 1 MCQ

p-Chlorotoluene is the major product in which of the following reactions ?

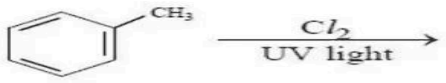
(only = only) (light = light; dark = dark)

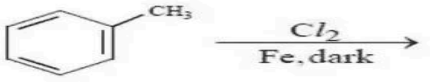
I) *(see the figure above)*

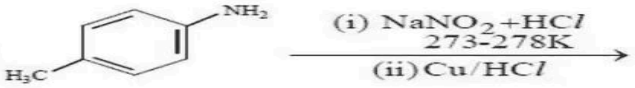
II) *(see the figure above)*

III) *(see the figure above)*

p-Chlorotoluene is the major product in which of the following reactions ?
క్రింది ఏ చర్యలలో p-క్లోరోటోలీన్ ప్రధాన ఉత్పన్నం ?
(only = మాత్రమే) (light = కాంతి; dark = చీకటి)

I) 

II) 

III) 

Options :

1. I, III only
2. I, II only
3. II, III only
4. I, II, III

(A) I, III only
(B) I, II only
(C) II, III only
(D) I, II, III

Answer: (C) II, III only · The council's preliminary key

Q47 AP EAPCET 2025 · 24 May · Shift 1 MCQ

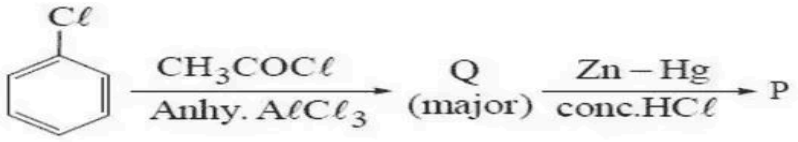
What is the ratio of sp^3 carbons to sp^2 carbons in the product 'P' of the given sequence of reactions ?
(anhy = anhydrous, major, conc. = concentrated)

(see the figure above)

What is the ratio of sp^3 carbons to sp^2 carbons in the product 'P' of the given sequence of reactions ?

ఇచ్చిన క్రమానుచర్యలలో ఉత్పన్నం 'P' నందలి sp^3 కార్బన్‌లకు, sp^2 కార్బన్‌లకు గల నిష్పత్తి ఏది ?

(anhy = అనార్ద్ర, major = ప్రధాన, conc. = గాఢ)



Options :

1. 3 : 1
2. 2 : 1
3. 1 : 2
4. 1 : 3

(A) 3 : 1
(B) 2 : 1
(C) 1 : 2
(D) 1 : 3

Answer: (D) 1 : 3 · The council's preliminary key

Q48 AP EAPCET 2025 · 23 May · Shift 1 MCQ

Which one of the following compounds does not give benzoic acid when treated with alkaline $KMnO_4$?

(A) Acetophenone
(B) n-Propyl benzene
(C) Styrene
(D) t-Butyl benzene

Answer: (D) t-Butyl benzene · The council's preliminary key

Q49 AP EAPCET 2025 · 23 May · Shift 2 MCQ

The empirical formula weight of 'Z' in the given reaction sequence is

$$\text{n-propyl bromide} \xrightarrow[\text{Dry ether}]{\text{Na}} X \xrightarrow[\substack{773\ K \\ 20\ atm}]{V_2O_5} Y \xrightarrow[500\ K]{\substack{Cl_2 \\ UV}} Z$$

(A) 47.5
(B) 54.5
(C) 84.5
(D) 48.5

Answer: (D) 48.5 · The council's preliminary key

Q50 AP EAPCET 2025 · 22 May · Shift 1 MCQ

Consider the following

Statement-I : Kolbe's electrolysis of sodium propionate gives n-hexane as product

Statement-II : In Kolbe's process CO_2 is liberated at anode and H_2 is liberated at cathode

Correct answer is

(A) Both statement-I and statement-II are correct
(B) Both statement-I and statement-II are not correct
(C) Statement-I is correct, but statement-II is not correct
(D) Statement-I is not correct, but statement-II is correct

Answer: (D) Statement-I is not correct, but statement-II is correct · The council's preliminary key

Q51 AP EAPCET 2025 · 22 May · Shift 2 MCQ

What are X, Y, Z in the following reaction sequence ?

But-2-ene $\xrightarrow{X}$ Ethanoic acid $\xrightarrow{Y}$ Ethanoyl chloride $\xrightarrow[\text{Anhy. } AlCl_3]{\text{Benzene}}$ Z

(A) $KMnO_4/H^+$; $SOCl_2$; Acetophenone
(B) $KMnO_4/H^+$; Cl_2; Propiophenone
(C) Cold $KMnO_4$; $SOCl_2$; Propiophenone
(D) Cold $KMnO_4$; Cl_2; Acetophenone

Answer: (A) $KMnO_4/H^+$; $SOCl_2$; **Acetophenone** · The council's preliminary key

Q52 AP EAPCET 2025 · 22 May · Shift 2 MCQ

The correct statement regarding X and Y in the following set of reactions is

(see the figure above)

The correct statement regarding X and Y in the following set of reactions is
క్రింది చర్యల సమితిలో X మరియు Y లకు సంబంధించి సరియైన వ్యాఖ్య

$$Y \xleftarrow[333-343\ K,\ 6-7\ atm]{(C_2H_5)_3Al.TiCl_4} nCH_2=CH_2 \xrightarrow[350-570\ K,\ 1000-2000\ atm]{(C_6H_5COO)_2} X$$

Options :

1. X is HDP and Y is LDP
   X అనేది HDP మరియు Y అనేది LDP
2. X is LDP and Y is HDP
   X అనేది LDP మరియు Y అనేది HDP
3. X is used in the preparation of flexible pipes and Y is used in manufacturing squeeze bottles
   X ను నమ్యశీలత గల పైపుల తయారీలో మరియు Y ను నలిపివేసే సీసాల తయారీలో వాడుతారు
4. X is used in insulation of electricity carrying wires, Y is used in manufacturing of bottles
   X ను విద్యుత్ ప్రసారం చేసే తీగలకు విద్యుద్బంధకంగా మరియు Y ను సీసాల తయారీలో ఉపయోగిస్తారు

(A) X is HDP and Y is LDP
(B) X is LDP and Y is HDP
(C) X is used in the preparation of flexible pipes and Y is used in manufacturing squeeze bottles
(D) X is used in insulation of electricity carrying wires, Y is used in manufacturing of bottles

Answer: (B) X is LDP and Y is HDP · The council's preliminary key

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Q53 AP EAPCET 2025 · 21 May · Shift 1 MCQ

Consider the following reaction sequence

$$\text{Vinylbenzene} \xrightarrow[\Delta]{KMnO_4+KOH} X \xrightarrow[\Delta]{NaOH+CaO} Y$$

'Y' can also be formed from

(A) Polymerisation of ethylene
(B) Polymerisation of propyne
(C) Aromatisation of n-hexane
(D) Aromatisation of n-heptane

Answer: (C) Aromatisation of n-hexane · The council's preliminary key

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Q54 AP EAPCET 2025 · 21 May · Shift 2 MCQ

The catalyst used for the isomerisation of n-alkanes to branched chain alkanes is

(Anhy : anhydrous)

(A) Anhy.$AlCl_3$ / HCl

(B) Mo_2O_3

(C) $FeCl_3$

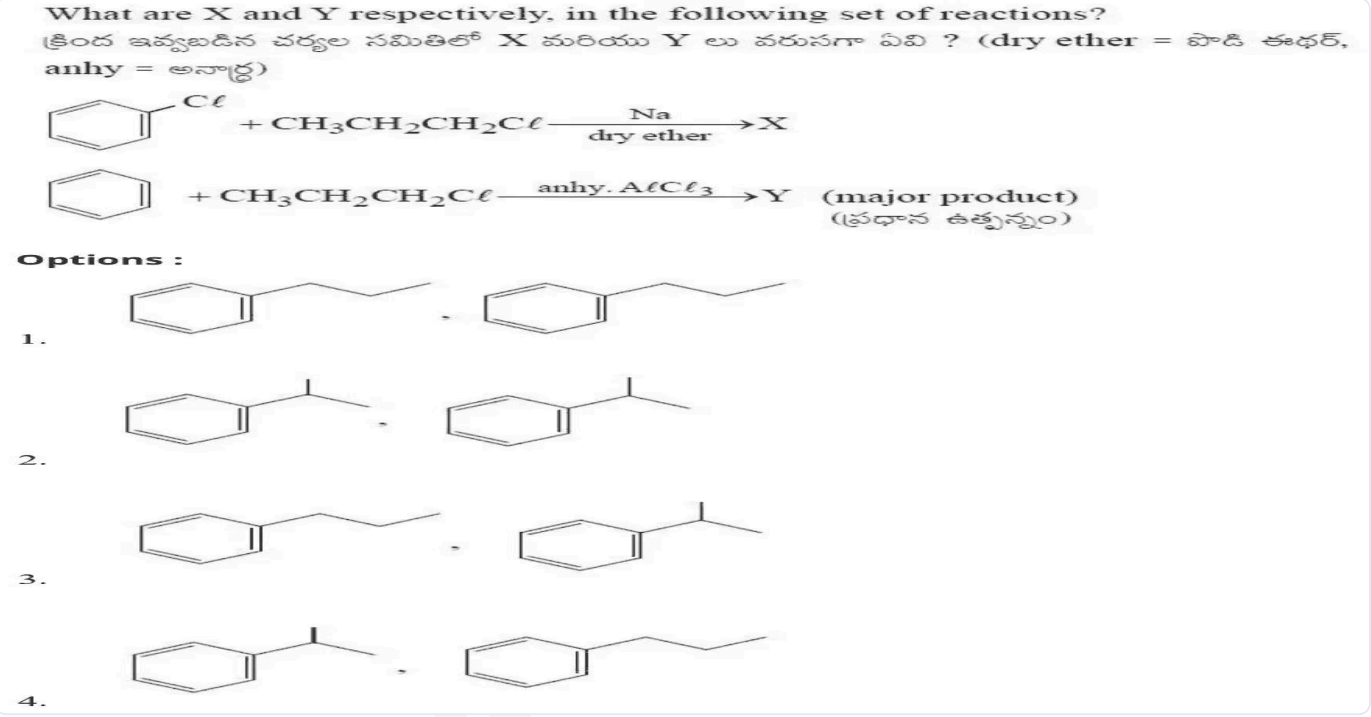
(D) $TiCl_4$ + R_3Al

Answer: (A) Anhy.$AlCl_3$ / HCl · The council's preliminary key

Q55 AP EAPCET 2025 · 21 May · Shift 2 MCQ

What are X and Y respectively, in the following set of reactions? (dry ether, anhy = anhydrous)

(see the figure above)



(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (C) · The council's preliminary key

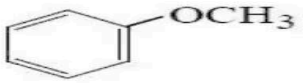
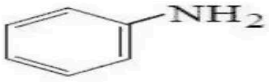
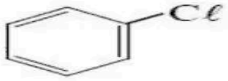
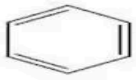
Q56 AP EAPCET 2025 · 21 May · Shift 2 MCQ

Which of the following does not involve in Friedel-Craft reaction ?

Display Question Number : Yes
Correct Marks : 1 Wrong Marks : 0

Which of the following does not involve in Friedel-Craft reaction ?
క్రింది వాటిలో ఏది ఫ్రీడల్–క్రాఫ్ట్ చర్యలో పాల్గొనదు ?

Options :

1. 
2. 
3. 
4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

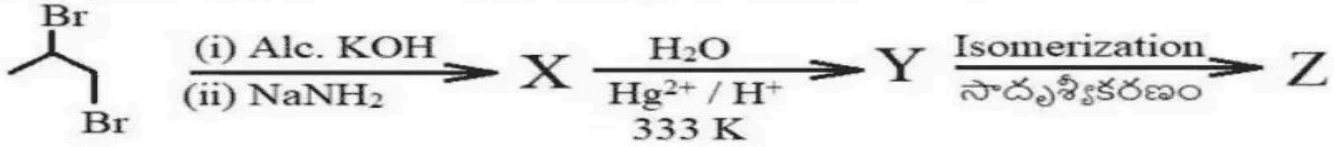
Answer: (B) · The council's preliminary key

Q57 TS EAPCET 2025 · 4 May · Shift 1 MCQ

Identify the compound (Z) in the following reaction sequence

(see the figure above)

Identify the compound (Z) in the following reaction sequence
క్రింది చర్యా క్రమంలో సమ్మేళనం (Z) ను గుర్తించుము



Options :

1. Propanal
ప్రోపనాల్

2. Propanone
ప్రోపనోన్

3. Propanoic acid
ప్రోపనోయిక్ ఆమ్లం

4. Propanamide
ప్రోపనమైడ్

(A) Propanal
(B) Propanone
(C) Propanoic acid
(D) Propanamide

Answer: (B) Propanone · The council's preliminary key

Q58 TS EAPCET 2025 · 4 May · Shift 1 MCQ

Match the following

List – 1 (Reaction)	List – 2 (Major product)
A $CH_3 - C \equiv CH \xrightarrow[Hg^{2+}/H^+,\ 333K]{H_2O}$	I $CH_3 - CH - CH_3$ with OH on the middle carbon
B $CH_3COONa \xrightarrow[electrolysis]{H_2O,Pt}$	II $CH_3 - C - CH_3$ with =O on the middle carbon
C $CH_3 - CH = CH_2 \xrightarrow{H_2O/H^+}$	III $CH_3 - CH - CH_2$ with OH on the middle carbon and OH on the terminal carbon
D $CH_3 - CH = CH_2 \xrightarrow[273K]{H_2O,\ dil.KMnO_4}$	IV $CH_3 - CH_3$
	V CH_4

The correct answer is

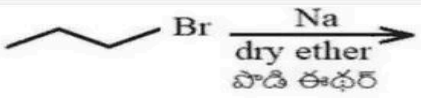
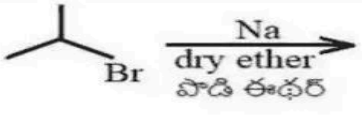
(A) A-II, B-IV, C-I, D-III
(B) A-II, B-V, C-I, D-III
(C) A-III, B-IV, C-II, D-I
(D) A-II, B-III, C-IV, D-I

Answer: (A) A-II, B-IV, C-I, D-III · The council's preliminary key

Q59 TS EAPCET 2025 · 4 May · Shift 2 MCQ

'X' is the isomer of C_6H_{14}. It has four primary carbons and two tertiary carbons. 'X' can be prepared from which of the following reaction?

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: Yes
Correct Marks : 1 Wrong Marks : 0
'X' is the isomer of C_6H_{14}. It has four primary carbons and two tertiary carbons. 'X' can be prepared from which of the following reaction?
C_6H_{14} యొక్క సదృశకం 'X'. దీనిలో నాలుగు ప్రైమరీ మరియు రెండు తెర్షియరీ కార్బన్ లున్నాయి. క్రింది ఏ చర్య ద్వారా 'X' ను తయారు చేయవచ్చు?
Options :
1. 
2. 
3. 
4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (D) · The council's preliminary key

Q60 TS EAPCET 2025 · 4 May · Shift 2 MCQ

What are X and Y in the following reaction sequence?

Iso pentane $\xrightarrow{KMnO_4}$ X $\xrightarrow[358\ K]{20\%\ H_3PO_4}$ Y

: Yes
Correct Marks : 1 Wrong Marks : 0
What are X and Y in the following reaction sequence?
క్రింది వరుస చర్యలలో X మరియు Y లు ఏవి?
Iso pentane ఐసోపెంటేన్ $\xrightarrow{KMnO_4}$ X $\xrightarrow[358\ K]{20\%\ H_3PO_4}$ Y
Options :
1. 
2. 

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3. 
4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

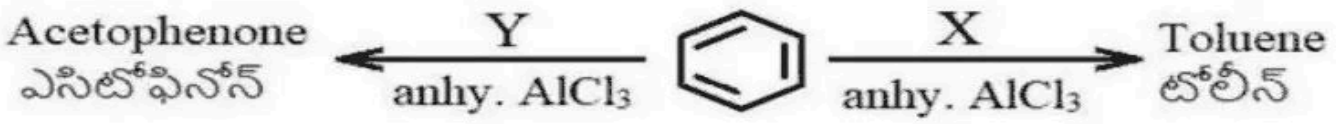
Answer: (C) · The council's preliminary key

Q61 TS EAPCET 2025 · 4 May · Shift 2 MCQ

What are X and Y respectively in the following reactions? (Anhy. = anhydrous)

(see the figure above)

: Yes
Correct Marks : 1 Wrong Marks : 0
What are X and Y respectively in the following reactions?
క్రింది చర్యలలో X మరియు Y లు వరుసగా ఏవి? (Anhy. = అనార్ద్ర)



Options :

1. CH_3Cl, CH_3COCl
2. C_2H_5Cl, CH_3COCl
3. CH_3COCl, CH_3Cl
4. C_2H_5COCl, CH_3Cl

(A) CH_3Cl, CH_3COCl
(B) C_2H_5Cl, CH_3COCl
(C) CH_3COCl, CH_3Cl
(D) C_2H_5COCl, CH_3Cl

Answer: (A) CH_3Cl, CH_3COCl · The council's preliminary key

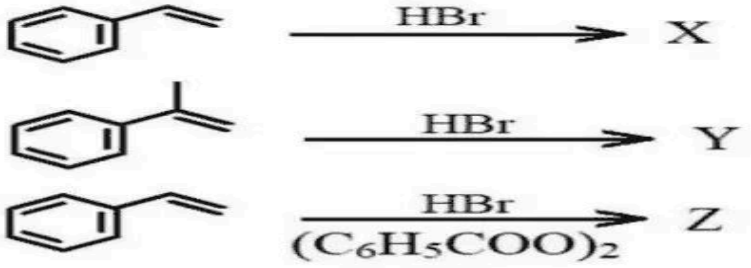
Q62 TS EAPCET 2025 · 4 May · Shift 2 MCQ

Observe the following reactions

(see the figure above)

The correct order of reactivity of X, Y, Z towards S_N1 reaction is

: Yes
Correct Marks : 1 Wrong Marks : 0
Observe the following reactions
క్రింది చర్యలను గమనించండి



The correct order of reactivity of X, Y, Z towards S_N1 reaction is
S_N1 చర్యలో X, Y, Z ల సరైన చర్యా శీలత క్రమం

Options :

1. $X > Y > Z$
2. $X > Z > Y$
3. $Y > X > Z$
4. $Y > Z > X$

(A) $X > Y > Z$
(B) $X > Z > Y$
(C) $Y > X > Z$
(D) $Y > Z > X$

Answer: (C) $Y > X > Z$ · The council's preliminary key

Q63 TS EAPCET 2025 · 4 May · Shift 2 MCQ

What are X and Y in the following reaction sequence?

$$C_5H_{12}O \xrightarrow[573\ K]{Cu} C_5H_{10} \xrightarrow[(ii)\ Zn+H_2O]{(i)\ O_3} X + Y$$

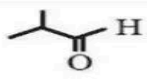
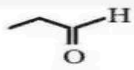
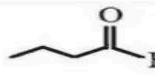
: Yes
Correct Marks : 1 Wrong Marks : 0

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What are X and Y in the following reaction sequence?
క్రింది చర్యా క్రమంలో X మరియు Y లు ఏవి?

$$C_5H_{12}O \xrightarrow[573\ K]{Cu} C_5H_{10} \xrightarrow[(ii)\ Zn + H_2O]{(i)\ O_3} X + Y$$

Options :

1.  + CH_3CHO
2.  + $HCHO$
3.  + CH_3CHO
4.  + HCO_2H

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (A) · The council's preliminary key

Q64 TS EAPCET 2025 · 3 May · Shift 1 MCQ

The empirical formula of the compound 'D' formed in the given reaction sequence is

$$C_2H_4 \xrightarrow{Br_2|CCl_4} A \xrightarrow[(ii)\ NaNH_2]{(i)\ alc.\ KOH} B \xrightarrow[polymerization]{cylclic} C \xrightarrow[dry\ AlCl_3,\ dark,\ cold]{Cl_2\ (excess)} D$$

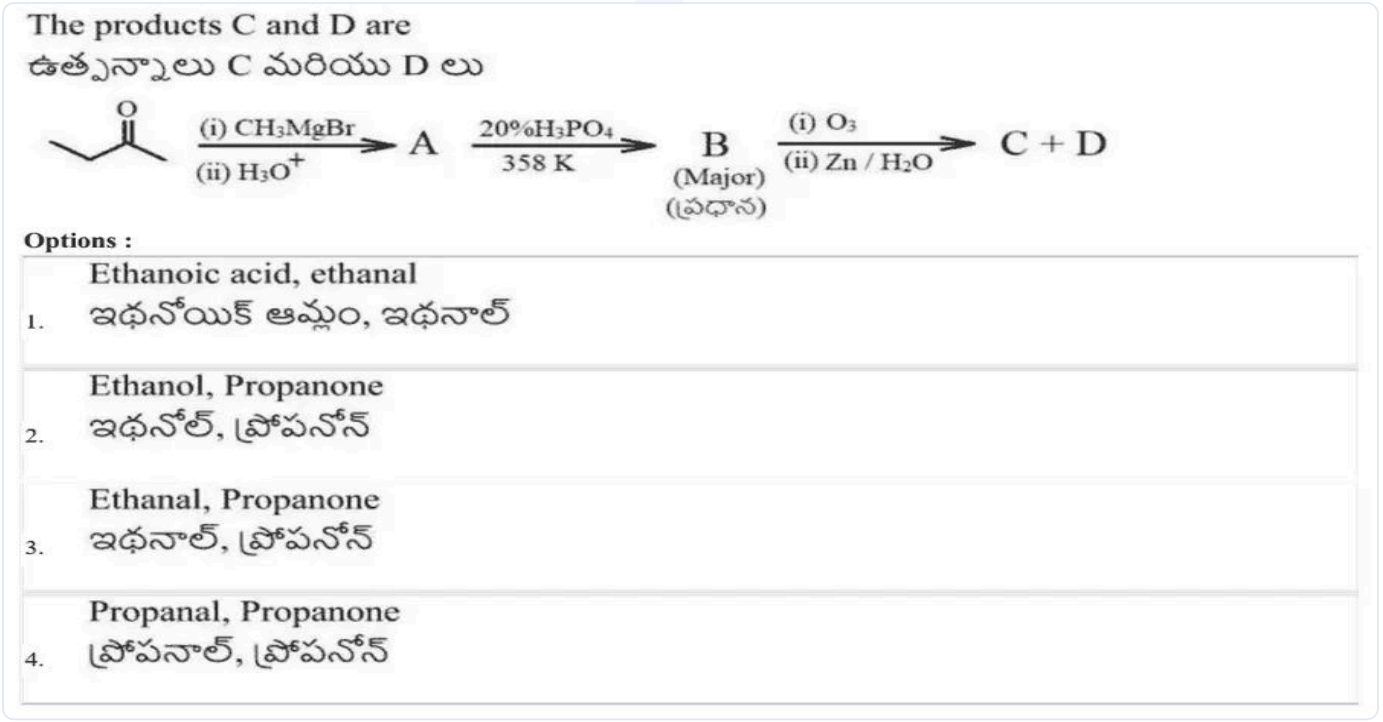
(A) $CHCl$
(B) CCl
(C) CH_2Cl
(D) $CHCl_2$

Answer: (B) CCl · The council's preliminary key

Q65 TS EAPCET 2025 · 3 May · Shift 1 MCQ

The products C and D are

(see the figure above)



(A) Ethanoic acid, ethanal
(B) Ethanol, Propanone
(C) Ethanal, Propanone
(D) Propanal, Propanone

Answer: (C) Ethanal, Propanone · The council's preliminary key

Q66 TS EAPCET 2025 · 3 May · Shift 2 MCQ

Arrange the following in decreasing order of their boiling points

(A) 2 – Methylbutane

(B) 2,2 – Dimethylpropane

(C) Pentane

(D) Hexane

(A) $D > C > A > B$
(B) $B > A > C > D$
(C) $D > A > C > B$
(D) $B > C > A > D$

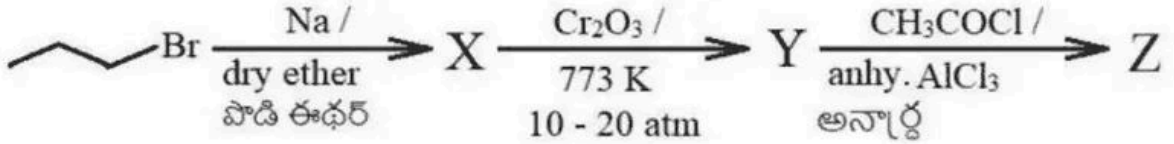
Answer: (A) $D > C > A > B$ · The council's preliminary key

Q67 TS EAPCET 2025 · 2 May · Shift 1 MCQ

Consider the following sequence of reactions. In 'Z' the number of sp^3 carbons is 'a' and sp^2 carbons is 'b'. Value of (a + b) is

(see the figure above)

Consider the following sequence of reactions. In 'Z' the number of sp^3 carbons is 'a' and sp^2 carbons is 'b'. Value of (a + b) is
క్రింది క్రమాను చర్యలను పరిగణించుము. 'Z' నందలి sp^3 కార్బన్ ల సంఖ్య 'a' మరియు sp^2 కార్బన్ ల సంఖ్య 'b' అయిన, (a + b) విలువ



Options :

1. 8
2. 7
3. 6
4. 9

(A) 8
(B) 7
(C) 6
(D) 9

Answer: (A) 8 · The council's preliminary key

Q68 TS EAPCET 2025 · 2 May · Shift 1 MCQ

Consider the following reaction sequence. (A) and (C) are

$$CH_3CHO \xrightarrow[(ii)\ H_2O\,|\,H^+]{(i)\ CH_3MgBr} (A) \xrightarrow{H_2SO_4,\,\Delta} (B) \xrightarrow[(ii)\ H_2O,H_2O_2\,|\,OH^-]{(i)\ B_2H_6} (C)$$

(A) Functional isomers
(B) Metamers
(C) Optical isomers
(D) Position isomers

Answer: (D) Position isomers · The council's preliminary key

Q69 TS EAPCET 2025 · 2 May · Shift 2 MCQ

An alkene X on ozonolysis gives a mixture of simplest ketone (Y) and 3-Pentanone. The IUPAC name of the alkene X is

(A) 2,3-Dimethylbut-2-ene
(B) 3-Ethyl-4-methylpent-3-ene
(C) 3-Ethyl-2- methylpent-2-ene
(D) 2-Methyl-3-ethylpent-2-ene

Answer: (C) 3-Ethyl-2- methylpent-2-ene · The council's preliminary key

Q70 AP EAPCET 2024 · 23 May · Shift 1 MCQ

Which of the following sequence of reagents convert 3-hexene to propane?

(A) $KMnO_4|H^+$; NaOH, CaO
(B) (i) O_3 (ii) Zn, H_2O; $NaBH_4$
(C) (i) O_3, (ii) Zn,H_2O ; Zn-Hg, HCl
(D) $KMnO_4|H^+$; $LiAlH_4$, H_2O

Answer: (C) (i) O_3, (ii) Zn,H_2O ; Zn-Hg, HCl · The council's preliminary key

Q71 AP EAPCET 2024 · 23 May · Shift 1 MCQ

What are X and Y respectively in the following reactions?

(see the figure above)

What are X and Y respectively in the following reactions?
కింది చర్యలలో X మరియు Y లు వరుసగా ఏవి?



Options :

1. 

2. 

3. 

4. 

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (C) · The council's preliminary key

Q72 AP EAPCET 2024 · 23 May · Shift 1 MCQ

Toluene on reaction with the reagent X gave Y, which dissolves in $NaHCO_3$ and when reacted with Br_2/Fe gave Z. What are X and Z?

Toluene on reaction with the reagent X gave Y, which dissolves in $NaHCO_3$ and when reacted with Br_2 / Fe gave Z. What are X and Z?
టోలీన్, కారకం X తో చర్యనొంది Y ను ఇచ్చింది. Y, $NaHCO_3$ లో కరుగుతుంది మరియు దానిని Br_2 / Fe తో చర్య జరిపినపుడు Z ను ఇచ్చింది. X మరియు Z లు ఏవి?

Options :

1. (i) $KMnO_4$ / OH^-, Δ (ii) H_3O^+; 

2. (i) CrO_2Cl_2 (ii) H_3O^+; 

3. (i) CrO_2Cl_2 (ii) H_3O^+; 

4. (i) $KMnO_4$ / OH^-, Δ (ii) H_3O^+; 

(A) X: (i) $KMnO_4/OH^-$, Δ (ii) H_3O^+; Z: *(see the figure above)* benzene ring with COOH and Br in para (1,4) positions (p-bromobenzoic acid)

(B) X: (i) CrO_2Cl_2 (ii) H_3O^+; Z: *(see the figure above)* benzene ring with COOH and Br in para (1,4) positions (p-bromobenzoic acid)

(C) X: (i) CrO_2Cl_2 (ii) H_3O^+; Z: *(see the figure above)* benzene ring with CHO and Br in meta (1,3) positions (m-bromobenzaldehyde)

(D) X: (i) $KMnO_4/OH^-$, Δ (ii) H_3O^+; Z: *(see the figure above)* benzene ring with COOH and Br in meta (1,3) positions (m-bromobenzoic acid)

Answer: (D) X: (i) $KMnO_4/OH^-$, Δ (ii) H_3O^+; Z: *(see the figure above)* **benzene ring with COOH and Br in meta (1,3) positions (m-bromobenzoic acid)** · The council's preliminary key

Q73 AP EAPCET 2024 · 22 May · Shift 1 MCQ

In Kolbe's electrolysis of sodium propanoate, products formed at anode and cathode are respectively

(A) C_2H_6, H_2

(B) C_3H_8, H_2

(C) C_4H_{10}, H_2

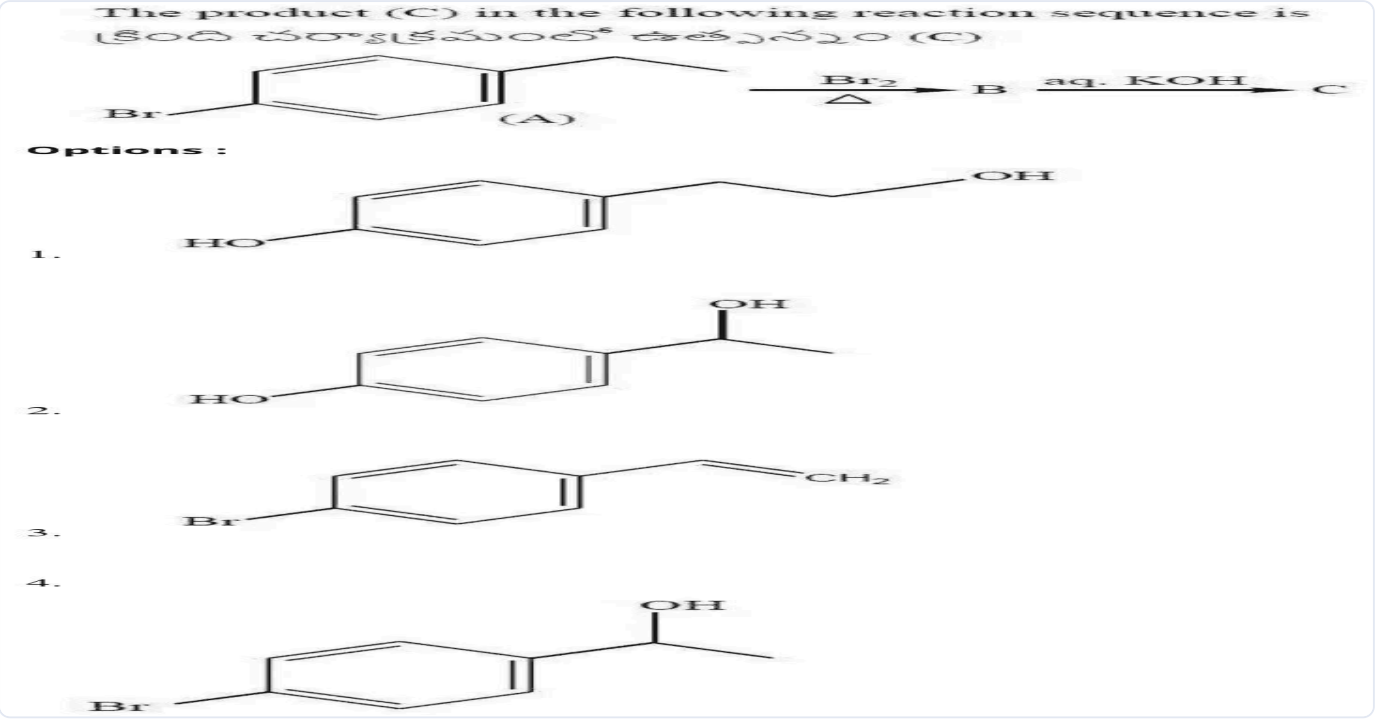
(D) H_2, C_4H_{10}

Answer: (C) C_4H_{10}, H_2 · The council's preliminary key

Q74 AP EAPCET 2024 · 22 May · Shift 1 MCQ

The product (C) in the following reaction sequence is

(see the figure above)



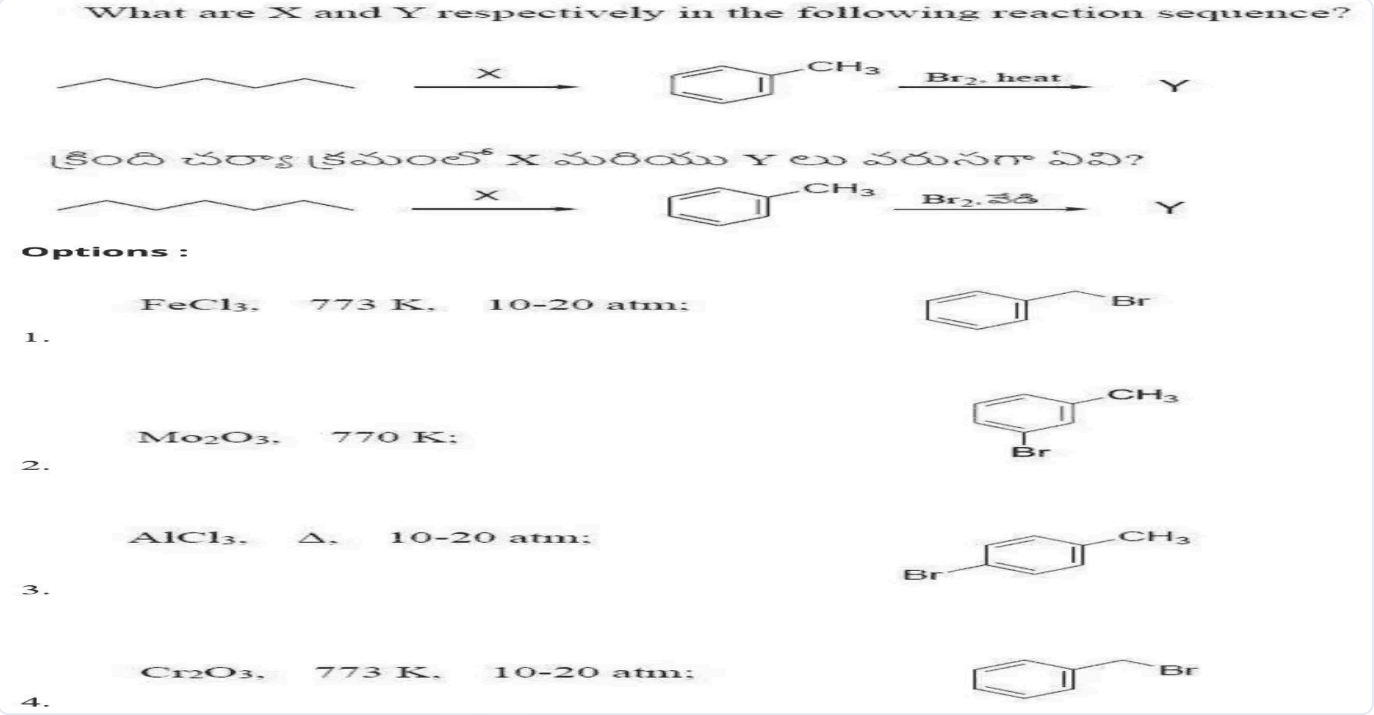
(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (D) · The council's preliminary key

Q75 AP EAPCET 2024 · 22 May · Shift 2 MCQ

What are X and Y respectively in the following reaction sequence?

(see the figure above)



(A) $FeCl_3$, 773 K, 10-20 atm; *(see the figure above)* benzyl bromide (benzene ring with a CH2Br group attached)
(B) Mo_2O_3, 770 K; *(see the figure above)* 3-bromotoluene (benzene ring with CH3 and Br in meta positions)
(C) $AlCl_3$, Δ, 10-20 atm; *(see the figure above)* 4-bromotoluene (benzene ring with CH3 and Br in para positions)
(D) Cr_2O_3, 773 K, 10-20 atm; *(see the figure above)* benzyl bromide (benzene ring with a CH2Br group attached)

Answer: (D) Cr_2O_3, 773 K, 10-20 atm; *(see the figure above)* benzyl bromide (benzene ring with a CH2Br group attached) · The council's preliminary key

Q76 AP EAPCET 2024 · 21 May · Shift 1 MCQ

A mixture of ethyl iodide and n-propyl iodide is subjected to Wurtz reaction. The hydrocarbon which will not be formed is

(A) Butane
(B) Propane
(C) Pentane
(D) Hexane

Answer: (B) Propane · The council's preliminary key

Q77 AP EAPCET 2024 · 21 May · Shift 1 MCQ

Which of the following alkenes does not undergo anti Markownikov addition of HBr?

(A) Propene
(B) 1-Butene
(C) 2-Butene
(D) 3-Methyl-2-Pentene

Answer: (C) 2-Butene · The council's preliminary key

Q78 AP EAPCET 2024 · 21 May · Shift 2 MCQ

Number of deactivating groups of the following is

$-\mathrm{Cl},\ -\mathrm{SO_3H},\ -\mathrm{OH},\ -\mathrm{NHC_2H_5},\ -\mathrm{COOCH_3},\ -\mathrm{CH_3}$

(A) 4
(B) 3
(C) 2
(D) 1

Answer: (B) 3 · The council's preliminary key

Q79 AP EAPCET 2024 · 21 May · Shift 2 MCQ

What are X and Y respectively in the following reaction sequence?

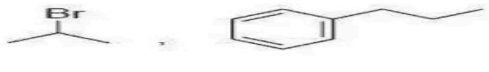
(see the figure above)

EdLoop EAPCET

What are X and Y respectively in the following reaction sequence?
క్రింది చర్యా క్రమంలో X మరియు Y లు వరుసగా ఏవి?



Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (D) · The council's preliminary key

Q80 AP EAPCET 2024 · 20 May · Shift 1 MCQ

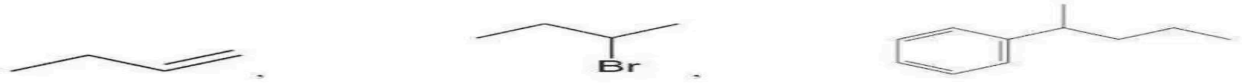
An alkene X (C_4H_8) on reaction with HBr gave Y (C_4H_9Br). Reaction of Y with benzene in the presence of anhydrous $AlCl_3$ gave Z which is resistant to oxidation with $KMnO_4$ - KOH. What are X, Y, Z respectively?

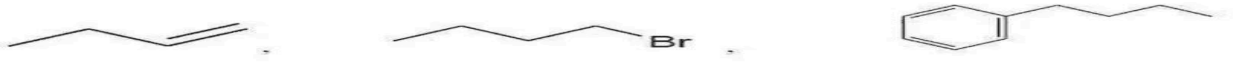
An alkene X (C_4H_8) on reaction with HBr gave Y (C_4H_9Br). Reaction of Y with benzene in the presence of anhydrous $AlCl_3$ gave Z which is resistant to oxidation with $KMnO_4$ - KOH. What are X, Y, Z respectively?
ఒక ఆల్కీన్ X (C_4H_8) HBr తో చర్యనొంది Y (C_4H_9Br) ను ఇచ్చింది. అనార్ద్ర $AlCl_3$ సమక్షంలో Y బెంజీన్ తో చర్యనొంది Z ను ఇచ్చింది. $KMnO_4$ - KOH తో ఆక్సీకరణాన్ని Z నిరోధిస్తుంది. X, Y, Z లు వరుసగా ఏవి?

Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

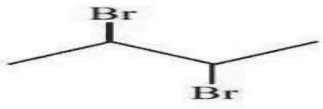
Answer: (A) · The council's preliminary key

Q81 AP EAPCET 2024 · 20 May · Shift 1 MCQ

An alkene X (C_4H_8) does not exhibit cis trans isomerism. Reaction of X with Br_2 in the presence of UV light gave Y. What is Y?

An alkene X (C_4H_8) does not exhibit cis trans isomerism. Reaction of X with Br_2 in the presence of UV light gave Y. What is Y?
ఆల్కీన్ X (C_4H_8) సిస్-ట్రాన్స్ సాదృశ్యాన్ని ప్రదర్శించదు. X, UV కాంతి సమక్షంలో Br_2 తో చర్యనొంది Y ని ఏర్పరచింది. Y ఏది?

Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · The council's preliminary key

Q82 AP EAPCET 2024 · 20 May · Shift 2 MCQ

What is X in the following reaction?

(see the figure above)

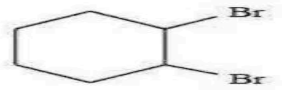
What is X in the following reaction?
క్రింది చర్యలో X ఏది?

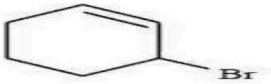


Options :

1. 

2. 

3. 

4. 

(A) $H_3C - CH_2 - C \equiv C - CH_2 - CH_2Br$

(B) $H_3C - CH_2 - C \equiv C - CH(Br) - CH_3$ (Br on the CH carbon, drawn below it)

(C) *see figure*

(D) *see figure*

Answer: (D) · The council's preliminary key

Q83 AP EAPCET 2024 · 20 May · Shift 2 MCQ

Styrene on reaction with reagent X gave Y which on hydrolysis followed by oxidation gave Z. Z gives positive 2,4 – DNP test but does not give iodoform test. What are X and Z respectively?

(A) HBr ; $C_6H_5COCH_3$

(B) HBr ; $C_6H_5CH_2CHO$

(C) $HBr/(C_6H_5CO)_2O_2$; $C_6H_5CH_2CHO$

(D) $HBr/(C_6H_5CO)_2O_2$; $C_6H_5COCH_3$

Answer: (C) $HBr/(C_6H_5CO)_2O_2$; $C_6H_5CH_2CHO$ · The council's preliminary key

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Q84 AP EAPCET 2024 · 19 May · Shift 2 MCQ

What are X and Y respectively in the following reaction sequence?

Isopentane $\xrightarrow{KMnO_4}$ X $\xrightarrow{\text{dehydration}}$ Y (Major)

What are X and Y respectively in the following reaction sequence?

Isopentane $\xrightarrow{KMnO_4}$ X $\xrightarrow{\text{dehydration}}$ Y (Major)

క్రింది చర్యాక్రమంలో X మరియు Y లు వరసగా ఏవి?

ఐసోపెంటేన్ $\xrightarrow{KMnO_4}$ X $\xrightarrow{\text{నిర్జలీకరణం}}$ Y ప్రధాన

Options :

1. 

2. 

3. 

4. 

A *see figure*

B *see figure*

C *see figure*

D *see figure*

Answer: (A) · The council's preliminary key

Q85 AP EAPCET 2024 · 19 May · Shift 2 MCQ

The major product (X) formed in the given reaction is an example of

(see the figure above)

The major product (X) formed in the given reaction is an example of

క్రింది చర్యలో ఏర్పడే ప్రధాన ఉత్పన్నం (X) దీనికి ఒక ఉదాహరణ



Options :

1. Secondary alkyl halide
సెకండరీ ఆల్కైల్ హాలైడ్

2. Primary alkyl halide
ప్రైమరీ ఆల్కైల్ హాలైడ్

3. Tertiary alkyl halide
టెర్షియరీ ఆల్కైల్ హాలైడ్

4. Benzylic halide
బెంజైలిక్ హాలైడ్

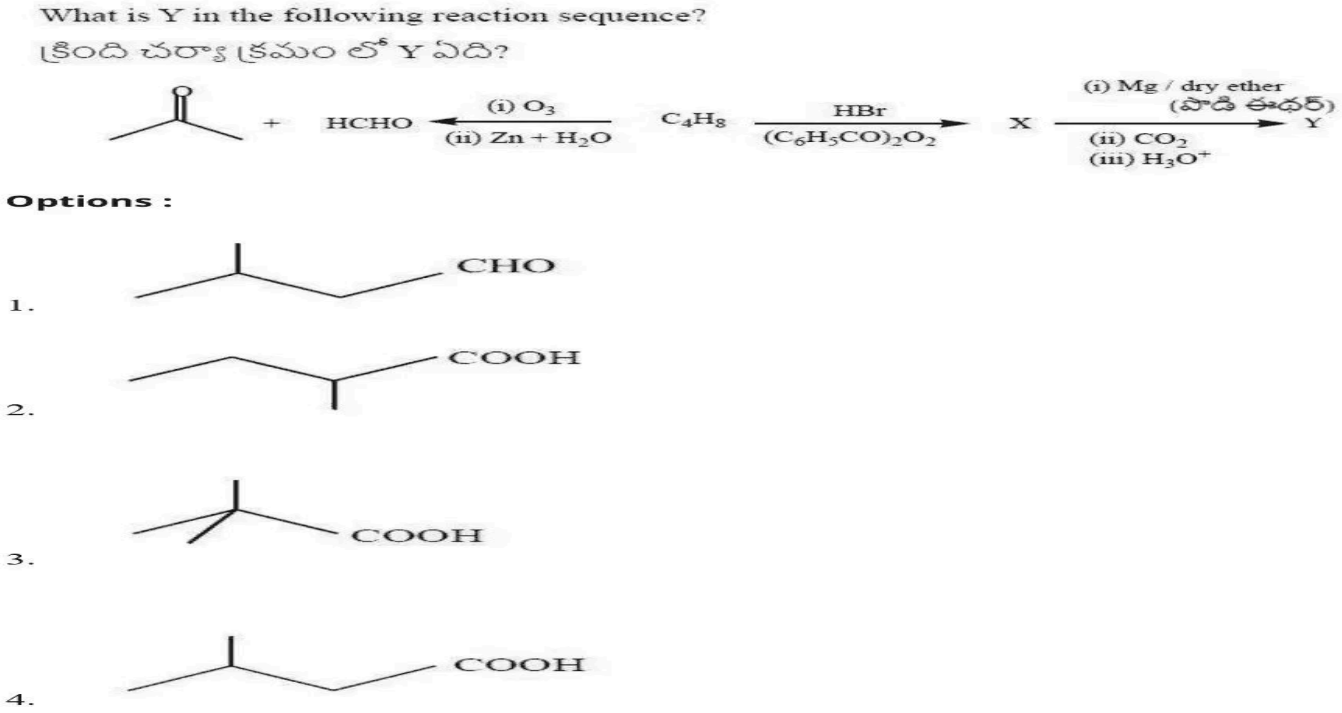
(A) Secondary alkyl halide
(B) Primary alkyl halide
(C) Tertiary alkyl halide
(D) Benzylic halide

Answer: (B) Primary alkyl halide · The council's preliminary key

Q86 AP EAPCET 2024 · 19 May · Shift 2 MCQ

What is Y in the following reaction sequence?

(see the figure above)



(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (D) · The council's preliminary key

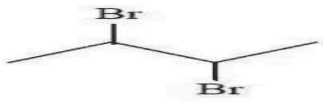
Q87 AP EAPCET 2024 · 18 May · Shift 1 MCQ

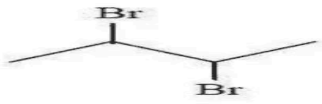
A dibromide X ($C_4H_8Br_2$) on dehydrohalogenation gave Y which on reduction with Z gave non polar isomer of C_4H_8. What are X and Z respectively?

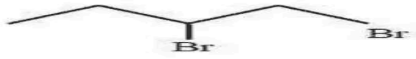
A dibromide X ($C_4H_8Br_2$) on dehydrohalogenation gave Y which on reduction with Z gave non polar isomer of C_4H_8. What are X and Z respectively?

ఒక డైబ్రోమైడ్ X ($C_4H_8Br_2$) డీహైడ్రో హాలోజినేషన్ లో Y ను ఇచ్చింది. Y ను Z తో క్షయకరణం చేయగా C_4H_8 యొక్క అధ్రువ సాదృశ్యాన్ని ఏర్పరిచింది. X మరియు Z లు వరుసగా ఏవి?

Options :

1.  - Na / NH_3 (*l*)

2.  - Pd / C

3.  - Na / NH_3 (*l*)

4.  - Pd / C

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (A) · The council's preliminary key

Q88 TS EAPCET 2024 · 11 May · Shift 1 MCQ

Consider the following reaction sequence

$$\text{2-Methylpropane} \xrightarrow{KMnO_4} X \xrightarrow[358\ K]{20\%\ H_3PO_4} Y \xrightarrow[(ii)\ Zn/H_2O]{(i)O_3} A + B$$

What are A and B?

(A) $CH_3CH{=}O,\ CH_3CH{=}O$

(B) $(CH_3)_2C{=}O,\ CH_2{=}O$

(C) $(CH_3)_2C{=}O,\ CH_3CH{=}O$

(D) $CH_3CH{=}O,\ CH_2{=}O$

Answer: (B) $(CH_3)_2C{=}O,\ CH_2{=}O$ · The council's preliminary key

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Q89 TS EAPCET 2024 · 11 May · Shift 1 MCQ

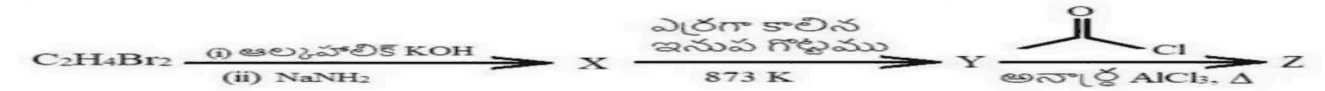
Identify the end product (Z) in the sequence of the following reactions

(see the figure above)

Identify the end product (Z) in the sequence of the following reactions



క్రింది చర్యల క్రమంలో అంత్య ఉత్పన్నం (Z) ను గుర్తించుము



Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (B) · The council's preliminary key

Q90 TS EAPCET 2024 · 10 May · Shift 1 MCQ

The major product 'Y' in the given sequence of reactions is

$$C_3H_7OH \xrightarrow[443\ K]{\text{Conc. } H_2SO_4} X \xrightarrow[(C_6H_5CO)_2O_2]{HBr} Y$$

(A) $CH_3CH_2CH_2Br$
(B) $CH_3CH(Br)CH_3$
(C) $CH_3COC_6H_5$
(D) C_6H_5COBr

Answer: (A) $CH_3CH_2CH_2Br$ · The council's preliminary key

Q91 TS EAPCET 2024 · 10 May · Shift 1 MCQ

Compound 'A' on heating with sodalime gives propane. Identify the compound 'A'.

Compound 'A' on heating with sodalime gives propane. Identify the compound 'A'.
సమ్మేళనం 'A' ను సోడాలైమ్ తో వేడి చేసినప్పుడు ప్రొపేన్ ఏర్పడినది. సమ్మేళనం 'A' ను గుర్తించుము

Options :

1. $CH_3-CH_2-CH_2-OH$
2. $CH_3CH_2CO_2Na$
3. $CH_3CH_2CH_2CO_2Na$
4. $CH_3-\overset{\overset{O}{||}}{C}-CH_3$

(A) $CH_3-CH_2-CH_2-OH$
(B) $CH_3CH_2CO_2Na$
(C) $CH_3CH_2CH_2CO_2Na$
(D) CH_3-C-CH_3 with a C=O double bond to O drawn above the central carbon (acetone) *(see the figure above)*

Answer: (C) $CH_3CH_2CH_2CO_2Na$ · The council's preliminary key

Q92 TS EAPCET 2024 · 10 May · Shift 2 MCQ

The alkane which is next to methane in homologous series can be prepared from which of the following reactions?

I. $2CH_3Br \xrightarrow[\text{dry ether}]{Na}$

II. $CH_3COOH \xrightarrow[CaO,\ \Delta]{NaOH}$

III. $CH_3CH=CH_2 \xrightarrow{H_2/Pt}$

IV. $CH_3CH_2Br \xrightarrow[H^+]{Zn}$

Correct answer is

(A) I, IV only
(B) II, III only
(C) I, III only
(D) II, IV only

Answer: (A) I, IV only · The council's preliminary key

Q93 TS EAPCET 2024 · 10 May · Shift 2 MCQ

At high pressure and regulated supply of air, methane is heated with catalyst 'X' to give methanol and with catalyst 'Y' to give methanal. X and Y respectively are

(A) Mo_2O_3, Cu
(B) Cu, Mo_2O_3
(C) V_2O_5, $KMnO_4$
(D) $KMnO_4$, Cr_2O_3

Answer: (B) Cu, Mo_2O_3 · The council's preliminary key

Q94 TS EAPCET 2024 · 10 May · Shift 2 MCQ

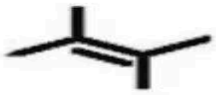
What is 'Y' in the following set of reactions?

$$C_3H_4 \xrightarrow[Hg^{2+}/H^+]{H_2O\ ,\ 333K} X \xleftarrow[(ii)\ Zn+H_2O]{(i)\ O_3} Y$$

What is 'Y' in the following set of reactions?
క్రింది చర్యా సమీకరణాలలో 'Y' ఏది ?

$$C_3H_4 \xrightarrow[333K]{H_2O} X \xleftarrow[(ii)\ Zn+H_2O]{(i)\ O_3} Y$$

Options :

1. 
2. 
3. 
4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (B) · The council's preliminary key

Q95 TS EAPCET 2024 · 9 May · Shift 1 MCQ

An alkene X (C_4H_8) exhibits geometrical isomerism. Oxidation of A with $KMnO_4|H^+$ gave Y. On heating sodium salt of Y with a mixture of NaOH and CaO gave Z. What is Z?

(A) CH_3CH_3

(B) $CH_3CH_2CH_3$

(C) $CH_3CH_2CH_2CH_3$

(D) CH_4

Answer: (D) CH_4 · The council's preliminary key

Q96 TS EAPCET 2024 · 9 May · Shift 1 MCQ

The number of activating and deactivating groups of the following are respectively

$-OCH_2CH_3$, $-COCH_3$, $-NHCOCH_3$, $-COOCH_3$, $-SO_3H$

(A) 2, 3

(B) 3, 2

(C) 1, 4

(D) 4, 1

Answer: (A) 2, 3 · The council's preliminary key

Q97 TS EAPCET 2024 · 9 May · Shift 1 MCQ

X and Z respectively in the following reaction sequence are

$C_3H_6 \xrightarrow{X} Y \xrightarrow[AlCl_3]{C_6H_6} Z$ (major product)

Correct Marks : 1 Wrong Marks : 0

X and Z respectively in the following reaction sequence are

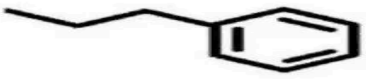
క్రింది చర్యా క్రమంలో X మరియు Z లు వరుసగా

$C_3H_6 \xrightarrow{X} Y \xrightarrow[AlCl_3]{C_6H_6} Z$ (major product)

(ప్రధాన ఉత్పన్నం)

Options :

1. HBr ,



2. HBr ,



3. HBr / ROOR ,



4. HBr / ROOR ,



(A) HBr, *(see the figure above)* n-propylbenzene drawn as a benzene ring with a linear three-carbon chain (propyl) attached

(B) HBr, *(see the figure above)* para-disubstituted benzene ring with an n-propyl group on one side and an isopropyl group on the opposite (para) position

(C) HBr / ROOR, *(see the figure above)* isopropylbenzene (cumene): benzene ring with an isopropyl group attached

(D) HBr / ROOR, *(see the figure above)* n-propylbenzene: benzene ring with a linear three-carbon chain (propyl) attached

Answer: (C) HBr / ROOR, *(see the figure above)* isopropylbenzene (cumene): benzene ring with an isopropyl group attached · The council's preliminary key

Q98 TS EAPCET 2024 · 9 May · Shift 2 MCQ

Identify the major product (P) in the following reaction sequence

$$(CH_3)_3CBr \xrightarrow[KOH\ \Delta]{\text{Alcoholic}} X \xrightarrow{HBr} P$$

Identify the major product (P) in the following reaction sequence
క్రింది క్రమాను చర్యలో ప్రధాన ఉత్పన్నం (P) ను గుర్తించుము

$$(CH_3)_3CBr \xrightarrow[KOH\ \Delta]{\text{ఆల్కహాలిక్ Alcoholic}} X \xrightarrow{HBr} P$$

Options :

1. $(CH_3)_3CBr$
2. $(CH_3)_2CHCH_2Br$
3. $CH_3-\underset{\displaystyle Br}{\underset{|}{CH}}-CH_2-CH_3$
4. $CH_3-CH=CH-CH_2Br$

(A) $(CH_3)_3CBr$

(B) $(CH_3)_2CHCH_2Br$

(C) $CH_3-CH-CH_2-CH_3$ with Br attached below the CH (second carbon) *(see the figure above)*

(D) $CH_3-CH=CH-CH_2Br$

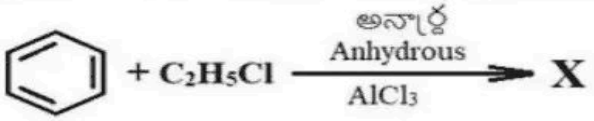
Answer: (A) $(CH_3)_3CBr$ · The council's preliminary key

Q99 TS EAPCET 2024 · 9 May · Shift 2 MCQ

What is the percentage of carbon in the product 'X' formed in the given reaction?

(see the figure above)

What is the percentage of carbon in the product 'X' formed in the given reaction?
క్రింది చర్యలో ఏర్పడే ఉత్పన్నం 'X' నందలి కార్బన్ శాతం ఎంత?



Options :

1. 85.6
2. 80.6
3. 90.6
4. 70.6

(A) 85.6
(B) 80.6
(C) 90.6
(D) 70.6

Answer: (C) 90.6 · The council's preliminary key

Q100 TS EAPCET 2024 · 9 May · Shift 2 MCQ

What is the major product Z in the given reaction sequence?

$$(CH_3)_2C=O \xrightarrow[(2)\ H_3O^+]{(1)\ C_2H_5MgBr} X \xrightarrow[\Delta]{i)\ SOCl_2\ ii)\ CH_3ONa} Y \xrightarrow[\text{Peroxide}]{HBr} Z$$

(A) 1-Bromo-2-methylpropene
(B) 2-Methoxy-2-methylbutane
(C) 2-Bromo-3- methylbutane
(D) 1-Bromo-2- methylbutane

Answer: (C) 2-Bromo-3- methylbutane · The council's preliminary key

Q101 AP EAPCET 2023 · 19 May · Shift 1 MCQ

Ethane on heating with a regulated supply of air at high pressure in presence of manganese acetate forms 'Q'. 'Q' is

(A) CH_3CH_2OH
(B) CH_3CHO
(C) $HCOOH$
(D) CH_3COOH

Answer: (D) CH_3COOH · The council's preliminary key

Q102 AP EAPCET 2023 · 19 May · Shift 1 MCQ

In which of the following chain termination step is absent?

In which of the following chain termination step is absent?
క్రింది దేనిలో శృంఖలాంతక అంచె ఉండదు?

Options :

1. Polymeristaion of $C_6H_5CH=CH_2$ by RLi
   RLi ద్వారా $C_6H_5CH=CH_2$ పాలిమరీకరణం
2. Polymerisation of $C_6H_5CH=CH_2$ by BF_3 and H_2O
   BF_3 మరియు H_2O ద్వారా $C_6H_5CH=CH_2$ పాలిమరీకరణం
3. Polymerisation of  and by $(C_6H_5COO)_2$
   $(C_6H_5COO)_2$ ద్వారా  మరియు ల పాలిమరీకరణం
4. Polymerisation of $C_6H_5CH=CH_2$ by $(C_6H_5COO)_2$
   $(C_6H_5COO)_2$ ద్వారా $C_6H_5CH=CH_2$ పాలిమరీకరణం

(A) Polymeristaion of $C_6H_5CH=CH_2$ by RLi
(B) Polymerisation of $C_6H_5CH=CH_2$ by BF_3 and H_2O
(C) Polymerisation of *(see the figure above)* and *(see the figure above)* by $(C_6H_5COO)_2$
(D) Polymerisation of $C_6H_5CH=CH_2$ by $(C_6H_5COO)_2$

Answer: (A) Polymeristaion of $C_6H_5CH=CH_2$ by RLi · The council's preliminary key

Q103 AP EAPCET 2023 · 18 May · Shift 1 MCQ

What are X, Y in the following reaction sequence?

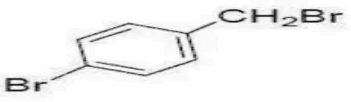
$CH_3(CH_2)_5CH_3$ --X--> C_7H_8 --(Br_2, Δ)--> Y

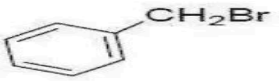
(see the figure above)

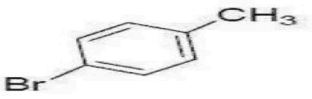
What are X, Y in the following reaction sequence?
క్రింది వరుస చర్యలలో X, Y లు?

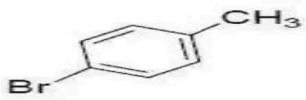
$CH_3(CH_2)_5CH_3 \xrightarrow{X} C_7H_8 \xrightarrow[\Delta]{Br_2} Y$

Options :

1. X= Cr_2O_3, 773 K, 10-20 atm Y= 

2. X= V_2O_5, 773 K, 10-20 atm Y= 

3. X= $KMnO_4$ Y= 

4. X= Anhydrous $AlCl_3$ Y= 

(A) X= Cr_2O_3, 773 K, 10-20 atm; Y= *(see the figure above)* benzene ring with CH_2Br and Br at para positions

(B) X= V_2O_5, 773 K, 10-20 atm; Y= *(see the figure above)* benzene ring with CH_2Br substituent only

(C) X= $KMnO_4$; Y= *(see the figure above)* benzene ring with CH_3 and Br at para positions

(D) X= Anhydrous $AlCl_3$; Y= *(see the figure above)* benzene ring with CH_3 and Br at para positions

Answer: (B) X= V_2O_5, 773 K, 10-20 atm; Y= *(see the figure above)* benzene ring with CH_2Br substituent only · The council's preliminary key

Q104 AP EAPCET 2023 · 18 May · Shift 1 MCQ

Which of the following reactions are not feasible?

I. $CH_3CH=CH_2 \xrightarrow[(C_6H_5CO)_2O_2]{HCl} CH_3CH_2CH_2Cl$

II. $C_6H_6 + CH_3CH_2CH_2Cl \xrightarrow{AlCl_3} C_6H_5CH(CH_3)_2$

III. $CH_3CHClCH_2Cl \xrightarrow[\Delta]{KOH} CH_3C\equiv CH$

IV. $CH_3CH=CHCH_3 \xrightarrow{KMnO_4/H^+} CH_3COOH$

(A) I & IV only

(B) II & III only

(C) II & IV only

(D) I & III only

Answer: (D) I & III only · The council's preliminary key

Q105 AP EAPCET 2023 · 18 May · Shift 2 MCQ

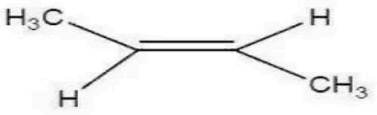
Which of the following reactions is not correct?

Which of the following reactions is not correct?

క్రింద ఇవ్వబడిన చర్యలలో ఏది సరైనది కాదు?

Options :

1. $CH_2Br - CH_2Br \xrightarrow{Zn} CH_2 = CH_2$

2. $CH_3 - C \equiv C - CH_3 \xrightarrow[Na]{\text{ద్రవ } Liq.\ NH_3}$ 

3. $CH_3 - C \equiv C - H \xrightarrow[Hg^{+2},\ H^+]{H_2O} CH_3 - CH_2 - CHO$

4. $Ph - CH_2 - Br \xrightarrow[\text{పొడి Dry ether}]{Na} Ph - (CH_2)_2 - Ph$

(A) $CH_2Br - CH_2Br \xrightarrow{Zn} CH_2 = CH_2$

(B) *see figure*

(C) $CH_3 - C \equiv C - H \xrightarrow[Hg^{+2},\ H^+]{H_2O} CH_3 - CH_2 - CHO$

(D) $Ph - CH_2 - Br \xrightarrow[\text{Dry ether}]{Na} Ph - (CH_2)_2 - Ph$

Answer: (C) $CH_3 - C \equiv C - H \xrightarrow[Hg^{+2},\ H^+]{H_2O} CH_3 - CH_2 - CHO$ · The council's preliminary key

Q106 AP EAPCET 2023 · 18 May · Shift 2 MCQ

The correct order of boiling points of following molecules is

(i) n – Hexane (ii) 2-methylpentane (iii) 2,3 – dimethylbutane

(A) i > ii > iii

(B) iii > ii > i

(C) iii > i > ii

(D) i > iii > ii

Answer: (A) i > ii > iii · The council's preliminary key

Q107 AP EAPCET 2023 · 18 May · Shift 2 MCQ

What is 'X' in the following reaction?

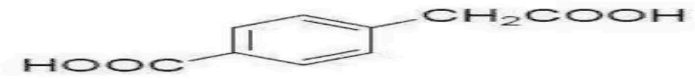
(see the figure above)

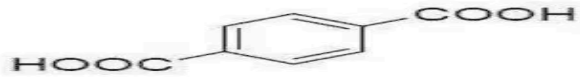
What is 'X' in the following reaction?

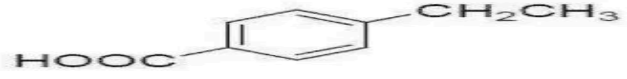
క్రింది చర్యలో 'X' ఏది?



Options :

1. 

2. 

3. 

4. 

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (B) · The council's preliminary key

Q108 AP EAPCET 2023 · 17 May · Shift 1 MCQ

In the reaction, if X is the reagent and Y is the product, which of the following is not feasible?

(see the figure above)

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instructi
Time : 0

In the reaction, if X is the reagent and Y is the product, which of the following is not feasible?

చర్యలో X కారకం, Y ఉత్పన్నం అయితే, క్రింది వాటిలో ఏది వీలుకాదు?



Options :

1. X = Conc. HNO_3+ Con. H_2SO_4 ; Y = 3 – Nitrobenzoic acid
   X = గాఢ HNO_3+ గాఢ H_2SO_4 ; Y = 3 – నైట్రోబెంజోయిక్ ఆమ్లం

2. X = Br_2 / Fe Y = 3 – Bromobenzoic acid
   X = Br_2 / Fe Y = 3 – బ్రోమోబెంజోయిక్ ఆమ్లం

3. X = NaOH, CaO Y = Benzene
   X = NaOH, CaO Y = బెంజీన్

4. X = CH_3Cl / $AlCl_3$ Y = 3 – Methylebenzoic acid
   X = CH_3Cl / $AlCl_3$ Y = 3 – మిథైల్ బెంజోయిక్ ఆమ్లం

(A) X = Conc. HNO_3 + Con. H_2SO_4 ; Y = 3 – Nitrobenzoic acid

(B) X = Br_2 / Fe Y = 3 – Bromobenzoic acid

(C) X = NaOH, CaO Y = Benzene

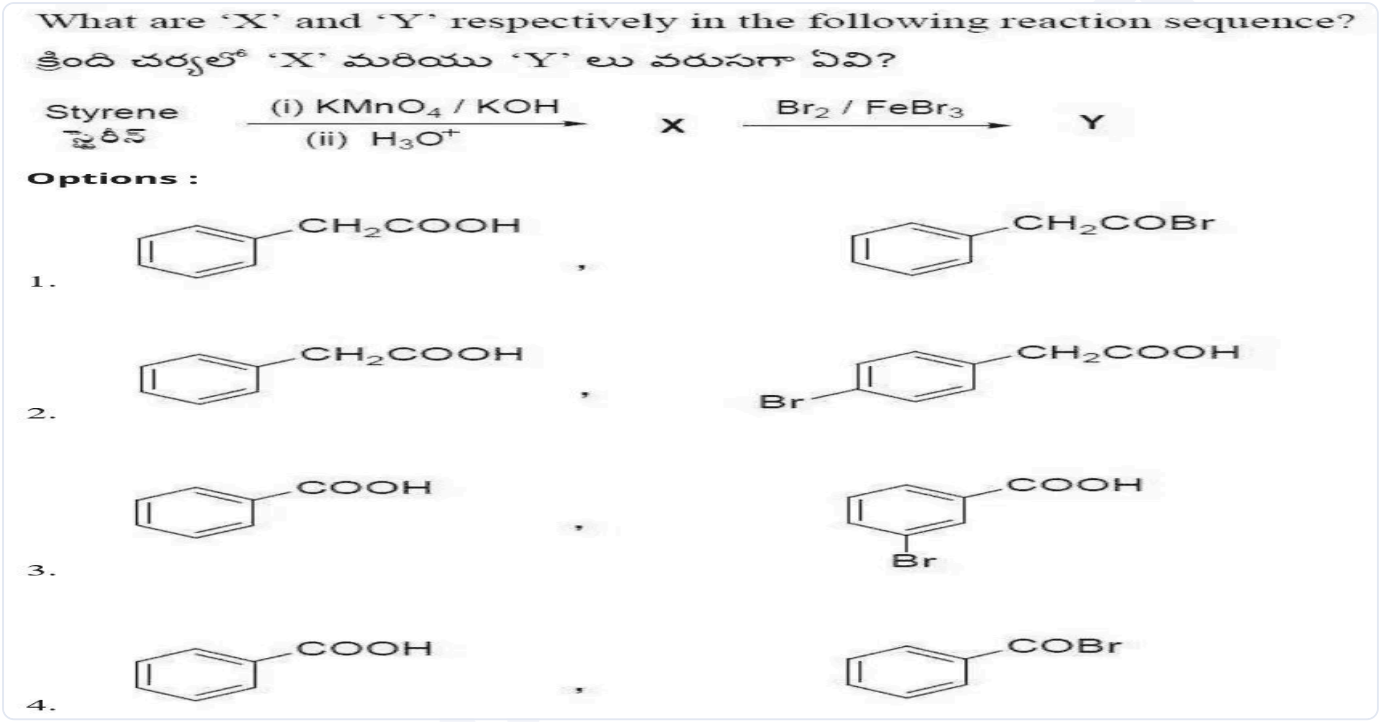
(D) X = CH_3Cl / $AlCl_3$ Y = 3 – Methylebenzoic acid

Answer: (D) X = CH_3Cl / $AlCl_3$ Y = 3 – Methylebenzoic acid · The council's preliminary key

Q109 AP EAPCET 2023 · 17 May · Shift 2 MCQ

What are 'X' and 'Y' respectively in the following reaction sequence?

Styrene $\xrightarrow[(ii)\ H_3O^+]{(i)\ KMnO_4/KOH}$ X $\xrightarrow{Br_2/FeBr_3}$ Y



(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (C) · The council's preliminary key

Q110 AP EAPCET 2023 · 16 May · Shift 1 MCQ

see figure



In the above reaction electrophile is substituted at meta position only, due to
పైన ఇవ్వబడిన ప్రతిక్షేపణ చర్యలో ఎలక్ట్రోఫిల్, మెటా స్థానంలో మాత్రమే ప్రతిక్షేపించబడుతుంది ఎందుకనగా

I. Electron density is more at ortho & para position
ఆర్థో మరియు పారా స్థానంలో ఎలక్ట్రాన్ సాంద్రత ఎక్కువగా ఉంటుంది.

II. Electron density is relatively less at ortho & para position
ఆర్థో మరియు పారా స్థానంలో ఎలక్ట్రాన్ సాంద్రత సాపేక్షంగా తక్కువగా ఉంటుంది.

III. Electron density is less at meta position
మెటా స్థానంలో ఎలక్ట్రాన్ సాంద్రత తక్కువగా ఉండును.

IV. Electron density is relatively more at meta position
మెటా స్థానంలో ఎలక్ట్రాన్ సాంద్రత సాపేక్షంగా ఎక్కువగా ఉండును.

correct answer is
సరైన జవాబు

Options :

1. I, III only
   I, III మాత్రమే
2. II, IV only
   II, IV మాత్రమే
3. I only
   I మాత్రమే
4. III only
   III మాత్రమే

(A) I, III only
(B) II, IV only
(C) I only
(D) III only

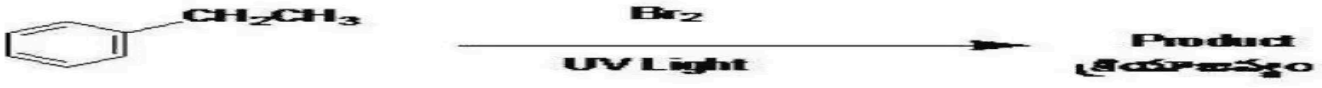
Answer: (B) II, IV only · The council's preliminary key

Q111 AP EAPCET 2023 · 16 May · Shift 2 MCQ

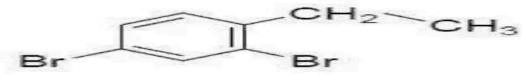
The major product of the following reaction is

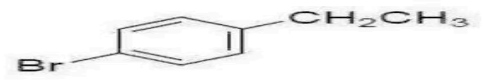
(see the figure above)

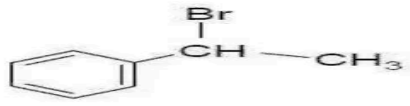
The major product of the following reaction is
క్రింద ఇవ్వబడిన చర్యలో ప్రధాన క్రియాజన్యం ఏది?

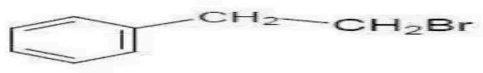


Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · The council's preliminary key

Q112 AP EAPCET 2023 · 16 May · Shift 2 MCQ

Identify the major product of the given reaction

(see the figure above)

Identify the major product of the given reaction

క్రింద ఇవ్వబడిన చర్య యొక్క ప్రధాన ఉత్పన్నాన్ని గుర్తించండి?



Options :

1. Benzoyl bromide
బెంజోయిల్ బ్రోమైడ్

2. Bromobenzene
బ్రోమో బెంజీన్

3. 4-bromo benzoic acid
4-బ్రోమో బెంజోయిక్ ఆమ్లం

4. 3-bromo benzoic acid
3- బ్రోమో బెంజోయిక్ ఆమ్లం

(A) Benzoyl bromide
(B) Bromobenzene
(C) 4-bromo benzoic acid
(D) 3-bromo benzoic acid

Answer: (D) 3-bromo benzoic acid · The council's preliminary key

Q113 AP EAPCET 2023 · 15 May · Shift 1 MCQ

In the Kolbe electrolysis of sodium propanoate, the products X and Y are formed at respected electrodes. What are X and Y?

(A) X = CH_3-CH_2-CH_2-CH_3 at Cathode; Y = H_2 at Anode

(B) X = CH_3-CH_2-CH_3 at Cathode; Y = H_2 at Anode

(C) X = CH_3-CH_2-CH_2-CH_3 at Anode; Y = H_2 at Cathode

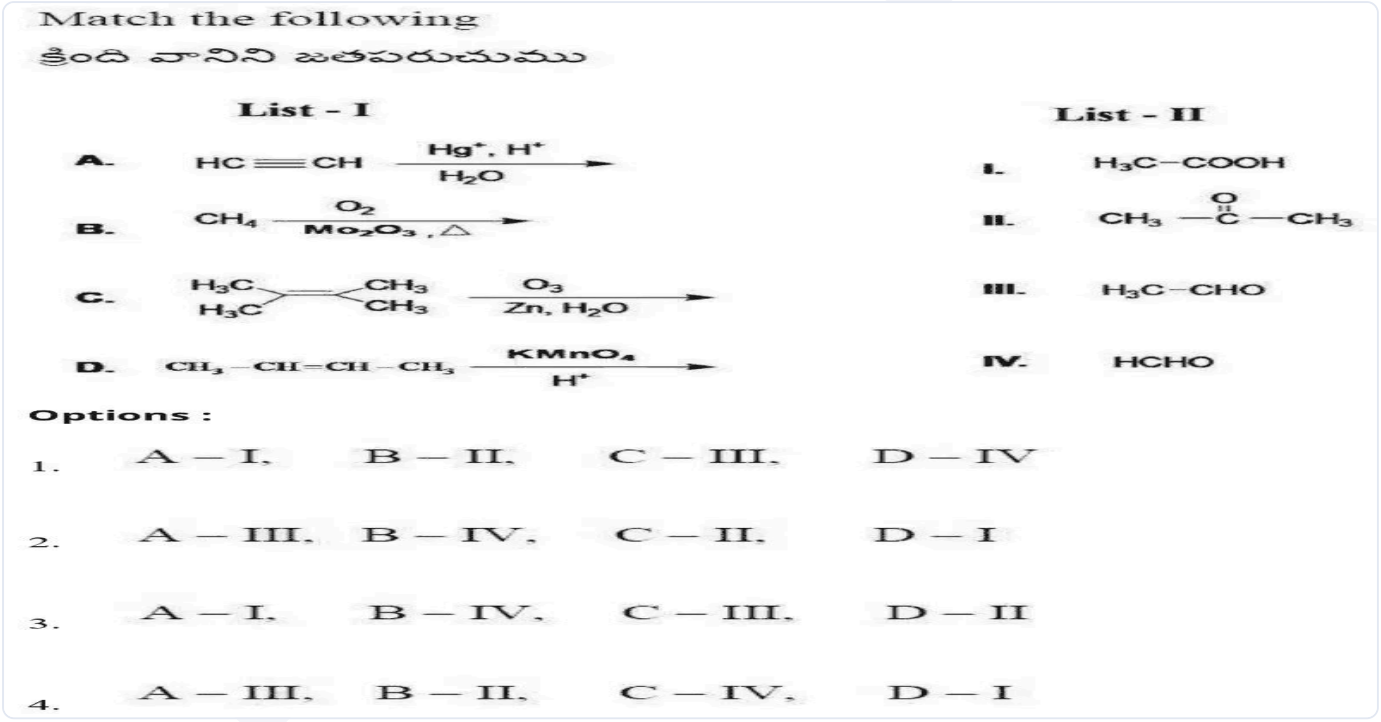
(D) X = CH_3-CH_3 at Anode; Y = H_2 at Cathode

Answer: (C) X = CH_3-CH_2-CH_2-CH_3 **at Anode; Y =** H_2 **at Cathode** · The council's preliminary key

Q114 AP EAPCET 2023 · 15 May · Shift 2 MCQ

Match the following

List - I	List - II
A. $HC \equiv CH \xrightarrow[H_2O]{Hg^+, H^+}$	I. $H_3C - COOH$
B. $CH_4 \xrightarrow[Mo_2O_3, \Delta]{O_2}$	II. $CH_3 - CO - CH_3$
C. *(see the figure above)* $\xrightarrow[Zn, H_2O]{O_3}$	III. $H_3C - CHO$
D. $CH_3 - CH = CH - CH_3 \xrightarrow[H^+]{KMnO_4}$	IV. $HCHO$



(A) A – I, B – II, C – III, D – IV

(B) A – III, B – IV, C – II, D – I

(C) A – I, B – IV, C – III, D – II

(D) A – III, B – II, C – IV, D – I

Answer: (B) A – III, B – IV, C – II, D – I · The council's preliminary key

Q115 AP EAPCET 2023 · 15 May · Shift 2 MCQ

Two statements are given below

Statement I: Chlorobenzene on nitration gives 1-chloro-4-nitrobenzene as major product

Statement II: Chlorobenzene undergoes nitration slowly than benzene

Identify the correct answer

(A) Statements I, II are correct
(B) Statements I, II are incorrect
(C) Statement I correct but statement II is incorrect
(D) Statement II correct but statement I is incorrect

Answer: (A) Statements I, II are correct · The council's preliminary key

Q116 TS EAMCET 2023 · 14 May · Shift 1 MCQ

In the conversion of A to B, the electrophile involved is

$\mathrm{C_2H_2} \xrightarrow[\text{Irontube, 873 K}]{\text{Redhot}} \mathrm{A} \xrightarrow[\text{Anhy. AlCl}_3]{\mathrm{CH_3-C(=O)-Cl}} \mathrm{B}$

In the conversion of A to B, the electrophile involved is

$C_2H_2 \xrightarrow[873K]{\text{ఎర్రగా కాలిన ఐరన్ గొట్టం}} A \xrightarrow[\text{అన్హ్రస్ } AlCl_3]{CH_3-C(=O)-Cl} B$

Options :

1. $^{\oplus}CH_3$
2. $Cl-C(=O)^{\oplus}$
3. $Cl^{\oplus}$
4. $H_3C-C(=O)^{\oplus}$

(A) $^{\oplus}CH_3$
(B) *see figure*
(C) $Cl^{\oplus}$
(D) *see figure*

Answer: (D) · The council's preliminary key

Q117 TS EAMCET 2023 · 14 May · Shift 1 MCQ

An alkene X on ozonolysis gives a mixture of Propan-2-one and methanal. What is X?

(A) Propene
(B) 2-Methylpropene
(C) 2-Methylbut-1-ene
(D) 2-Methylbut-2-ene

Answer: (B) 2-Methylpropene · The council's preliminary key

Q118 TS EAMCET 2023 · 14 May · Shift 2 MCQ

Arrange the following in the correct order of their acidic strength

$H_2C=CH_2$ (I) $CH\equiv CH$ (II) $CH_3\text{-}C\equiv CH$ (III) $CH_3\text{-}CH_3$ (IV)

(A) $I < II < III < IV$
(B) $IV < I < III < II$
(C) $IV < III < II < I$
(D) $II < III < IV < I$

Answer: (B) $IV < I < III < II$ · The council's preliminary key

Q119 TS EAMCET 2023 · 14 May · Shift 2 MCQ

$$C_3H_4 + H_2O \xrightarrow[333K]{Hg^{2+}/H^+} [X] \overset{\text{Tautomerisation}}{\rightleftharpoons} Y$$

X and Y are respectively

(A) unsaturated alcohol, aldehyde
(B) saturated alcohol, ketone
(C) unsaturated alcohol, ketone
(D) saturated alcohol, aldehyde

Answer: (C) unsaturated alcohol, ketone · The council's preliminary key

Q120 TS EAMCET 2023 · 14 May · Shift 2 MCQ

Addition of HBr to propene in presence of a peroxide takes place contrary to Markovnikov rule. This can be explained by the mechanism involving

(A) electrophile
(B) free radical
(C) nucleophile
(D) carbene

Answer: (B) free radical · The council's preliminary key

Q121 TS EAMCET 2023 · 14 May · Shift 2 MCQ

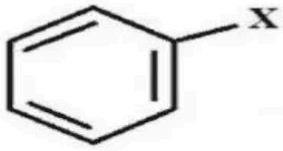
The rate of attack of an electrophile is least when X in the given compound is

(see the figure above)

EdLoop EAPCET

The rate of attack of an electrophile is least when X in the given compound is

క్రింది సమ్మేళనం లో X ఏదైనప్పుడు, ఎలక్ట్రోఫైల్ దాడి రేటు కనిష్ఠంగా ఉంటుంది



Options :

1. $-NO_2$
2. $-CH_3$
3. $-OH$
4. $-NH_2$

(A) $-NO_2$
(B) $-CH_3$
(C) $-OH$
(D) $-NH_2$

Answer: (A) $-NO_2$ · The council's preliminary key

Q122 TS EAMCET 2023 · 14 May · Shift 2 MCQ

Identify the major product Y in the given reaction sequence

(see the figure above)

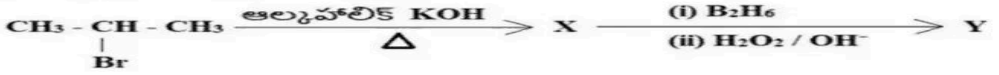
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Tim : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Identify the major product Y in the given reaction sequence



ఇచ్చిన చర్యా క్రమంలో ప్రధాన ఉత్పన్నం Y ను గుర్తించుము



Options :

1. 

2.

3. 

4. 

(A) $CH_3 - CH - CH_3$ with an OH group on the middle carbon (propan-2-ol)
(B) $CH_3 - CH_2 - CH_2OH$
(C) $CH_3 - CH - CH_2OH$ with an OH group on the middle (CH) carbon
(D) $CH_2 - CH_2 - CH_2$ with an OH group on each terminal CH2 carbon

Answer: (B) $CH_3 - CH_2 - CH_2OH$ · The council's preliminary key

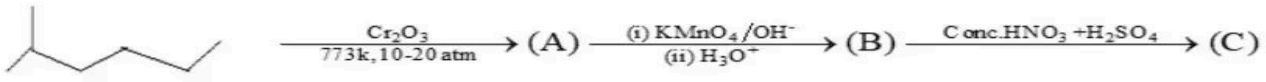
Q123 TS EAMCET 2023 · 13 May · Shift 1 MCQ

In the following reaction 'C' is an aromatic compound having substituents D&E. What are D&E?

(see the figure above)

In the following reaction 'C' is an aromatic compound having substituents D&E. What are D&E?

క్రింది చర్యలో 'C' అనునది ఒక ఏరోమాటిక్ సమ్మేళనం. దానిలో D,E లు ప్రతిక్షేపకాలుగా వున్నాయి. D మరియు E లు ఏవి?



Options :

1. $-OH, -SO_3H$
2. $-CHO, -NO_2$
3. $-COOH, -NO_2$
4. $-SO_3H, -NO_2$

(A) $-OH, -SO_3H$
(B) $-CHO, -NO_2$
(C) $-COOH, -NO_2$
(D) $-SO_3H, -NO_2$

Answer: (C) $-COOH, -NO_2$ · The council's preliminary key

Q124 TS EAMCET 2023 · 13 May · Shift 1 MCQ

An alkene (X) on ozonolysis gives propanal and ethanal. What is X?

(A) Pent-2-ene
(B) Pent-1-ene
(C) But-1-ene
(D) But-2-ene

Answer: (A) Pent-2-ene · The council's preliminary key

Q125 TS EAMCET 2023 · 13 May · Shift 1 MCQ

Match the following

List – I (Reaction)	List – II (Product)
A *(see the figure above)* benzene $+Cl_2 \xrightarrow{AlCl_3}$	I Benzoic acid
B *(see the figure above)* benzene $+CH_3Cl \xrightarrow{\text{anhy. } AlCl_3}$	II Alkyl phenyl ketone
C *(see the figure above)* benzene $+R-C(=O)-Cl \xrightarrow{\text{anhy. } AlCl_3}$	III Toluene
D *(see the figure above)* toluene (benzene ring with CH_3) $\xrightarrow[(ii)\ H_3O^+]{(i)\ KMnO_4\mid KOH}$	IV Chlorobenzene

The correct answer is



(A) A -I; B-II; C- III; D – IV

(B) A -II; B-I; C- IV; D – III

(C) A -IV; B-III; C- II; D – I

(D) A -IV; B-II; C- III; D – I

Answer: (C) A -IV; B-III; C- II; D – I · The council's preliminary key

Q126 TS EAMCET 2023 · 13 May · Shift 2 MCQ

An alkene X (C_6H_{12}) on ozonolysis gave acetaldehyde and ethyl methyl ketone. What is the product formed when X reacts with HBr?

An alkene X (C_6H_{12}) on ozonolysis gave acetaldehyde and ethyl methyl ketone. What is the product formed when X reacts with HBr?

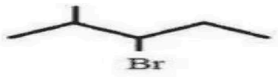
ఒక ఆల్కీన్ X (C_6H_{12}) ఓజోనీకరణంలో ఎసిటాల్డిహైడ్ మరియు ఈథైల్ మీథైల్ కీటోన్ లను ఇచ్చింది. HBr తో X చర్యనొందినపుడు ఏర్పడే ఉత్పన్నం ఏది?

Options :

1. 

2. 

3. 

4. 

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (A) · The council's preliminary key

Q127 TS EAMCET 2023 · 12 May · Shift 1 MCQ

I. $(CH_3)_2C = CH_2 \xrightarrow{KMnO_4/H^+} X + CO_2 + H_2O$

II. $CH_3 - CH = CH - CH_3 \xrightarrow{KMnO_4/H^+} Y$

The functional groups in X and Y are respectively

I. $(CH_3)_2C=CH_2 \xrightarrow{KMnO_4/H^+} X + CO_2 + H_2O$

II. $CH_3-CH=CH-CH_3 \xrightarrow{KMnO_4/H^+} Y$

The functional groups in X and Y are respectively

X, Y లలో ప్రమేయ సమూహాలు వరుసగా

Options :

1. 

2. 

3. 

4. 

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (B) · The council's preliminary key

Q128 TS EAMCET 2023 · 12 May · Shift 1 MCQ

Identify the major product B in the given sequence of reactions

$$CH_3-C\equiv CH \xrightarrow[Pd|c]{H_2} A \xrightarrow[HBr]{(C_6H_5CO)_2O_2} B$$

Correct Marks : 1 Wrong Marks : 0

Identify the major product B in the given sequence of reactions

క్రింది చర్యాక్రమంలో ప్రధాన ఉత్పన్నం B ను గుర్తించుము

$$CH_3-C\equiv CH \xrightarrow[Pd|c]{H_2} A \xrightarrow[HBr]{(C_6H_5CO)_2O_2} B$$

Options :

1. $CH_3-\underset{\displaystyle Br}{\underset{|}{CH}}-CH_3$

2. $CH_3-CH_2-CH_2Br$

3. $CH_3-\underset{\displaystyle Br}{\underset{|}{CH}}-CH_2Br$

4. $CH_3-CH_2-CHBr_2$

(A) *see figure*

(B) $CH_3 - CH_2 - CH_2Br$

(C) *see figure*

(D) $CH_3 - CH_2 - CHBr_2$

Answer: (B) $CH_3 - CH_2 - CH_2Br$ · The council's preliminary key

Q129 TS EAMCET 2023 · 12 May · Shift 2 MCQ

Identify 'Z' in the following reaction sequence

$$2C_3H_7Br \xrightarrow{Na/Ether} X \xrightarrow[773K,\ 10\text{-}20\ atm]{Mo_2O_3} Y \xrightarrow[CH_3Cl]{Anh.AlCl_3} Z$$

Identify 'Z' in the following reaction sequence

క్రింది చర్యాక్రమంలో 'Z' ను గుర్తించుము

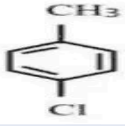
$2C_3H_7Br \xrightarrow{Na/Ether} X \xrightarrow[773K,\ 10\text{–}20\ atm]{Mo_2O_3} Y \xrightarrow[CH_3Cl]{Anh.AlCl_3} Z$

Options :

1. 

2. 

3. 

4. 

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (C) · The council's preliminary key

Q130 TS EAMCET 2023 · 12 May · Shift 2 MCQ

What is the major product 'C' in the following sequence of reactions?

$$C_2H_4Br_2 \xrightarrow[(ii)\ NaNH_2]{(i)\ alcohol\ |\ KOH} A \xrightarrow[333\ K]{H_2O\ /\ Hg^{2+}\ |\ H^+} [B] \rightleftharpoons C$$

What is the major product 'C' in the following sequence of reactions?

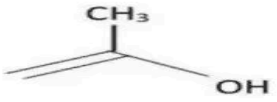
క్రింది అనుక్రమ చర్యలలోప్రధాన ఉత్పన్నం 'C' ఏది?

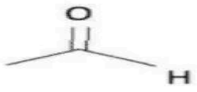
$$C_2H_4Br_2 \xrightarrow[(ii)\,NaNH_2]{(i)\ alcohol\,|\,KOH} A \xrightarrow[333K]{H_2O,\ Hg^{2+}\,|\,H^+} [B] \rightleftharpoons C$$

Options :

1. 

2. 

3. 

4. 

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (D) · The council's preliminary key

Q131 TS EAMCET 2022 · 20 Jul · Shift 1 MCQ

The organic compound 5-allylcyclohex-3-ene-1-ol is reacted with cold, dilute, aqueous solution of $KMnO_4$. The total number of hydroxyl group(s) (-OH) present in the product is

(A) 1

(B) 2

(C) 3

(D) 5

Answer: (D) 5 · The council's preliminary key

Q132 TS EAMCET 2022 · 20 Jul · Shift 1 MCQ

The molecular formula of the product formed when benzene is reacted with excess of chlorine molecules under ultra-violet light is

(A) C_6Cl_6

(B) $C_6H_3Cl_3$

(C) $C_6H_2Cl_4$

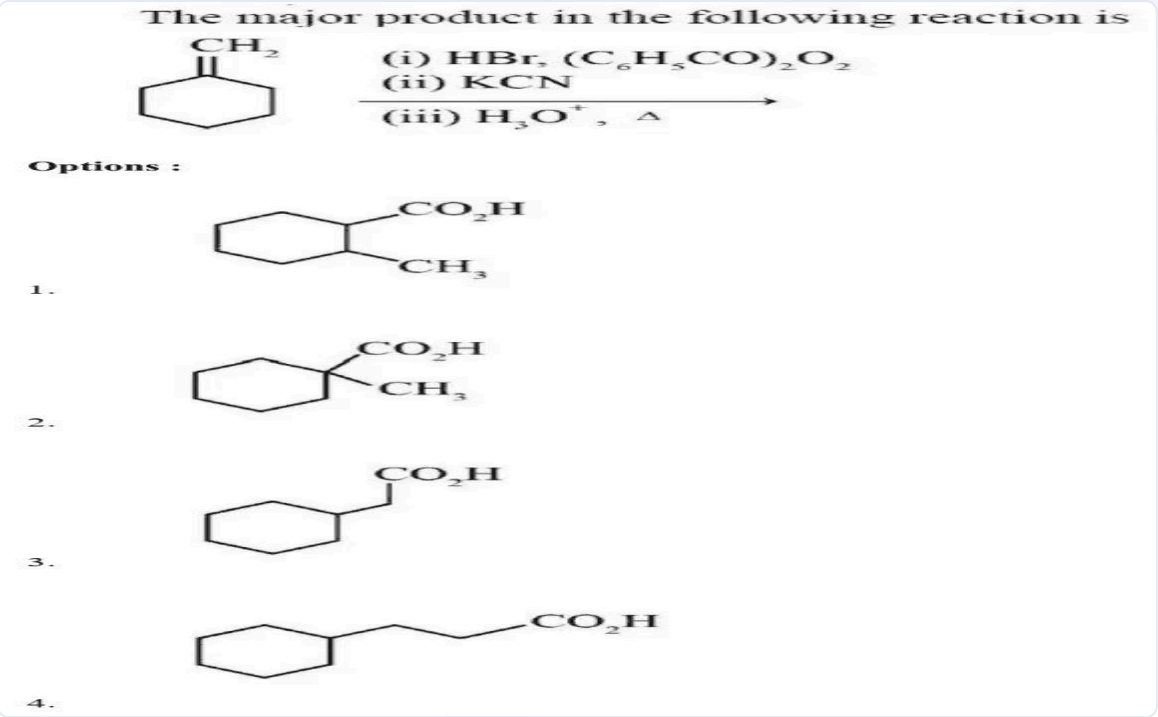
(D) $C_6H_6Cl_6$

Answer: (D) $C_6H_6Cl_6$ · The council's preliminary key

Q133 TS EAMCET 2022 · 20 Jul · Shift 1 MCQ

The major product in the following reaction is

(see the figure above)



(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (C) · The council's preliminary key

Q134 TS EAMCET 2022 · 20 Jul · Shift 2 MCQ

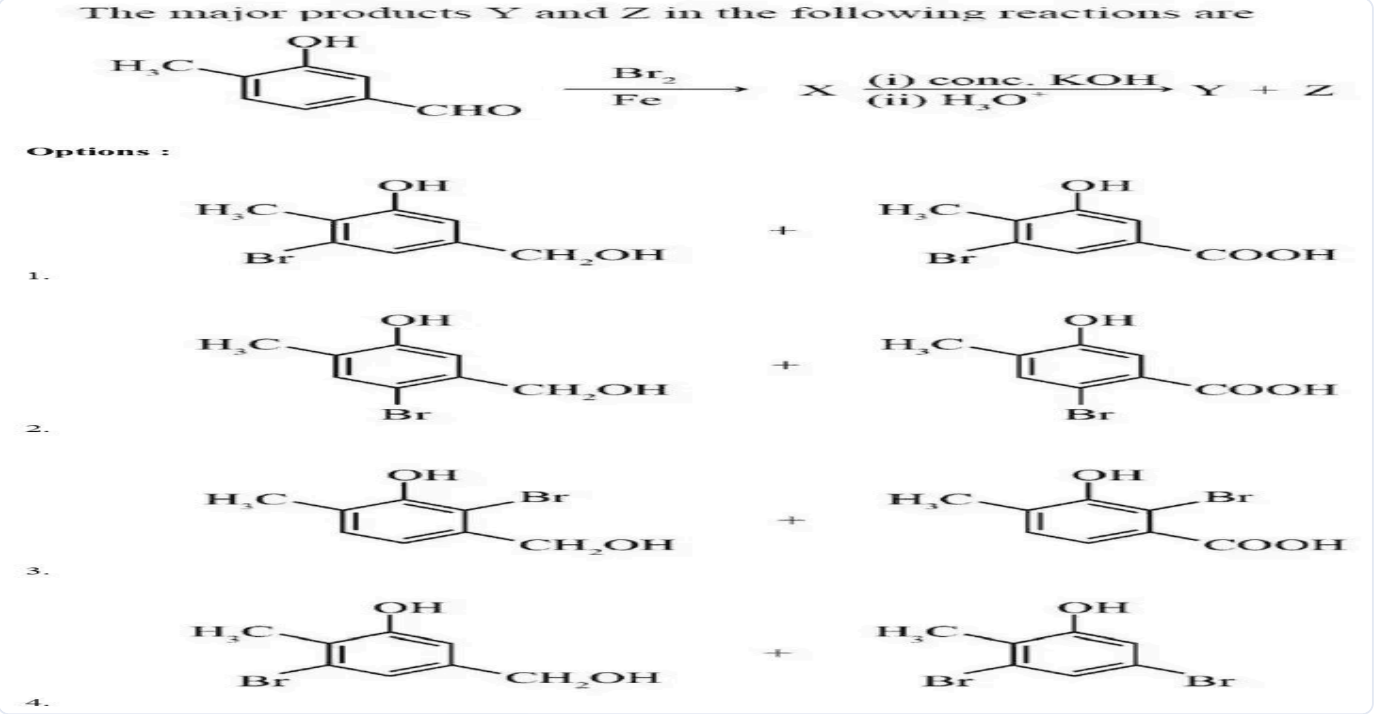
1 – Chloro – 3 – methylbutane on reaction with zinc and dilute hydrochloric acid gives _____ as the major product.

(A) 2– Methylbutane
(B) 2 – Methylbutene
(C) n – pentane
(D) n – pentene

Answer: (A) 2– Methylbutane · The council's preliminary key

Q135 TS EAMCET 2022 · 20 Jul · Shift 2 MCQ

The major products Y and Z in the following reactions are
(see the figure above)



(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (B) · The council's preliminary key

Q136 TS EAMCET 2022 · 19 Jul · Shift 1 MCQ

The major products P and Q in the following reactions, respectively, are
(see the figure above)

0
Correct Marks : 1 Wrong Marks : 0

The major products P and Q in the following reactions, respectively, are



Options :

1. P: Alkene (cis) Q: Alkene (cis)
2. P: Alkane Q: Alkene (trans)
3. P: Alkene (cis) Q: Alkene (trans)
4. P: Alkene (trans) Q: Alkene (trans)

(A) P: Alkene (cis); Q: Alkene (cis)
(B) P: Alkane; Q: Alkene (trans)
(C) P: Alkene (cis); Q: Alkene (trans)
(D) P: Alkene (trans); Q: Alkene (trans)

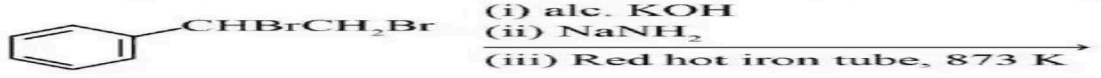
Answer: (C) P: Alkene (cis); Q: Alkene (trans) · The council's preliminary key

Q137 TS EAMCET 2022 · 19 Jul · Shift 1 MCQ

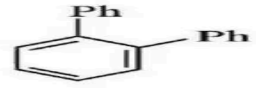
The major product formed in the following reaction sequence is
(see the figure above)

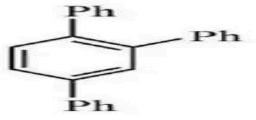
0
Correct Marks : 1 Wrong Marks : 0

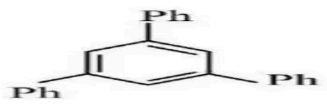
The major product formed in the following reaction sequence is

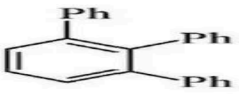


Options :

1. 

2. 

3. 

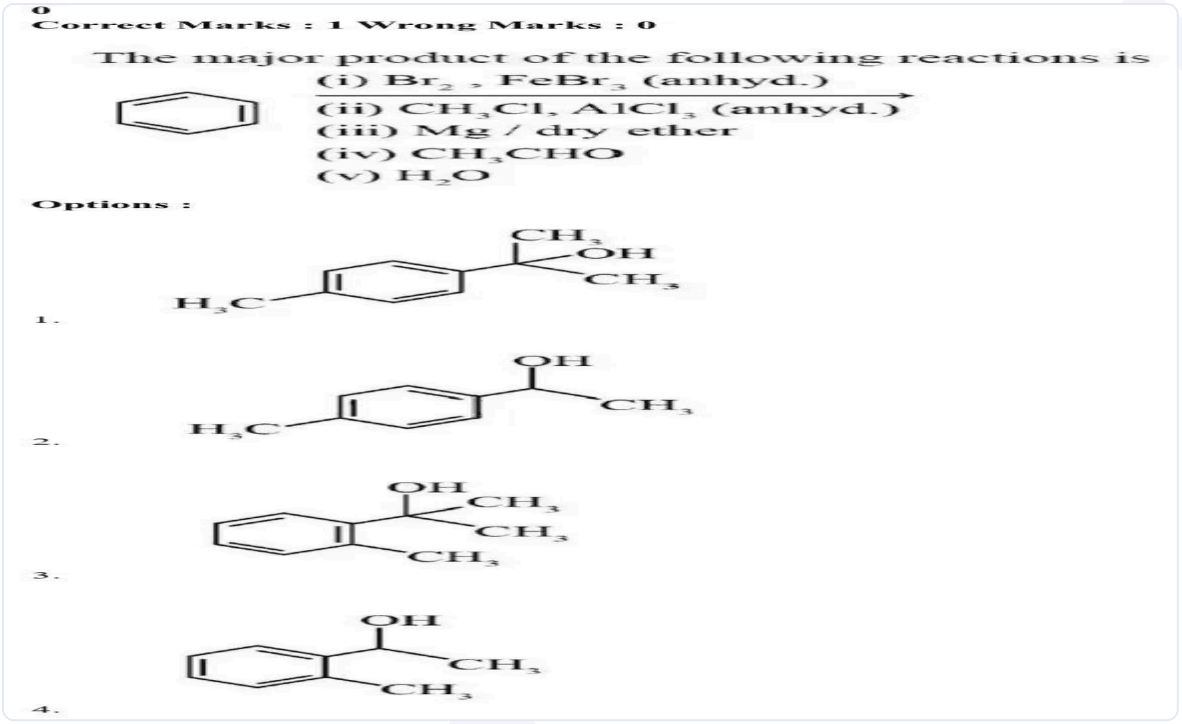
4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · The council's preliminary key

Q138 TS EAMCET 2022 · 19 Jul · Shift 1 MCQ

The major product of the following reactions is
(see the figure above)



(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (B) · The council's preliminary key

Q139 TS EAMCET 2022 · 19 Jul · Shift 2 MCQ

The order of decreasing reactivity towards an electrophilic reagent, for the following compounds, is
(i) Benzene
(ii) Toluene
(iii) Chlorobenzene
(iv) Phenol

(A) (i) > (ii) > (iii) > (iv)

(B) (ii) > (iv) > (i) > (iii)

(C) (iv) > (iii) > (ii) > (i)

(D) (iv) > (ii) > (i) > (iii)

Answer: (D) (iv) > (ii) > (i) > (iii) · The council's preliminary key

Q140 TS EAMCET 2022 · 19 Jul · Shift 2 MCQ

The major product in the following reactions is

(see the figure above)



(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (C) · The council's preliminary key

Q141 TS EAMCET 2022 · 18 Jul · Shift 1 MCQ

The correct order of rates of addition of Br_2/water to the following alkenes is

[A] $CH_2 = CH_2$

[B] $CH_2 = CH - NO_2$

[C] $CH_3 - CH_2 - CH = CH_2$

[D] $CH_3 - CH(CH_3) = CH_2$

(A) [D] > [C] > [A] > [B]

(B) [D] > [C] > [B] > [A]

(C) [A] > [B] > [C] > [D]

(D) [A] > [B] > [D] > [C]

Answer: (A) [D] > [C] > [A] > [B] · The council's preliminary key

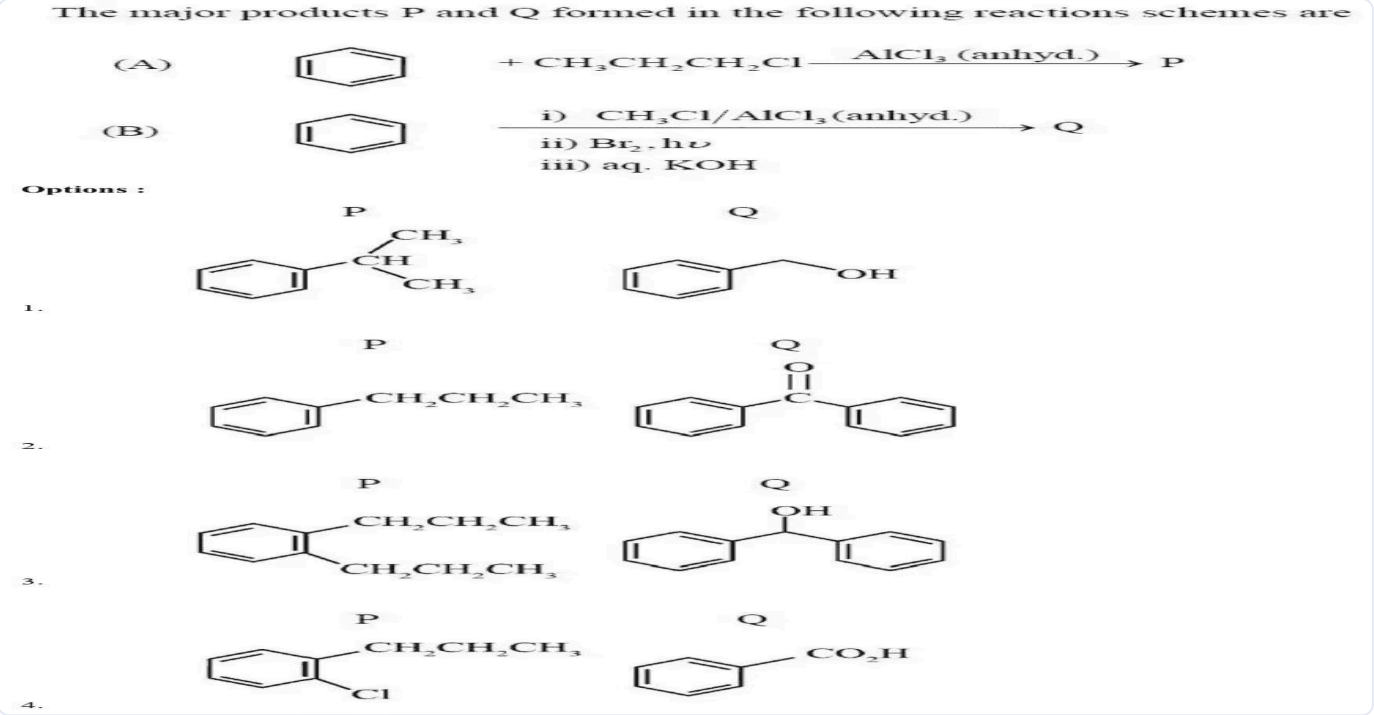
Q142 TS EAMCET 2022 · 18 Jul · Shift 1 MCQ

The major products P and Q formed in the following reactions schemes are

(A) benzene $+ \mathrm{CH_3CH_2CH_2Cl} \xrightarrow{\mathrm{AlCl_3\ (anhyd.)}}$ P

(B) benzene $\xrightarrow[\text{ii) } \mathrm{Br_2}, h\upsilon \text{ iii) aq. KOH}]{\text{i) } \mathrm{CH_3Cl/AlCl_3\ (anhyd.)}}$ Q

(see the figure above)



(A) P: isopropylbenzene (benzene ring bearing a CH(CH3)2 group); Q: benzyl alcohol (benzene ring bearing CH2-OH)

(B) P: n-propylbenzene (benzene ring bearing CH2CH2CH3); Q: benzophenone (two benzene rings joined through C=O)

(C) P: 1,2-di-n-propylbenzene (benzene ring bearing two adjacent CH2CH2CH3 groups); Q: diphenylmethanol (two benzene rings on a CH-OH carbon)

(D) P: 1-chloro-2-n-propylbenzene (ring bearing CH2CH2CH3 and an adjacent Cl); Q: benzoic acid (benzene ring bearing CO2H)

Answer: (A) P: isopropylbenzene (benzene ring bearing a CH(CH3)2 group); Q: benzyl alcohol (benzene ring bearing CH2-OH) · The council's preliminary key

Q143 TS EAMCET 2022 · 18 Jul · Shift 2 MCQ

The most suitable solvent for Wurtz reaction is

(A) Dry acetonitrile
(B) Dry dichloromethane
(C) Dry ethanol
(D) Dry ether

Answer: (D) Dry ether · The council's preliminary key

Q144 TS EAMCET 2022 · 18 Jul · Shift 2 MCQ

Propyne was subjected to a reaction with $HgSO_4$ / dil. H_2SO_4, which resulted in a product P. The product P was heated with $Ba(OH)_2$ to give the product Q. The molecular formula of the product Q is

(A) C_3H_6O
(B) C_3H_8OH
(C) $C_6H_{12}O_2$
(D) $C_6H_{10}O$

Answer: (D) $C_6H_{10}O$ · The council's preliminary key

Q145 AP EAPCET 2022 · 8 Jul · Shift 1 MCQ

Identify the starting compound 'P' in the following reaction.

$$P \xrightarrow{Na\ /\ dry\ ether} (H_3C)_2CHCH_2CH_2CH(CH_3)_2$$

(A) 1-Bromo-2-methylpropane
(B) 1-Bromobutane
(C) 2-Brom propene
(D) 2-Bromobutane

Answer: (A) 1-Bromo-2-methylpropane · The council's preliminary key

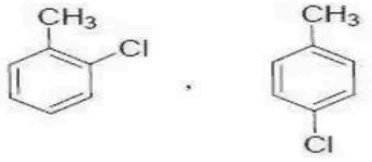
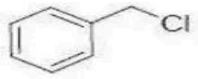
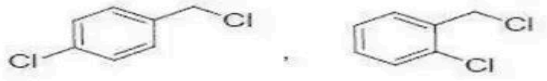
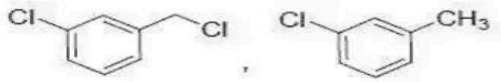
Q146 AP EAPCET 2022 · 8 Jul · Shift 1 MCQ

The product(s) formed when toluene is reacted with Cl_2 in presence of Fe in dark is/are

The product(s) formed when toluene is reacted with Cl_2 in presence of Fe in dark is/are

Fe సమక్షంలో టోలీన్‌ను Cl_2తో చీకటిలో చర్య జరిపినపుడు ఏర్పడిన ప్రధాన క్రియాజన్యం/లు

Options :

1. 
2. 
3. 
4. 

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (A) · The council's preliminary key

Q147 AP EAPCET 2022 · 8 Jul · Shift 2 MCQ

One mol of 2-Methylbuta-1, 3-diene on ozonolysis gives

(A) 2 moles of methanal and 1 mole of propanone

(B) 2 moles of methanal and 1 mole of 2-ketopropanal

(C) 1 mole of methanal 1 mole of ethanol, and 1mole of propanone

(D) 2 moles of ethanal and 1 mole of 2-ketopropanal

Answer: (B) 2 moles of methanal and 1 mole of 2-ketopropanal · The council's preliminary key

Q148 AP EAPCET 2022 · 8 Jul · Shift 2 MCQ

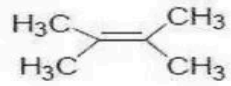
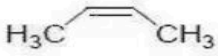
An organic compound (A) on ozonolysis followed by treatment with Zinc dust and water give product P, which can be used to preserve biological specimens. Identify A

(see the figure above)

An organic compound (A) on ozonolysis followed by treatment with Zinc dust and water give product P, which can be used to preserve biological specimens. Identify A

ఒక కర్బన సమ్మేళనం (A) ను ఓజొనాలిసిస్ చేసి తరువాత జంక్ పొడి మరియు నీటితో చర్య జరుపగా క్రియాజన్యం P ను ఇచ్చింది. దానిని జీవనమూనాలను నిల్వ ఉంచడానికి ఉపయోగిస్తారు. A ను గుర్తించండి.

Options :

1. 
2. 
3. $CH_2{=}CH_2$
4. 

(A) *see figure*

(B) *see figure*

(C) $CH_2{=}CH_2$

(D) *see figure*

Answer: (C) $CH_2{=}CH_2$ · The council's preliminary key

Q149 AP EAPCET 2022 · 7 Jul · Shift 1 MCQ

The major product 'B' of the following reaction sequence is

(see the figure above)

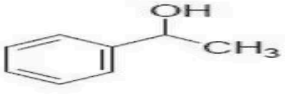
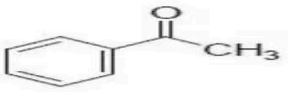
The major product 'B' of the following reaction sequence is



క్రింది అను క్రమ చర్యలో ప్రధాన ఉత్పన్నం (B) అనునది.



Options :

1. 
2. 
3. 
4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (D) · The council's preliminary key

Q150 AP EAPCET 2022 · 7 Jul · Shift 1 MCQ

Identify the major product from the following reaction sequence
(see the figure above)



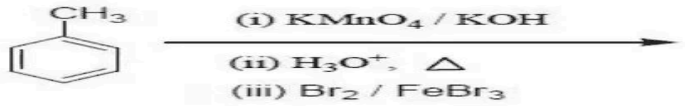
(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (D) · The council's preliminary key

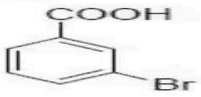
Q151 AP EAPCET 2022 · 7 Jul · Shift 2 MCQ

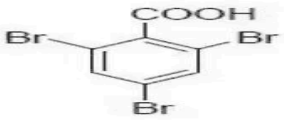
Identify the major product from the following reaction sequence.
(see the figure above)

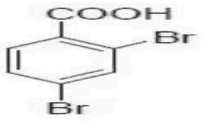
Identify the major product from the following reaction sequence.
క్రింది చర్యా క్రమాల నుండి వీర్యడే ప్రధాన క్రియాజన్యాన్ని గుర్తించండి.

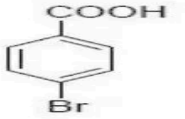


Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (A) · The council's preliminary key

Q152 AP EAPCET 2022 · 6 Jul · Shift 1 MCQ

An unsaturated organic compound, X on reaction with hot, acidified $KMnO_4$ gives succinic acid. What is X?

(A) Cyclopentene
(B) Cyclopropene
(C) Cyclobutene
(D) 2-Butene

Answer: (C) Cyclobutene · The council's preliminary key

Q153 AP EAPCET 2022 · 6 Jul · Shift 2 MCQ

The major products P and Q of the following reactions respectively are

I. n − Pentyl bromide $\xrightarrow{Zn/H^+}$ P

II. n − Pentyl bromide $\xrightarrow[\text{Dry Ether}]{Na}$ Q

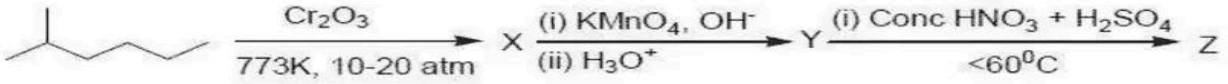
(A) Pentane ; Decane
(B) Pent-1-en ; Decane
(C) Pentane ; Pentane
(D) Pentane ; 1-Decene

Answer: (A) Pentane ; Decane · The council's preliminary key

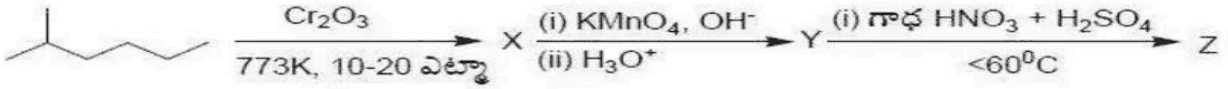
Q154 AP EAPCET 2022 · 6 Jul · Shift 2 MCQ

Z is an aromatic compound with substituents P & Q. What are P & Q?
(see the figure above)

Z is an aromatic compound with substituents P & Q. What are P & Q?



Z అనునది ఒక ఏరోమాటిక్ సమ్మేళనం. దాని యందలి ప్రతిక్షేపకాలు P, Q లు. అయినచో P, Q లు ఏవి?



Options :

1. $-OH, -SO_3H$
2. $-CHO, -NO_2$
3. $-SO_3H, -NO_2$
4. $-COOH, -NO_2$

(A) $-OH, -SO_3H$
(B) $-CHO, -NO_2$
(C) $-SO_3H, -NO_2$
(D) $-COOH, -NO_2$

Answer: (D) $-COOH, -NO_2$ · The council's preliminary key

Q155 AP EAPCET 2022 · 5 Jul · Shift 1 MCQ

Calcium carbide + $D_2O \rightarrow \underline{X} + Ca(OD)_2$. The hybridization of carbon atom/s in X

(A) sp^2
(B) sp
(C) sp^3
(D) dsp^2

Answer: (B) sp · The council's preliminary key

Q156 AP EAPCET 2022 · 5 Jul · Shift 1 MCQ

The gaseous mixture used for welding of metals is

(A) C_2H_4, O_2

(B) C_4H_{10}, O_2

(C) C_2H_2, N_2

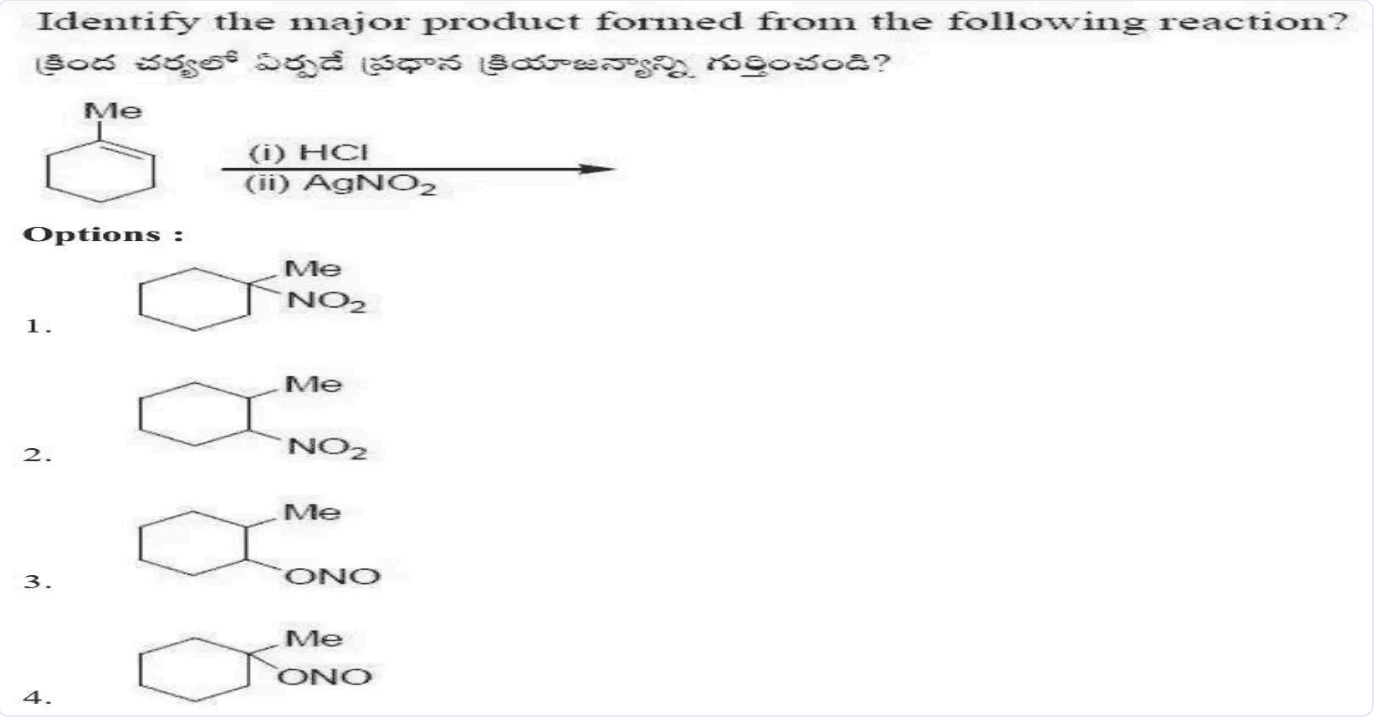
(D) C_2H_2, O_2

Answer: (D) C_2H_2, O_2 · The council's preliminary key

Q157 AP EAPCET 2022 · 5 Jul · Shift 1 MCQ

Identify the major product formed from the following reaction?

(see the figure above)



(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

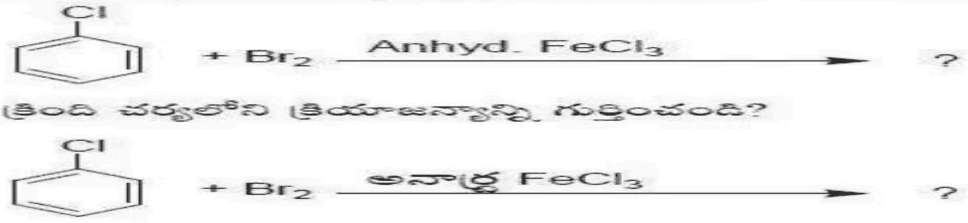
Answer: (D) · The council's preliminary key

Q158 AP EAPCET 2022 · 5 Jul · Shift 1 MCQ

Identify the major product of the following reaction

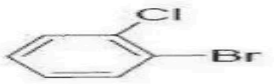
(see the figure above)

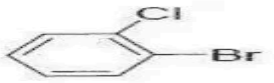
Identify the major product of the following reaction

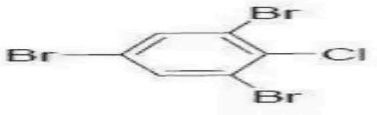


క్రింది చర్యలోని క్రియాజన్యాన్ని గుర్తించండి?

Options :

1.


2.


3.


4.


(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (D) · The council's preliminary key

Q159 AP EAPCET 2022 · 5 Jul · Shift 2 MCQ

The correct order of acidic nature of the following alkynes is

I. C_2H_2 II. $(CH_3)_2C_2$ III. $(CH_3)C_2H$

(A) I < III < II
(B) II < III < I
(C) III < II < I
(D) II < I < III

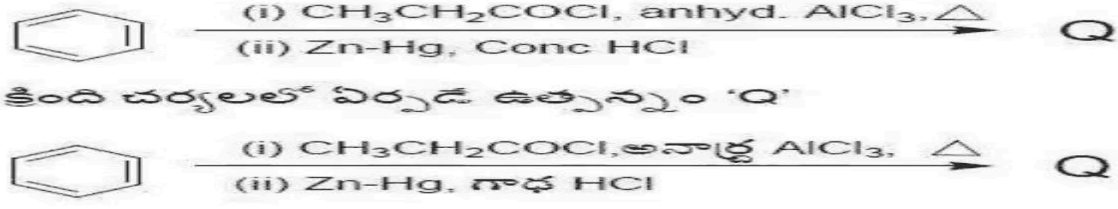
Answer: (B) II < III < I · The council's preliminary key

Q160 AP EAPCET 2022 · 5 Jul · Shift 2 MCQ

The product 'Q' of the following reactions is

(see the figure above)

The product 'Q' of the following reactions is

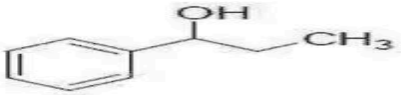


క్రింది చర్యలలో ఏర్పడే ఉత్పన్నం 'Q'

Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (B) · The council's preliminary key

Q161 AP EAPCET 2022 · 5 Jul · Shift 2 MCQ

On electrolysis of aqueous solution of sodium butanoate gives a hydrocarbon. The number of carbon atoms present in hydrocarbon are

(A) 6
(B) 4
(C) 8
(D) 3

Answer: (A) 6 · The council's preliminary key

Q162 AP EAPCET 2022 · 4 Jul · Shift 1 MCQ

What are X and Y respectively in the following reactions

$\underline{X} + D_2O \rightarrow C_2D_2 + P$

$\underline{Y} + D_2O \rightarrow CD_4 + Q$

(A) $AlCl_3$, $CaCl_2$

(B) Be_2C, Al_4C_3

(C) Al_4C_3, CaC_2

(D) CaC_2, Al_4C_3

Answer: (D) CaC_2, Al_4C_3 · The council's preliminary key

Q163 AP EAPCET 2022 · 4 Jul · Shift 1 MCQ

The catalyst used in the manufacture of polyethylene is a mixture of

(A) Ti, $Al(CH_3)_3$

(B) Ti, CH_3MgBr

(C) $TiCl_3$, $Si(CH_3)_4$

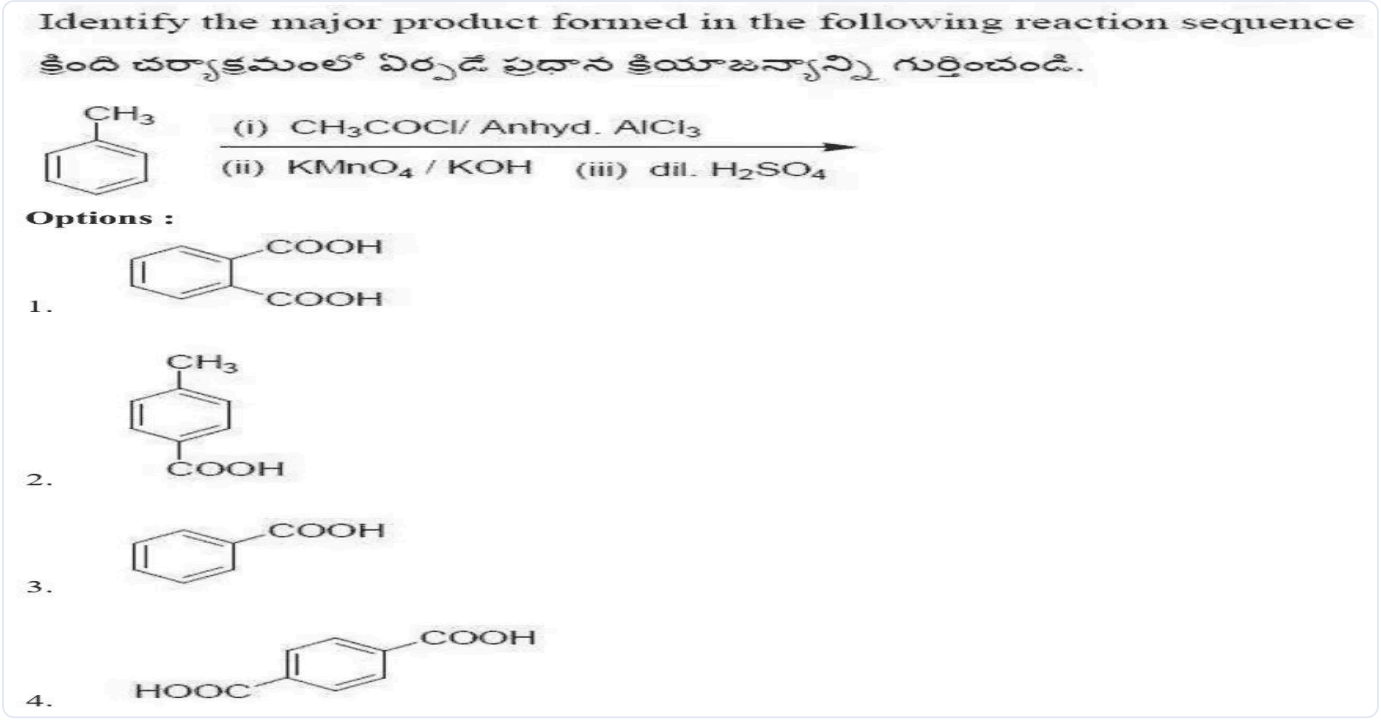
(D) $TiCl_4$, $Al(CH_3)_3$

Answer: (D) $TiCl_4$, $Al(CH_3)_3$ · The council's preliminary key

Q164 AP EAPCET 2022 · 4 Jul · Shift 1 MCQ

Identify the major product formed in the following reaction sequence

(see the figure above)



(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (D) · The council's preliminary key

Q165 AP EAPCET 2022 · 4 Jul · Shift 2 MCQ

Identify the ortho and para directing groups towards aromatic electrophilic substitution reactions from the following list

-OH (I) -CN (II) -CO_2H (III) -OCH_3 (IV) -$NHCOCH_3$ (V) -CHO (VI)

(A) I, IV, V

(B) II, III, VI

(C) I, II, IV

(D) IV, V, VI

Answer: (A) I, IV, V · The council's preliminary key

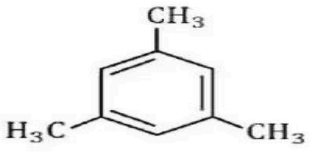
Q166 AP EAPCET 2021 · 5 Oct · Shift 1 MCQ

When an unsaturated hydrocarbon X is passed through a red-hot iron tube, it forms the compound shown in the figure. Identify X.

(see the figure above)

Mandatory : No

When an unsaturated hydrocarbon X is passed through a red-hot iron tube, it forms the compound shown in the figure. Identify X.



X అను ఒక అసంతృప్త హైడ్రోకార్బన్ ని ఎర్రగా వేడిచేయబడ్డ ఇనుప గొట్టం ద్వారా పంపగా పటంలో చూపిన సమ్మేళనము ఏర్పడినది. అయిన. ఆ హైడ్రోకార్బన్ _____

Options :

1. 2 — Methyl prop — 1 — ene
   2 — మీథైల్ ప్రోప — 1 — ఈన్
2. Prop — 1 — yne
   ప్రోప — 1 — ఐన్
3. 3 — Methyl cyclo prop — 1 — ene
   3 — మీథైల్ సైక్లో ప్రోప — 1 — ఈన్
4. Methyl cyclo propyne
   మీథైల్ సైక్లో ప్రోపైన్

(A) 2 - Methyl prop - 1 - ene

(B) Prop - 1 - yne

(C) 3 - Methyl cyclo prop - 1 - ene

(D) Methyl cyclo propyne

Answer: (B) Prop - 1 - yne · The council's preliminary key

Q167 AP EAPCET 2021 · 5 Oct · Shift 1 MCQ

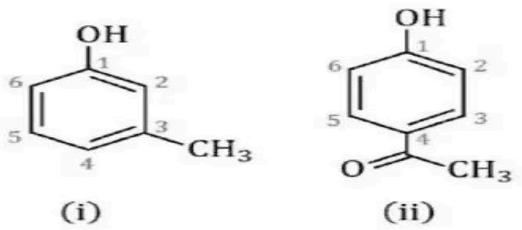
The relatively more electron rich sites of the following aromatic compounds are _____

(see the figure above)

Mandatory : No

The relatively more electron rich sites of the following aromatic compounds are _____

క్రింది ఏరోమాటిక్ సమ్మేళనాలలో ఎలక్ట్రాన్ లభ్యత (సాంద్రత) అధికముగా ఉండే కార్బన్ స్థానాలు



(i)

(ii)

Options :

1. (i) 2 , 5 & (ii) 2 , 3
2. (i) 4 , 5 & (ii) 3 , 5
3. (i) 2 , 4 , 6 & (ii) 2 , 6
4. (i) 2 , 5 , 6 & (ii) 2 , 6

(A) (i) 2, 5 & (ii) 2, 3

(B) (i) 4, 5 & (ii) 3, 5

(C) (i) 2, 4, 6 & (ii) 2, 6

(D) (i) 2, 5, 6 & (ii) 2, 6

Answer: (C) (i) 2, 4, 6 & (ii) 2, 6 · The council's preliminary key

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Q168 AP EAPCET 2021 · 25 Aug · Shift 1 MCQ

Identify the most suitable reagents (I) and (II) for the following sequence of reactions:

$\mathrm{H_3C{-}CH_2{-}CH_2Br} \xrightarrow{(I)} (X)\ \text{Unsaturated} \xrightarrow{(II)} \mathrm{H_3C{-}CH(Br){-}CH_3}$

(A) $(I) \rightarrow$ conc. $\mathrm{H_2SO_4}$, $(II) \rightarrow \mathrm{HBr}$

(B) $(I) \rightarrow$ aq. KOH, $(II) \rightarrow$ HBr / peroxide

(C) $(I) \rightarrow$ alc. KOH, $(II) \rightarrow$ HBr / peroxide

(D) $(I) \rightarrow$ alc. KOH, $(II) \rightarrow$ HBr

Answer: (D) $(I) \rightarrow$ alc. KOH, $(II) \rightarrow$ HBr · The council's preliminary key

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Q169 AP EAPCET 2021 · 25 Aug · Shift 1 MCQ

The major product(s) formed in the following reaction sequence is(are):

2,3-Dibromobutane $\xrightarrow[\text{iii) } \mathrm{Zn/H_2O}]{\text{i) } \mathrm{Zn/Cu},\ \Delta;\ \text{ii) } \mathrm{O_3}}$?

(A) $2\ CH_3COOH$

(B) $CH_3COCOCH_3$

(C) $2\ CH_3CHO$

(D) $2\ HCHO + \begin{matrix}CHO\\CHO\end{matrix}$ (OHC-CHO)

Answer: (C) $2\ CH_3CHO$ · The council's preliminary key

Q170 AP EAPCET 2021 · 24 Aug · Shift 2 MCQ

Identify the products (P), (Q) and (R) formed from the following reactions:
(see the figure above)



(A) (P): Benzene hexachloride (Q): Hexachlorobenzene (R): Cyclohexanol

(B) (P): Hexachlorobenzene (Q): Benzene hexachloride (R): Cyclohexenol

(C) (P): Benzene hexachloride (Q): Hexachlorobenzene (R): Cyclohexane

(D) (P): Hexachlorobenzene (Q): Benzene hexachloride (R): Cyclohexane

Answer: (A) (P): Benzene hexachloride (Q): Hexachlorobenzene (R): Cyclohexanol · The council's preliminary key

Q171 AP EAPCET 2021 · 24 Aug · Shift 2 MCQ

Match the following?

Reaction | Nature of reaction

A) $RBr \xrightarrow{Na}$

B) $RCOO^-Na^+ \xrightarrow[CaO,\ \Delta]{NaOH}$

C) $R-C\equiv C-R' \xrightarrow[Catalyst\ (H_2)]{Lindlar's}$

D) $H_2C=CH_2 \xrightarrow{Br_2/CCl_4}$

I) Partial reduction
II) Electrophilic addition
III) Wurtz reaction
IV) Decarboxylation
V) Decarboxylative dimerization

(A) A-III, B-V, C-I, D-II
(B) A-III, B-IV, C-I, D-II
(C) A-II, B-III, C-I, D-II
(D) A-V, B-I, C-III, D-II

Answer: (B) A-III, B-IV, C-I, D-II · The council's preliminary key

Q172 AP EAPCET 2021 · 23 Aug · Shift 1 MCQ

The suitable reagents for the conversion of methane into methyl iodide are _____

(A) I_2, HNO_2
(B) I_2, H_2O_2
(C) I_2, H_2O
(D) I_2, HNO_3

Answer: (D) I_2, HNO_3 · The council's preliminary key

Q173 AP EAPCET 2021 · 23 Aug · Shift 1 MCQ

A compound 'A' contains C and H only, and has molecular mass 72. Its photochlorination gives a mixture containing only one monochloro and two dichloro hydrocarbons. Deduce the structure of 'A'

(A) 2, 2- dimethylpropane
(B) n- pentane
(C) 2- methyl butane
(D) Cyclopentane

Answer: (A) 2, 2- dimethylpropane · The council's preliminary key

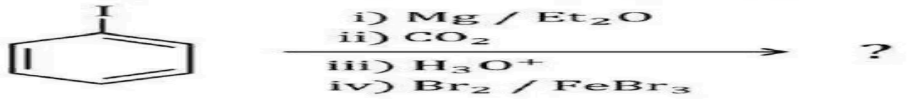
Q174 AP EAPCET 2021 · 23 Aug · Shift 1 MCQ

The major product of the following reaction sequence is _____
(see the figure above)

Mandatory : No

The major product of the following reaction sequence is _____

ఈ చర్యలో వీర్యము ప్రధాన ఉత్పన్నము _____



Options :

1.

AP EAPCET 2021

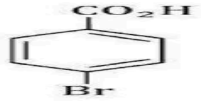
AP EAPCET 2021



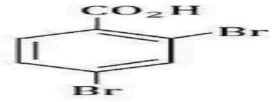
2.



3.



4.



(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (A) · The council's preliminary key

Q175 AP EAPCET 2021 · 20 Aug · Shift 1 MCQ

Which compound among the following is most reactive towards electrophilic reagents?

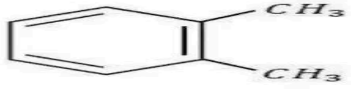
Mandatory : No

Which compound among the following is most reactive towards electrophilic reagents?

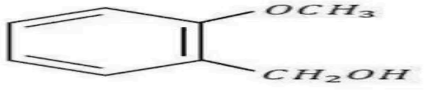
ఎలక్ట్రోఫిలిక్ కారకాలతో ఎక్కువ చర్యాశీలత ప్రదర్శించే సమ్మేళనం ఈ క్రింది వాటిలో ఏది?

Options :

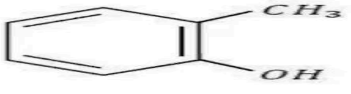
1.



2.



3.



AP EAPCET 2021

AP EAPCET 2021

4.

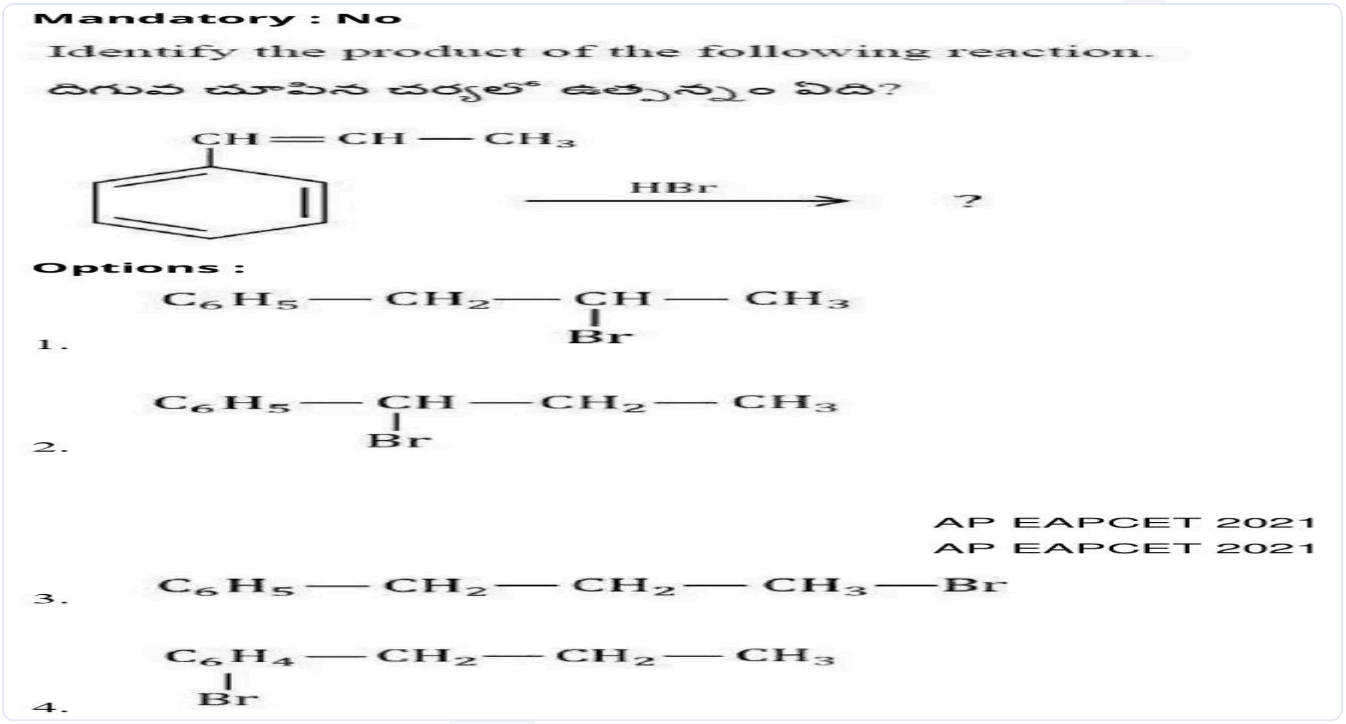


(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · The council's preliminary key

Q176 AP EAPCET 2021 · 20 Aug · Shift 1 MCQ

Identify the product of the following reaction.
(see the figure above)



(A) $C_6H_5 - CH_2 - CH(Br) - CH_3$ (Br on the middle CH, drawn below it)
(B) $C_6H_5 - CH(Br) - CH_2 - CH_3$ (Br on the CH next to the ring, drawn below it)
(C) $C_6H_5 - CH_2 - CH_2 - CH_3 - Br$ (sic)
(D) $C_6H_4 - CH_2 - CH_2 - CH_3$ with Br drawn below C_6H_4 (sic)

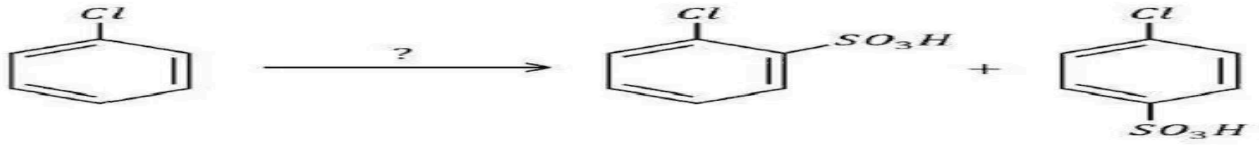
Answer: (B) $C_6H_5 - CH(Br) - CH_2 - CH_3$ **(Br on the CH next to the ring, drawn below it)** · The council's preliminary key

Q177 AP EAPCET 2021 · 20 Aug · Shift 2 MCQ

Identify the best suitable reagent for the following reaction.
(see the figure above)

Mandatory : No

Identify the best suitable reagent for the following reaction.
క్రింది చర్య జరుగుటకు కావలసిన కారకం ఏది?



Options :

1. Concentrated Sulphuric acid
గాఢ సల్ఫ్యూరిక్ ఆమ్లం

2. Dilute Sulphuric acid (10 %)
సజల సల్ఫ్యూరిక్ ఆమ్లం

3. Concentrated Sulphuric acid & Concentrated Nitric acid
గాఢ సల్ఫ్యూరిక్ ఆమ్లం మరియు గాఢ నత్రికామ్లం

4. Concentrated Acetic acid (fuming)
గాఢ ఎసిటిక్ ఆమ్లం

AP EAPCET 2021
AP EAPCET 2021

(A) Concentrated Sulphuric acid
(B) Dilute Sulphuric acid (10 %)
(C) Concentrated Sulphuric acid & Concentrated Nitric acid
(D) Concentrated Acetic acid (fuming)

Answer: (A) Concentrated Sulphuric acid · The council's preliminary key

Q178 AP EAPCET 2021 · 19 Aug · Shift 1 MCQ

Assertion (A): Sodium acetate on Kolbe's electrolysis gives ethane.
Reason (B): Methyl free radical is formed at cathode.

(A) Both A and R are true and R is a correct explanation for A
(B) Both A and R are true but R is not a correct explanation for A
(C) A is true, R is false
(D) A is false, R is true

Answer: (C) A is true, R is false · The council's preliminary key

Q179 AP EAPCET 2021 · 19 Aug · Shift 2 MCQ

The product formed when a hydrocarbon 'X' of molecular formula C_6H_{10} is reacted with sodamide is subjected to ozonolysis, followed by hydrolysis with Zn/H_2O_2, and upon further oxidation gave two carboxylic acids, of which one is optically active. The hydrocarbon 'X' is _____

(A) Hex-1-yne
(B) Hex-3-yne
(C) 3-Methyl pent-1-yne
(D) 3,3-Dimethyl but-1-yne

Answer: (C) 3-Methyl pent-1-yne · The council's preliminary key

Q180 TS EAMCET 2021 · 6 Aug · Shift 1 MCQ

In which of the following reactions, t-butyl benzene is formed
(I) Benzene + t- Butyl Chloride $\xrightarrow{AlCl_3}$
(II) Benzene + $(CH_3)_2\,C{=}CH_2$ $\xrightarrow{BF_3\cdot HF}$
(III) Benzene + t- Butyl alcohol $\xrightarrow{H_2SO_4}$
(IV) Benzene + Butanoyl chloride $\xrightarrow[Zn/HCl]{AlCl_3}$

(A) (I), (II) and (III)
(B) (II), (III) and (IV)
(C) (I), (II) and (IV)
(D) (I), (III) and (IV)

Answer: (A) (I), (II) and (III) · The council's preliminary key

Q181 TS EAMCET 2021 · 6 Aug · Shift 2 MCQ

The number of π-bonds and lone pair(s) present in the major benzenoid product, which formed when benzene is reacted with acetyl chloride in the presence of anhydrous aluminium chloride; respectively are

(A) 5; 2
(B) 4; 2
(C) 5; 4
(D) 6; 4

Answer: (B) 4; 2 · The council's preliminary key

Q182 TS EAMCET 2021 · 6 Aug · Shift 2 MCQ

Match the following

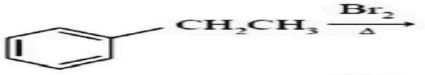
List-I Reaction
A) $CH_3CH{=}CH_2 \xrightarrow{HI}$
B) *(see the figure above)* $C_6H_5{-}CH_2CH_3 \xrightarrow[\Delta]{Br_2}$
C) *(see the figure above)* $C_6H_5{-}CH{=}CH_2 \xrightarrow{HBr}$

List-II Major product
I) 1-Bromo-2-phenylethane
II) 1-Iodopropane

III) 2-Iodopropane
IV) 1-Bromo-1-phenylethane

The correct match is

Match the following

List-I Reaction		List -II Major product
A)	$CH_3CH=CH_2 \xrightarrow{HI}$	I) 1-Bromo-2- phenylethane
B)		II) 1- Iodopropane
C)		III) 2- Iodopropane
		IV) 1-Bromo-1- phenylethane

The correct match is

Options :

1. A II, B I, C IV
2. A III, B IV, C IV
3. A III, B I, C I
4. A II, B IV, C I

(A) A-II, B-I, C-IV
(B) A-III, B-IV, C-IV
(C) A-III, B-I, C-I
(D) A-II, B-IV, C-I

Answer: (B) A-III, B-IV, C-IV · The council's preliminary key

Q183 TS EAMCET 2021 · 5 Aug · Shift 1 MCQ

The reaction $CH_2 = CH_2 + H_2 \xrightarrow[300\,^\circ C]{Ni} CH_3 - CH_3$

(A) Wurtz reaction
(B) Kolbe reaction
(C) Sabatier - Senderen's reaction
(D) Dow's reaction

Answer: (C) Sabatier - Senderen's reaction · The council's preliminary key

Q184 TS EAMCET 2021 · 5 Aug · Shift 1 MCQ

Benzene reacts with n-propyl chloride in the presence of anhydrous $AlCl_3$ to give predominantly

(A) n-Propyl benzene
(B) Isopropyl benzene
(C) 3-Propyl-1-chloro benzene
(D) 1-Chloro-3-n-propyl benzene

Answer: (B) Isopropyl benzene · The council's preliminary key

Q185 TS EAMCET 2021 · 5 Aug · Shift 1 MCQ

The major product of the following reaction sequence is
(see the figure above)



(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (D) · The council's preliminary key

Q186 TS EAMCET 2021 · 5 Aug · Shift 2 MCQ

Among the following reactions, the reaction that "does not" give alkane product is

(A) $CH_3C \equiv CCH_3 \xrightarrow{Pt,H_2}$
(B) $CH_3CH_2CH_2CH_2CO_2Na \xrightarrow{Electrolysis}$
(C) $CH_3CH_2Br \xrightarrow{Na,\ dry\ ether}$
(D) $CH_3CH_2CH_2CH_2F \xrightarrow{Zn,H^{\oplus}}$

Answer: (D) $CH_3CH_2CH_2CH_2F \xrightarrow{Zn,H^{\oplus}}$ · The council's preliminary key

Q187 TS EAMCET 2021 · 5 Aug · Shift 2 MCQ

Hex-1-yne on reaction with Br_2 (excess)/ CCl_4, gives

(A) 1, 1, 3, 3 - Tetrabromohexane
(B) 2, 2, 3, 3 - Tetrabromohexane
(C) 1, 1, 1, 2 - Tetrabromohexane
(D) 1, 1, 2, 2 - Tetrabromohexane

Answer: (D) 1, 1, 2, 2 - Tetrabromohexane · The council's preliminary key

Q188 TS EAMCET 2021 · 4 Aug · Shift 1 MCQ

When propyne is passed through a red hot iron tube at 873 K, the reaction gives product having molecular formula of

(A) C_7H_8
(B) C_9H_{12}
(C) C_8H_{10}
(D) C_6H_6

Answer: (B) C_9H_{12} · The council's preliminary key

Q189 TS EAMCET 2021 · 4 Aug · Shift 1 MCQ

Identity (sic) Z in the following reaction

$$CH_3CH_2OH \xrightarrow{PBr_3} X \xrightarrow{\text{alc. KOH}} Y \xrightarrow[\text{(ii) } H_2O,\ \text{heat}]{\text{(i) } H_2SO_4,\ RT} Z$$

(A) $CH_2 = CH_2$
(B) CH_3CH_2OH
(C) $CH_3CH_2 - O - CH_2CH_3$
(D) $CH_3CH_2 - SO_3H$

Answer: (B) CH_3CH_2OH · The council's preliminary key

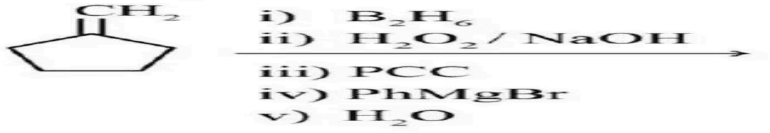
Q190 TS EAMCET 2021 · 4 Aug · Shift 1 MCQ

The major product of the following reactions is

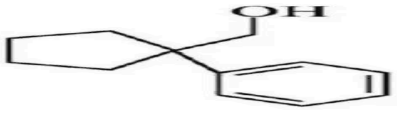
(see the figure above)

EdLoop EAPCET

The major product of the following reactions is



options :

1. 
2. 
3. 
4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · The council's preliminary key

Q191 TS EAMCET 2021 · 4 Aug · Shift 2 MCQ

The energy difference between the staggered and eclipsed conformations of ethane is

(A) $6.5\ \text{kJ/mol}$
(B) $8.5\ \text{kJ/mol}$
(C) $10.5\ \text{kJ/mol}$
(D) $12.5\ \text{kJ/mol}$

Answer: (D) $12.5\ \text{kJ/mol}$ · The council's preliminary key

Q192 TS EAMCET 2021 · 4 Aug · Shift 2 MCQ

The correct order of acidity of the following compounds is

I) $CH_3 - C \equiv CH$
II) $F_3C - C \equiv CH$
III) $CH_3C \equiv CCH_3$
IV) $CH_3CH = CHCH_3$

(A) (I) > (II) > (III) > (IV)
(B) (I) > (III) > (II) > (IV)
(C) (II) > (III) > (I) > (IV)
(D) (II) > (I) > (III) > (IV)

Answer: (D) (II) > (I) > (III) > (IV) · The council's preliminary key

Q193 AP EAMCET 2020 · 7 Oct · Shift 1 MCQ

Which reaction among the following will yield 2,2-dibromopropane?

(A) $CH_3 - C \equiv CH + 2\,HBr \longrightarrow$
(B) $CH_3 - CH = CHBr + HBr \longrightarrow$
(C) $CH \equiv CH + 2\,HBr \longrightarrow$
(D) $CH_3 - CH = CH_2 + HBr \longrightarrow$

Answer: (A) $CH_3 - C \equiv CH + 2\,HBr \longrightarrow$ · The council's preliminary key

Q194 AP EAMCET 2020 · 7 Oct · Shift 1 MCQ

Identify the product Y in the given reaction
benzene $\xrightarrow[\text{Conc. } H_2SO_4]{\text{Conc. } HNO_3}$ X $\xrightarrow[FeCl_3]{Cl_2}$ Y

(A) 1-chloro-3-nitro benzene
(B) 3-chloro-1-nitro benzene
(C) 2-chloro-1-nitro benzene
(D) 1-chloro-4-nitro benzene

Answer: (A) 1-chloro-3-nitro benzene · The council's preliminary key

Q195 AP EAMCET 2020 · 23 Sep · Shift 1 MCQ

The product Q and R in the following reactions respectively are
$H_2 + CH_3C \equiv CH \xrightarrow{\text{lindlar's catalyst}} P \xrightarrow[Zn+H_2O]{O_3} Q + R$

(A) Ethanol, Methanoic Acid
(B) Ethanoic acid, Methanol
(C) Ethanal, Methanal
(D) Ethanoic acid, Methanoic acid

Answer: (C) Ethanal, Methanal · The council's preliminary key

Q196 AP EAMCET 2020 · 22 Sep · Shift 1 MCQ

Ozonolysis of an organic compound 'A' produces acetone and propanal in equimolar mixture. Identify 'A' from the following compound.

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(A) 1- pentene
(B) 2- methyl -1- pentene
(C) 2- methyl -2- pentene
(D) 2- pentene

Answer: (C) 2- methyl -2- pentene · The council's preliminary key

Q197 AP EAMCET 2020 · 22 Sep · Shift 2 MCQ

For the reaction given below, which of the following is not a possible product?
$H_2C = CH_2 + aq.\ Br_2 \xrightarrow{NaCl}$ Products

(A) $CH_2 - Br\ /\ CH_2 - Br$ (i.e. $BrCH_2 - CH_2Br$)
(B) $CH_2 - Br\ /\ CH_2 - Cl$ (i.e. $BrCH_2 - CH_2Cl$)
(C) $CH_2 - Br\ /\ CH_2 - OH$ (i.e. $BrCH_2 - CH_2OH$)
(D) $CH_2 - Cl\ /\ CH_2 - Cl$ (i.e. $ClCH_2 - CH_2Cl$)

Answer: (D) $CH_2 - Cl\ /\ CH_2 - Cl$ (i.e. $ClCH_2 - CH_2Cl$) · The council's preliminary key

Q198 AP EAMCET 2020 · 21 Sep · Shift 2 MCQ

Which of the following alkenes will yield 2-methyl propanal on reductive ozonolysis. (addition with ozone followed by the reaction with Zn/H_2O)

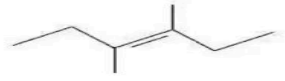
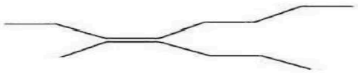
AP EAMCET 2020
AP EAMCET 2020

Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following alkenes will yield 2-methyl propanal on reductive ozonolysis. (addition with ozone followed by the reaction with Zn/H_2O)

ఓజోనాలిసిస్ పద్ధతి (ఓజోన్‌తో సంకలనం జరిగిన పిదప Zn/H_2O లో జలవిశ్లేషణం) లో 2-మిథైల్ ప్రొపనాల్‌ను క్రింది వాటిలో ఏది విర్భవగలదు?

Options :

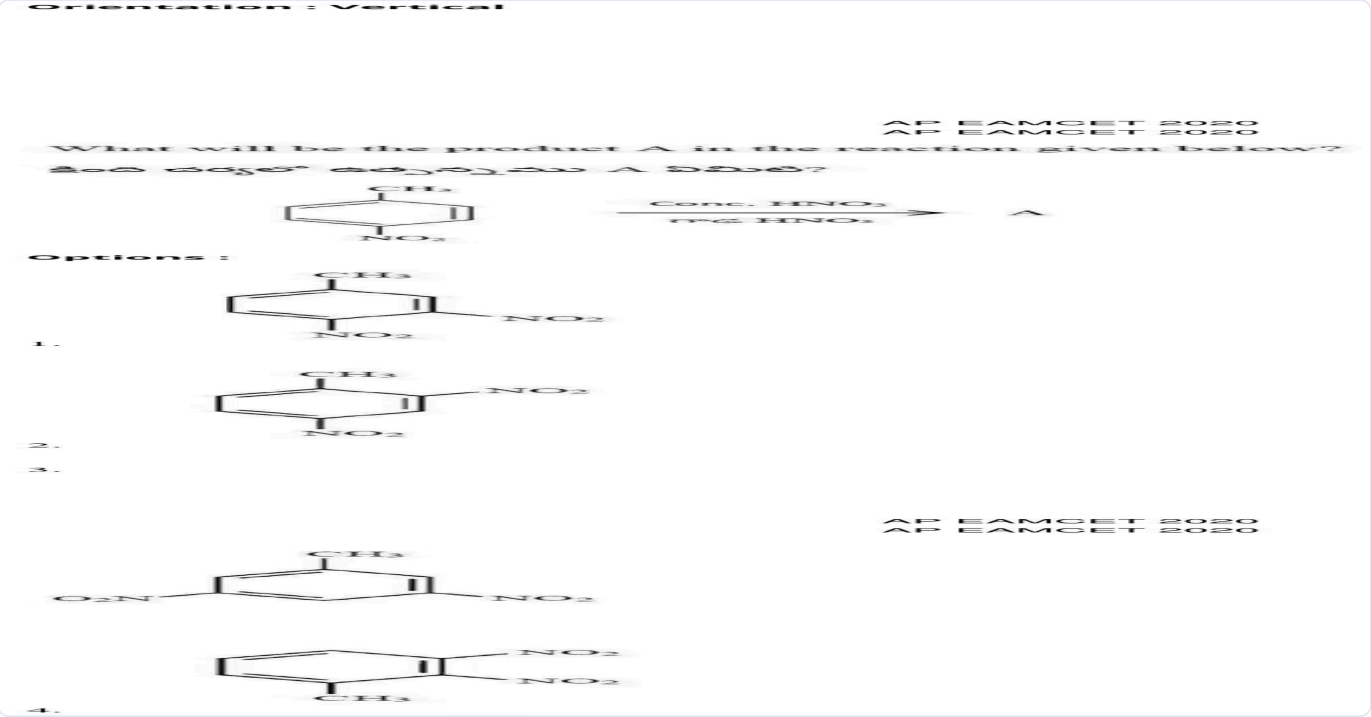
1. 
2. 
3. 
4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · The council's preliminary key

Q199 AP EAMCET 2020 · 18 Sep · Shift 1 MCQ

What will be the product A in the reaction given below?
(see the figure above)



(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (B) · The council's preliminary key

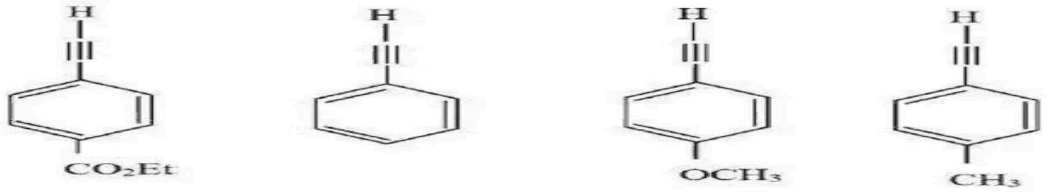
Q200 AP EAMCET 2020 · 17 Sep · Shift 1 MCQ

Decreasing order of acidity of the following terminal acetylenes is
(see the figure above)

Orientation : Vertical

Decreasing order of acidity of the following terminal acetylenes is

క్రింది అంత్య ఎసిటిలీన్ల ఆమ్లత్వము యొక్క సరియైన అవరోహణ క్రమము



(i) (ii) (iii) (iv)

Options :

1. (i) > (iii) > (ii) > (iv)
2. (i) > (ii) > (iv) > (iii)
3. (i) > (iv) > (ii) > (iii)
4. (i) > (iii) > (iv) > (ii)

A (i) > (iii) > (ii) > (iv)

B (i) > (ii) > (iv) > (iii)

C (i) > (iv) > (ii) > (iii)

D (i) > (iii) > (iv) > (ii)

Answer: (B) (i) > (ii) > (iv) > (iii) · The council's preliminary key

Q201 AP EAMCET 2020 · 17 Sep · Shift 2 MCQ

What is A in the following reaction?

(see the figure above)

Orientation : Vertical

What is A in the following reaction?

క్రింది చర్య లో ఉత్పన్నము A ఏమిటి?



Options :

1. 

2. 

3. 

4. 

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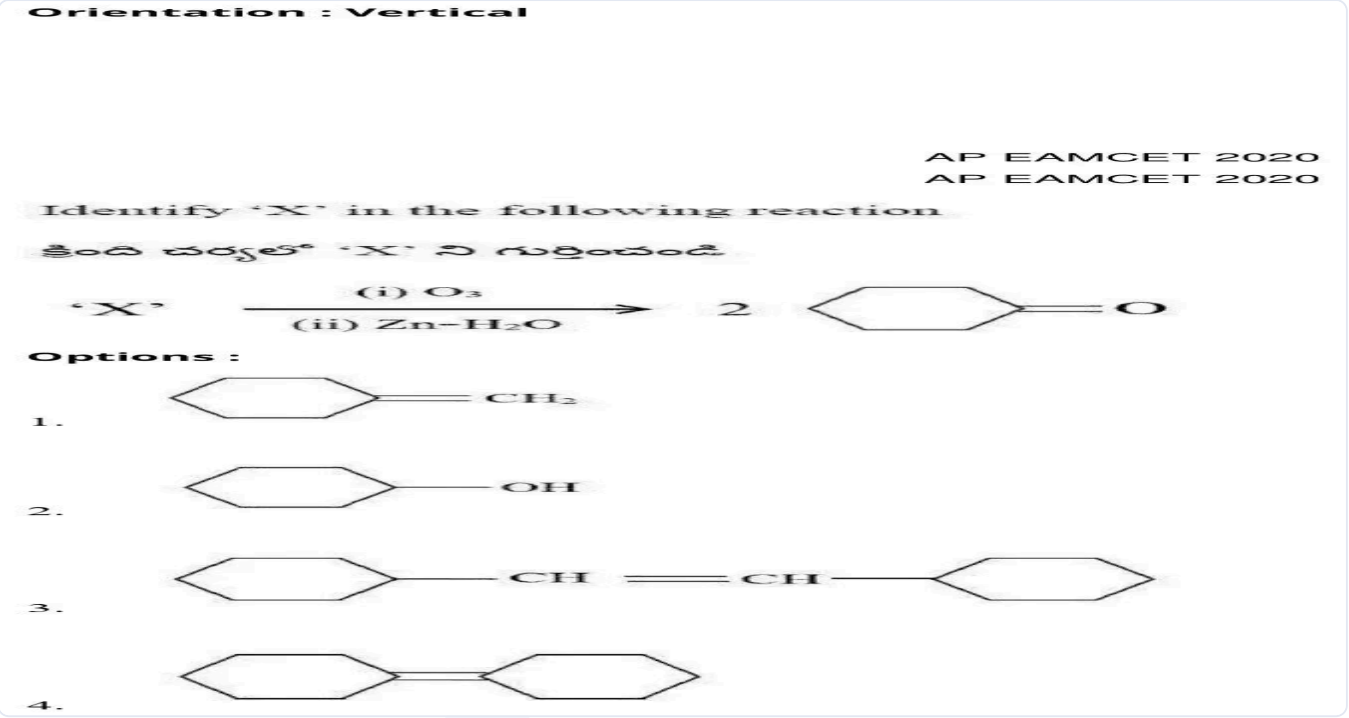
AP EAMCET 2020

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (B) · The council's preliminary key

Q202 AP EAMCET 2020 · 17 Sep · Shift 2 MCQ

Identify 'X' in the following reaction
(see the figure above)



(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (D) · The council's preliminary key

Q203 AP EAMCET 2020 · 17 Sep · Shift 2 MCQ

Suitable conditions to prepare hexachlorobenzene from benzene is /are

(A) Cl_2 (Excess), Anhyd. $AlCl_3$, dark, cold
(B) Cl_2 (Excess), Anhyd. $AlCl_3$, Δ
(C) Cl_2 (Excess), Anhyd. $ZnCl_2$, Δ
(D) Cl_2 (Excess), UV, 500 K

Answer: (B) Cl_2 **(Excess), Anhyd.** $AlCl_3$, Δ · Checked by our team

Q204 TS EAMCET 2020 · 14 Sep · Shift 1 MCQ

When calcium carbide is reacted with heavy water, which of the following product(s) will be formed?
(i) CD_4 (ii) C_2D_2 (iii) $Ca(OD)_2$ (iv) $Ca_2{\cdot}D_2O$

(A) (i) and (iv) only
(B) (ii) and (iii) only
(C) (i), (ii) and (iii) only
(D) (i), (ii), (iii) and (iv)

Answer: (B) (ii) and (iii) only · Official TGCHE final key

Q205 TS EAMCET 2020 · 14 Sep · Shift 1 MCQ

When CH_3Br and C_2H_5Br are subjected to Wurtz reaction, the maximum number of possible alkane product(s) formed is/are

(A) 1
(B) 2
(C) 3
(D) 4

Answer: (C) 3 · Official TGCHE final key

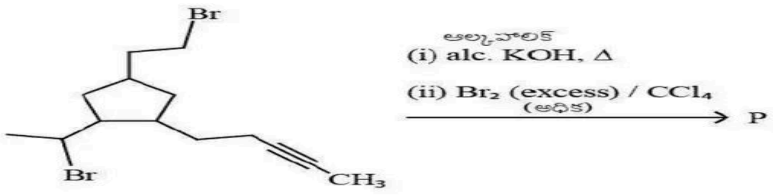
Q206 TS EAMCET 2020 · 14 Sep · Shift 1 MCQ

Maximum number of bromine atoms present in the final product P upon complete bromination are *(see the figure above)* (i) alc. KOH, Δ (ii) Br_2 (excess) / $CCl_4 \rightarrow$ P

Question Number : 141 Question Id : 7196501261 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Maximum number of bromine atoms present in the final product P upon complete bromination are

మొత్తం బ్రోమినేషన్ చేసినప్పుడు అంత్య ఉత్పన్నం 'P' లో, గరిష్ట సంఖ్యలో బ్రోమిన్ పరమాణువులు ఎన్ని ఉంటాయి



Options :

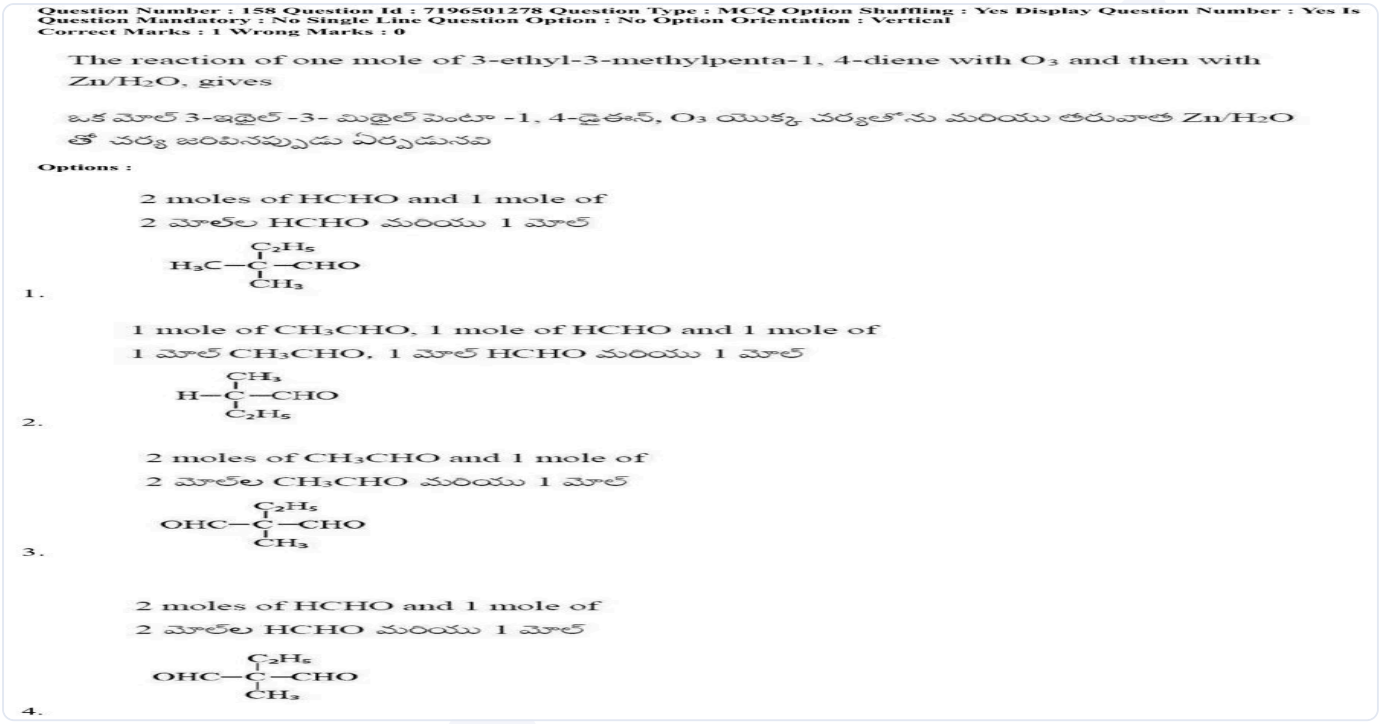
1. 4
2. 6
3. 10
4. 8

(A) 4
(B) 6
(C) 10
(D) 8

Answer: (D) 8 · Official TGCHE final key

Q207 TS EAMCET 2020 · 14 Sep · Shift 1 MCQ

The reaction of one mole of 3-ethyl-3-methylpenta-1, 4-diene with O_3 and then with Zn/H_2O, gives *(see the figure above)*


Question Number : 158 Question Id : 7196501278 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The reaction of one mole of 3-ethyl-3-methylpenta-1, 4-diene with O_3 and then with Zn/H_2O, gives

ఒక మోల్ 3-ఇథైల్ -3- మిథైల్ పెంటా -1, 4-డైఈన్, O_3 యొక్క చర్యతో ను మరియు తరువాత Zn/H_2O తో చర్య జరిపినప్పుడు ఏర్పడునవి

Options :

1. 2 moles of HCHO and 1 mole of
2 మోలు HCHO మరియు 1 మోల్

2. 1 mole of CH_3CHO, 1 mole of HCHO and 1 mole of
1 మోల్ CH_3CHO, 1 మోల్ HCHO మరియు 1 మోల్

3. 2 moles of CH_3CHO and 1 mole of
2 మోలు CH_3CHO మరియు 1 మోల్

4. 2 moles of HCHO and 1 mole of
2 మోలు HCHO మరియు 1 మోల్

(A) 2 moles of HCHO and 1 mole of $H_3C-C(C_2H_5)(CH_3)-CHO$ *(see the figure above)*
(B) 1 mole of CH_3CHO, 1 mole of HCHO and 1 mole of $H-C(CH_3)(C_2H_5)-CHO$ *(see the figure above)*
(C) 2 moles of CH_3CHO and 1 mole of $OHC-C(C_2H_5)(CH_3)-CHO$ *(see the figure above)*
(D) 2 moles of HCHO and 1 mole of $OHC-C(C_2H_5)(CH_3)-CHO$ *(see the figure above)*

Answer: (D) 2 moles of HCHO and 1 mole of $OHC-C(C_2H_5)(CH_3)-CHO$ ***(see the figure above)*** · Official TGCHE final key

Q208 TS EAMCET 2020 · 14 Sep · Shift 2 MCQ

Reactions that produce n-butanol in the following are
(see the figure above)
(i) $CH_3CH_2CH=CH_2$ with (i) B_2H_6, (ii) $NaOH/H_2O_2$
(ii) CH_3CH_2CHO with (i) CH_3MgI, (ii) H_2O
(iii) $CH_3CH_2CH_2CN$ with (i) $SnCl_2, HCl$, (ii) $H_3O^{\oplus}$, (iii) $NaBH_4$
(iv) $CH_3CH_2CH_2CO_2H$ with B_2H_6

Question Number : 157 Question Id : 71965011437 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Reactions that produce n-butanol in the following are

క్రింది వాటిలో n-బ్యుటనాల్‌ను ఉత్పత్తి చేయు చర్యలు ఏవి?

(i) $CH_3CH_2CH-CH_2 \xrightarrow[(ii)\ NaOH/H_2O_2]{(i)\ B_2H_6}$

(ii) $CH_3CH_2CHO \xrightarrow[(ii)\ H_2O]{(i)\ CH_3MgI}$

(iii) $CH_3CH_2CH_2CN \xrightarrow[(ii)\ H_2O^{\oplus}]{(i)\ SnCl_2,\ HCl} \xrightarrow{(iii)\ NaBH_4}$

(iv) $CH_3CH_2CH_2CO_2H \xrightarrow{B_2H_6}$

Options :

1. (i), (ii) and (iii)
(i), (ii) మరియు (iii)

2. (ii), (iii) and (iv)
(ii), (iii) మరియు (iv)

3. (i), (ii) and (iv)
(i), (ii) మరియు (iv)

4. (i), (iii) and (iv)
(i), (iii) మరియు (iv)

(A) (i), (ii) and (iii)

(B) (ii), (iii) and (iv)

(C) (i), (ii) and (iv)

(D) (i), (iii) and (iv)

Answer: (D) (i), (iii) and (iv) · Official TGCHE final key

Q209 TS EAMCET 2020 · 11 Sep · Shift 1 MCQ

What will be the organic compound formed when, aluminium carbide react with deuterated water?

(A) CD_3OD

(B) $DCOOD$

(C) CD_4

(D) $D_3C-O-CD_3$

Answer: (C) CD_4 · Official TGCHE final key

Q210 TS EAMCET 2020 · 11 Sep · Shift 1 MCQ

Which of the following sets of functional groups is meta-directing group?

(A) $-NO_2, -NH_2, -COOH, -COOR$

(B) $-NO_2, -CHO, -SO_3H, -COR$

(C) $-CN, -CHO, -NHCOCH_3, -COOR$

(D) $-CN, -NH_2, -NHR, -OCH_3$

Answer: (B) $-NO_2, -CHO, -SO_3H, -COR$ · Official TGCHE final key

Q211 TS EAMCET 2020 · 11 Sep · Shift 1 MCQ

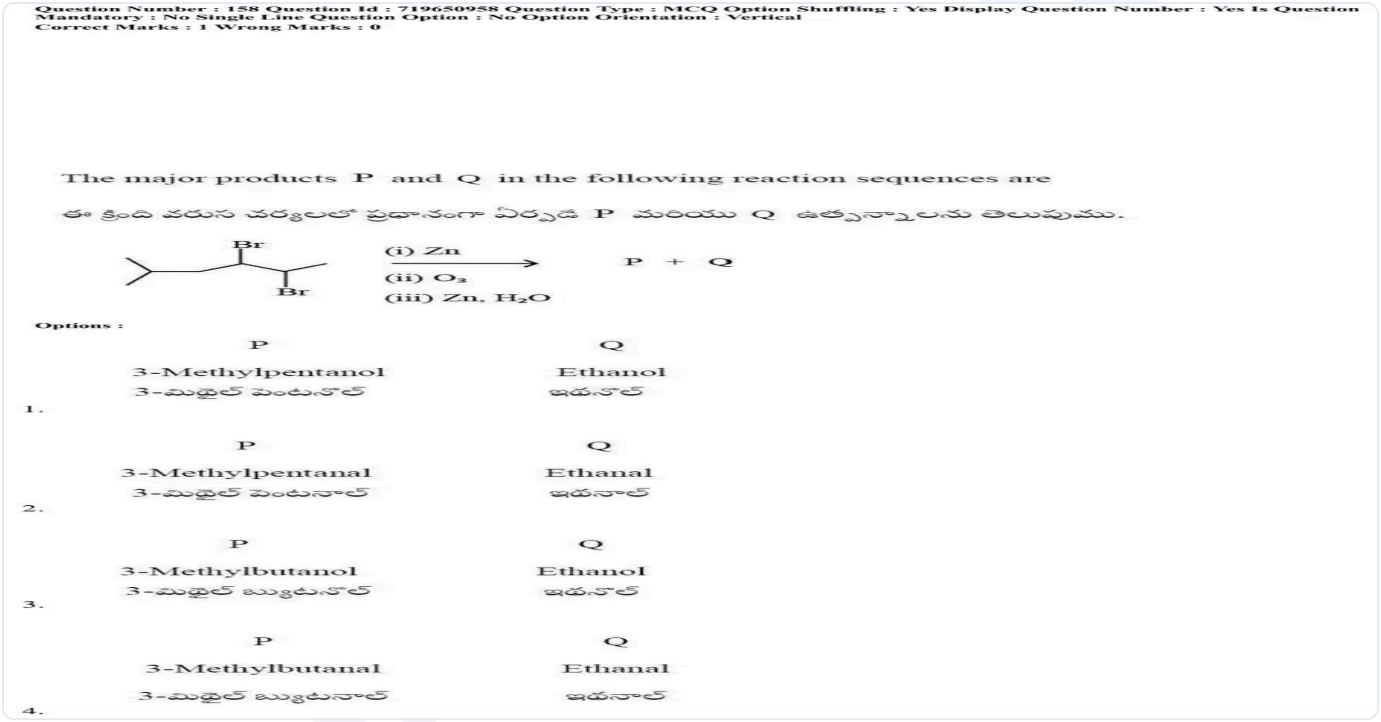
The correct order of reactivity of hydrogen halides with propene is

(A) HCl > HBr > HI
(B) HBr > HI > HCl
(C) HI > HBr > HCl
(D) HCl > HI > HBr

Answer: (C) HI > HBr > HCl · Official TGCHE final key

Q212 TS EAMCET 2020 · 11 Sep · Shift 1 MCQ

The major products P and Q in the following reaction sequences are
(see the figure above)



(A) P = 3-Methylpentanol, Q = Ethanol
(B) P = 3-Methylpentanal, Q = Ethanal
(C) P = 3-Methylbutanol, Q = Ethanol
(D) P = 3-Methylbutanal, Q = Ethanal

Answer: (D) P = 3-Methylbutanal, Q = Ethanal · Official TGCHE final key

Q213 TS EAMCET 2020 · 11 Sep · Shift 2 MCQ

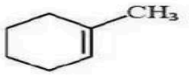
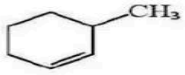
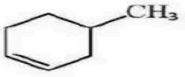
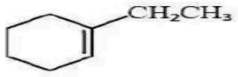
Product 6–oxoheptanal is formed by reductive ozonolysis of
(see the figure above)

Question Number : 140 Question Id : 7196501100 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Product 6–oxoheptanal is formed by reductive ozonolysis of

ఈ క్రింది వానిలో ఏ సమ్మేళనము క్షయకరణ ఓజోనీకరణం చెంది 6–ఆక్సోహెప్టనాల్ ఉత్పన్నంను ఇస్తుంది?

Options :

1. 
2. 
3. 
4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (A) · Official TGCHE final key

Q214 TS EAMCET 2020 · 11 Sep · Shift 2 MCQ

The major products P and Q from the below reactions are

$$CH_3CH{=}CH_2 \xrightarrow{HBr} P$$

$$CH_3CH{=}CH_2 \xrightarrow[H_2O,H_2O_2/OH^-]{(BH_3)_2} Q$$

(A) P: $CH_3CH(Br)CH_3$; Q: $CH_3CH(OH)CH_3$
(B) P: $CH_3CH(Br)CH_3$; Q: $CH_3CH_2CH_2OH$
(C) P: $CH_3CH_2CH_2Br$; Q: $CH_3CH_2CH_2OH$
(D) P: $CH_3CH_2CH_2Br$; Q: CH_3CH_2COOH

Answer: (B) P: $CH_3CH(Br)CH_3$; Q: $CH_3CH_2CH_2OH$ · Official TGCHE final key

Q215 TS EAMCET 2020 · 11 Sep · Shift 2 MCQ

An alkene A (C_4H_8) exhibits cis/trans isomerism. A on ozonolysis gives B, which when reacted with NaOH followed by hydroxylamine gave C. What are B and C?

(A) B: CH_3CH_2CHO; C: $CH_3CH_2CH = NOH$

(B) B: CH_3CH_2CHO; C: $CH_3CH_2CH = CHCH_2CH = NOH$

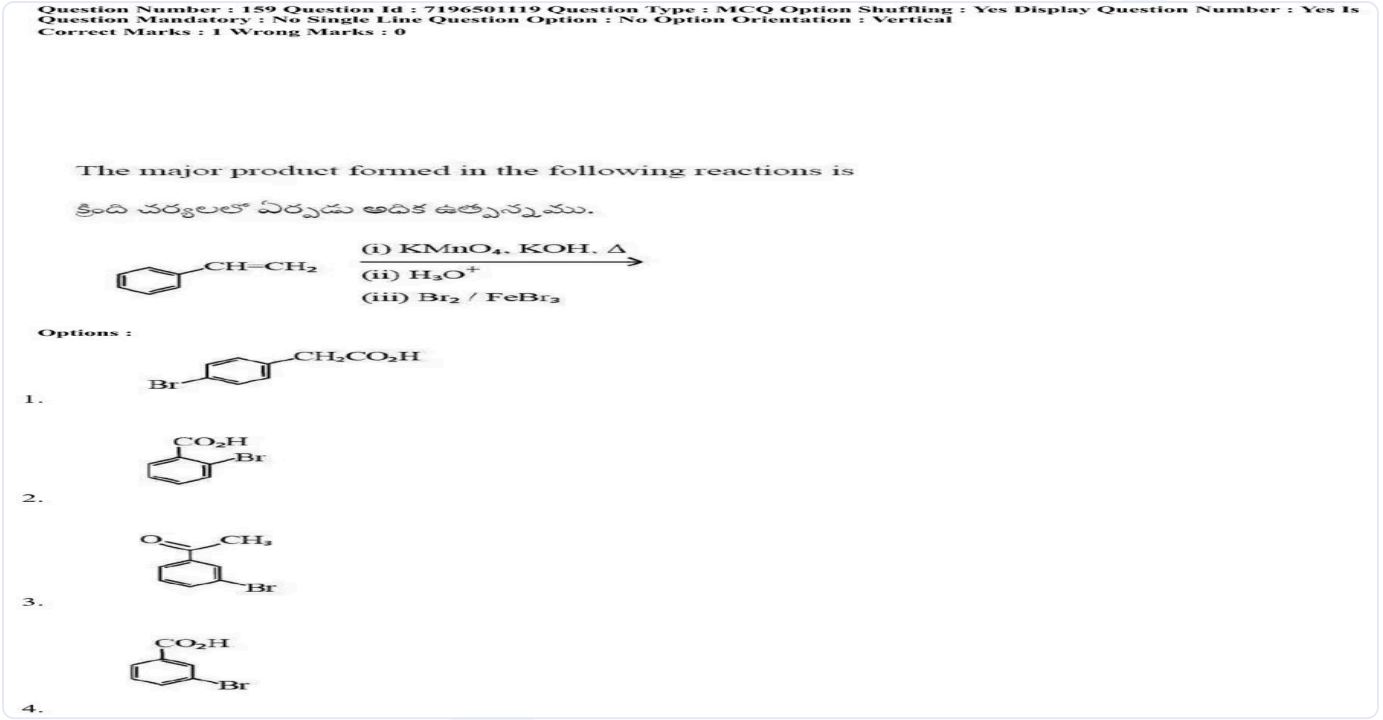
(C) B: CH_3CHO; C: $CH_3CH = CHCH = NNH_2$

(D) B: CH_3CHO; C: $CH_3CH = CHCH = NOH$

Answer: (D) B: CH_3CHO; C: $CH_3CH = CHCH = NOH$ · Official TGCHE final key

Q216 TS EAMCET 2020 · 11 Sep · Shift 2 MCQ

The major product formed in the following reactions is
(see the figure above) (i) $KMnO_4$, KOH, Δ; (ii) H_3O^+; (iii) Br_2 / $FeBr_3$



(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (D) · Official TGCHE final key

Q217 TS EAMCET 2020 · 10 Sep · Shift 1 MCQ

Ethyl phenyl acetylene (1-phenyl-1-butyne) on reduction with partially deactivated palladised charcoal (Lindlar's catalyst) gives
(see the figure above)

Question Number : 140 Question Id : 814578300 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

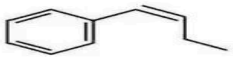
Ethyl phenyl acetylene (1–phenyl–1–butyne) on reduction with partially deactivated palladised charcoal (Lindlar's catalyst) gives

ఇథైల్ ఫినైల్ ఎసిటిలిన్ (1– ఫినైల్–1–బ్యూటైన్) పాక్షికంగా అనుత్తేజితమైన పల్లడైజ్‌డ్ చార్‌కోల్ (లిండ్లార్స్ ఉత్ప్రేరకం) తో క్షయకరణము చెందినపుడు ఏర్పడునది.

Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · Official TGCHE final key

Q218 TS EAMCET 2020 · 10 Sep · Shift 1 MCQ

Which one of the following methods is suitable to generate aromatic compound(s) from linear aliphatic saturated hydrocarbons with at least six carbon atoms?

(A) Heating at 773 K
(B) Mo_2O_3, 773 K, 10-20 atm
(C) Anhyd. $AlCl_3$, conc. HCl, Δ
(D) Cu, 523 K, 100 atm

Answer: (B) Mo_2O_3, 773 K, 10-20 atm · Official TGCHE final key

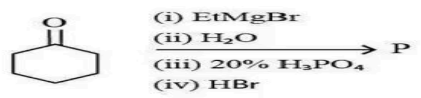
Q219 TS EAMCET 2020 · 10 Sep · Shift 1 MCQ

The major product in the following reaction sequence is
(see the figure above)

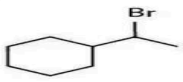
Question Number : 156 Question Id : 8145783316 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The major product in the following reaction sequence is

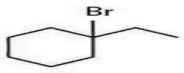
క్రింది చర్యల క్రమాంతములో ఏర్పడు అధిక(ప్రధాన) ఉత్పన్నము

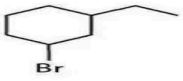


Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · Official TGCHE final key

Q220 TS EAMCET 2020 · 10 Sep · Shift 2 MCQ

A benzene derivative did not produce white precipitate with the ammonical silver nitrate solution but decolorized the cold dilute alkaline $KMnO_4$ solution. The compound is

(A) C_8H_6
(B) C_8H_{10}
(C) C_8H_8
(D) C_7H_8

Answer: (C) C_8H_8 · Official TGCHE final key

Q221 TS EAMCET 2020 · 10 Sep · Shift 2 MCQ

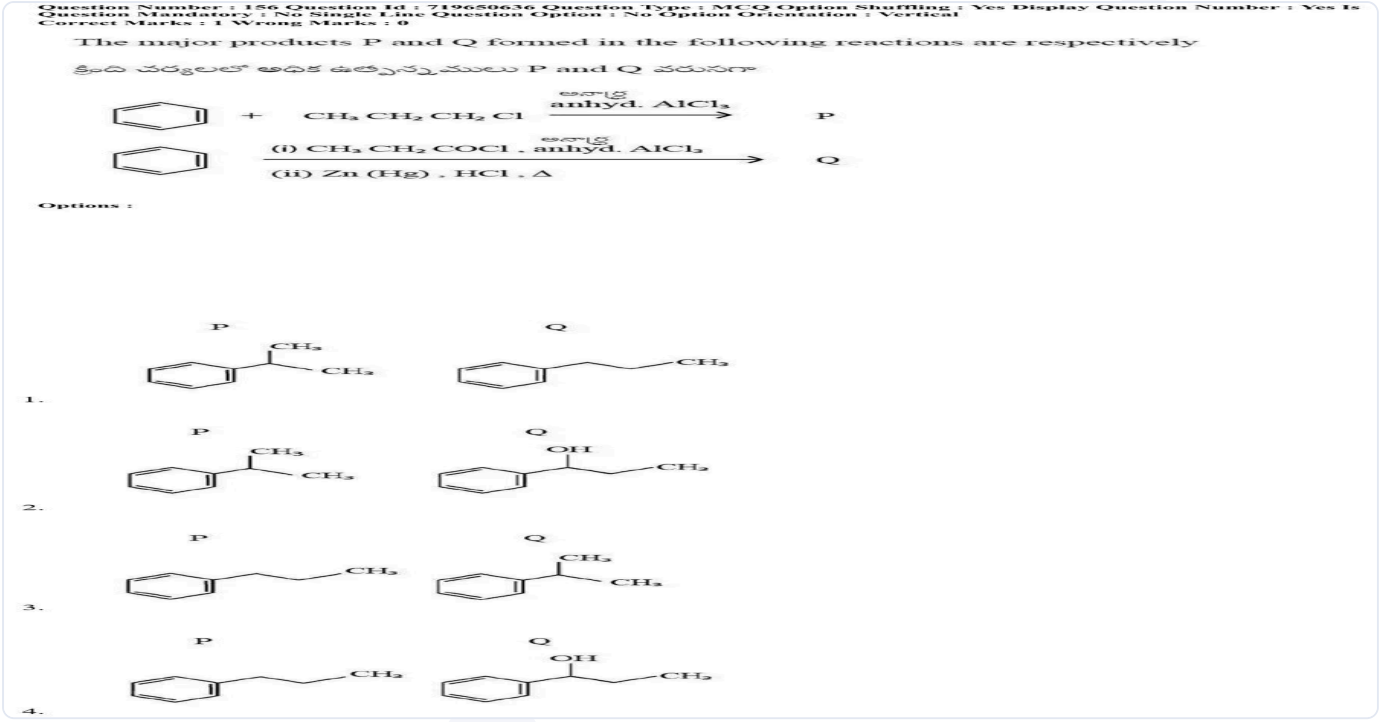
Which of the following can be used as the test for unsaturation with regard to color change of reaction?

(A) Addition of hydrogen
(B) Addition of hydrogen bromide
(C) Addition of hypobromous acid
(D) Addition of bromine

Answer: (D) Addition of bromine · Official TGCHE final key

Q222 TS EAMCET 2020 · 10 Sep · Shift 2 MCQ

The major products P and Q formed in the following reactions are respectively
(see the figure above)



(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (A) · Official TGCHE final key

Q223 TS EAMCET 2020 · 9 Sep · Shift 1 MCQ

The major product formed in the following reaction is

$$H_3C - C{\equiv}C - CH_3 + Na \xrightarrow{\text{liquid } NH_3}$$

Question Number : 140 Question Id : 719650300 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The major product formed in the following reaction is

$H_3C-C\equiv C-CH_3 + Na \xrightarrow{\text{liquid } NH_3}$

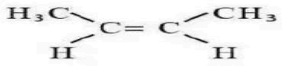
క్రింది చర్యలో ఏర్పడు అధిక ఉత్పన్నం ఏది.

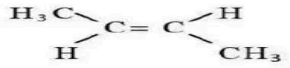
$H_3C-C\equiv C-CH_3 + Na \xrightarrow{\text{ద్రవ } NH_3}$

Options :

1. $H_3C-CH_2-C\equiv C^-Na^+$

2. $H_3C-C\equiv C-CH_2^- Na^+$

3. 

4. 

(A) $H_3C-CH_2-C\equiv C^-Na^+$

(B) $H_3C-C\equiv C-CH_2^- Na^+$ *(see the figure above)*

(C) *see figure*

(D) *see figure*

Answer: (D) · Official TGCHE final key

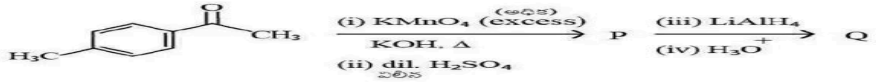
Q224 TS EAMCET 2020 · 9 Sep · Shift 1 MCQ

The major products P and Q in the following reaction sequence are
(see the figure above)

Question Number : 159 Question Id : 719650319 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The major products P and Q in the following reaction sequence are

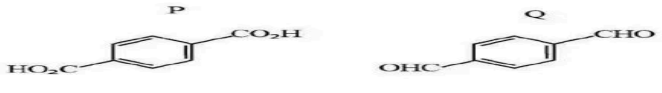
ఈ క్రింది చర్యాశ్రేణిలో అధిక ఉత్పన్నాలైన P మరియు Q వరుసగా



Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (A) · Official TGCHE final key

Q225 TS EAMCET 2020 · 9 Sep · Shift 2 MCQ

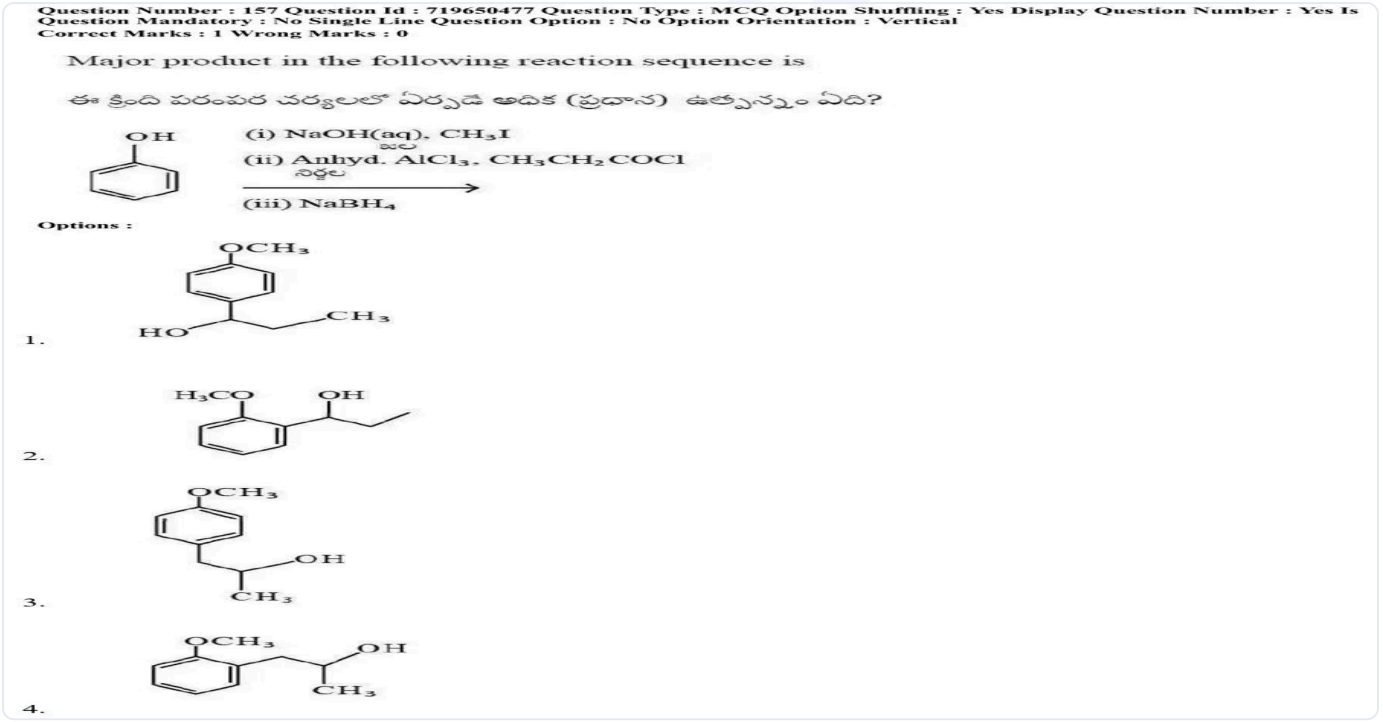
Reaction of 2-methylbuta-1, 3-diene with O_3 and $Zn - H_2O$, gives

(A) $CH_3COCH_3 + 2CO_2 \uparrow$
(B) $CH_3COCHO + 2HCHO$
(C) $CH_3COCHO + 2HCO_2H$
(D) $CH_3CO_2H + 3HCO_2H$

Answer: (B) $CH_3COCHO + 2HCHO$ · Official TGCHE final key

Q226 TS EAMCET 2020 · 9 Sep · Shift 2 MCQ

Major product in the following reaction sequence is *(see the figure above)*



(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (A) · Official TGCHE final key

Q227 TS EAMCET 2020 · 9 Sep · Shift 2 MCQ

The correct set of reagents which convert acetylene to but-2-enal are

(A) H_2SO_4, NaOH

(B) $H_2O/Hg^{2+}/H^+$, dil. NaOH

(C) H_2O/H^+, conc. NaOH

(D) H_2O, $KMnO_4/OH^-$

Answer: (B) $H_2O/Hg^{2+}/H^+$, **dil. NaOH** · Official TGCHE final key

Q228 TS EAMCET 2019 · 6 May · Shift 1 MCQ

Which of the following statements is correct in the Kolbe's electrolysis?

(A) Hydrocarbons containing even number of carbon atoms produced at anode

(B) Hydrocarbons containing odd number of carbon atoms produced at anode

(C) Hydrocarbons containing even number of carbon atoms produced at cathode

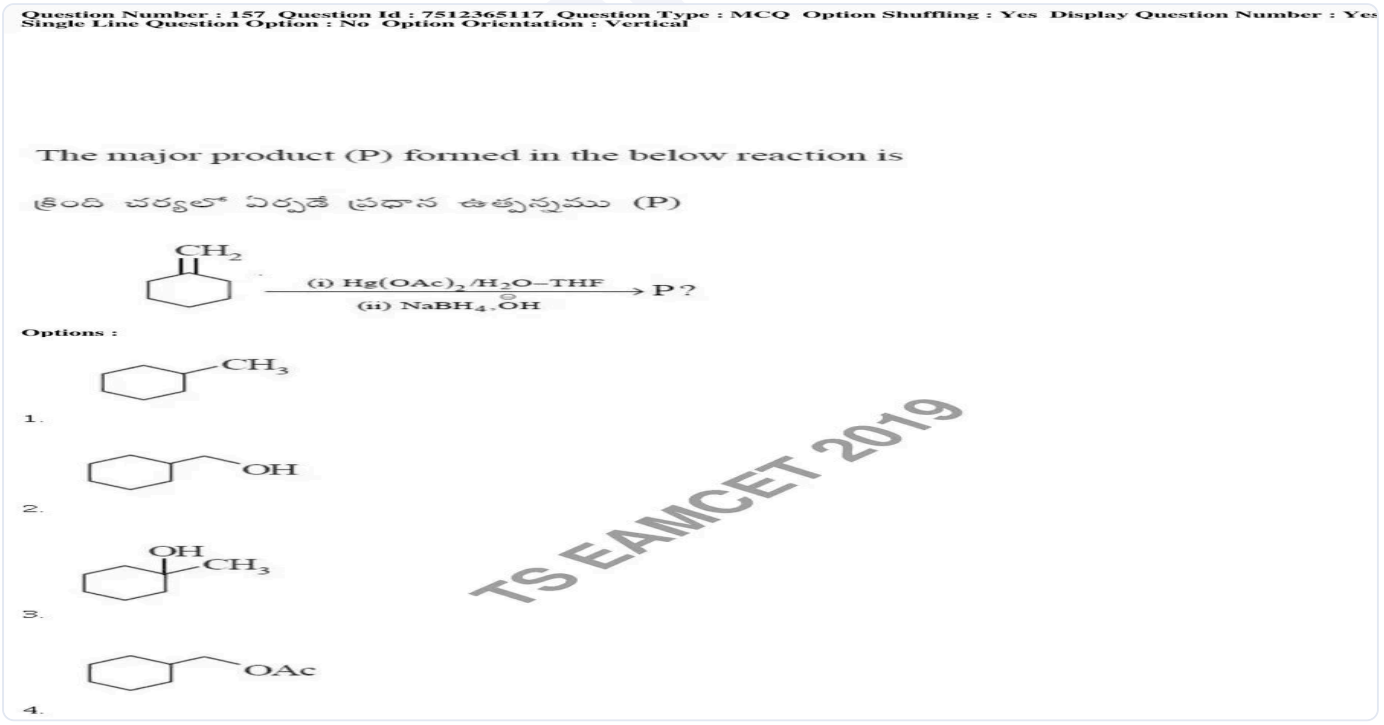
(D) Hydrocarbons containing odd number of carbon atoms produced at cathode

Answer: (A) Hydrocarbons containing even number of carbon atoms produced at anode · Official TGCHE final key

Q229 TS EAMCET 2019 · 6 May · Shift 1 MCQ

The major product (P) formed in the below reaction is

(see the figure above)

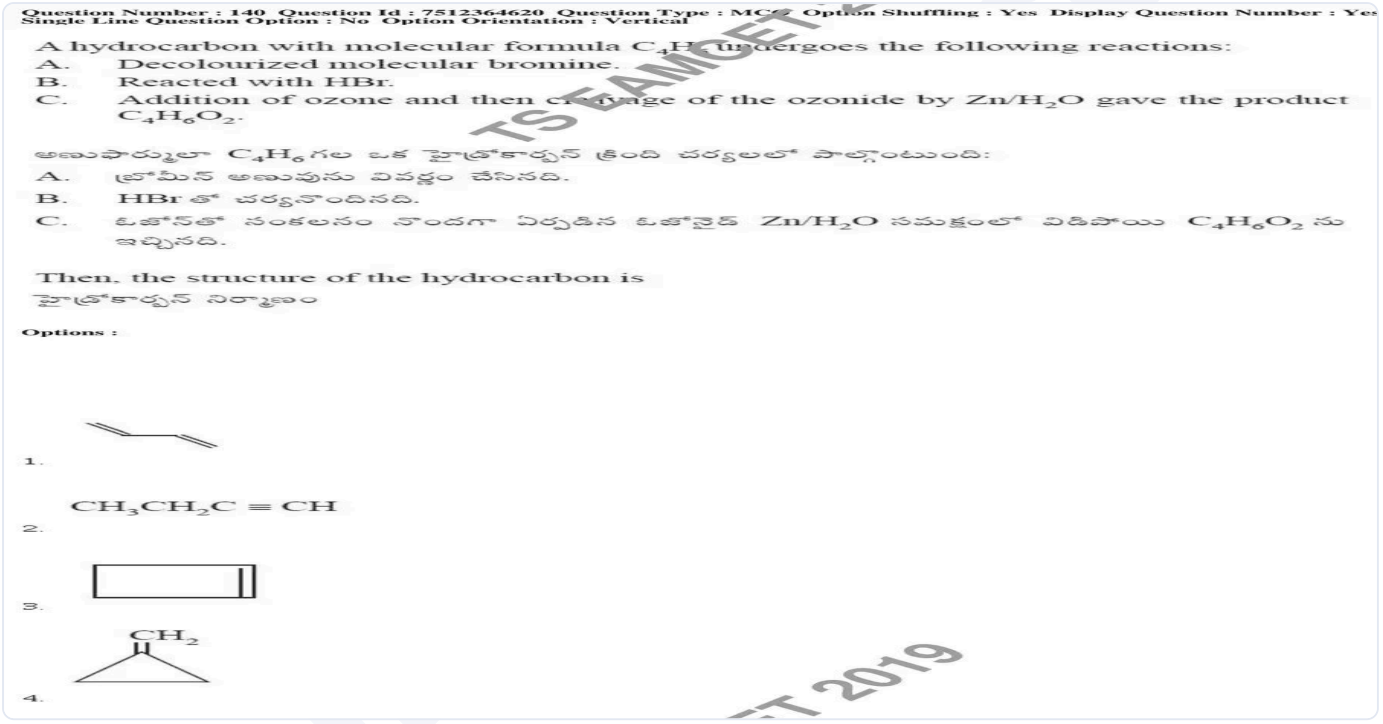


(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · Official TGCHE final key

Q230 TS EAMCET 2019 · 4 May · Shift 1 MCQ

A hydrocarbon with molecular formula C_4H_6 undergoes the following reactions:
A. Decolourized molecular bromine.
B. Reacted with HBr.
C. Addition of ozone and then cleavage of the ozonide by Zn/H_2O gave the product $C_4H_6O_2$.
Then, the structure of the hydrocarbon is


Question Number : 140 Question Id : 7512364620 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

A hydrocarbon with molecular formula C_4H_6 undergoes the following reactions:
A. Decolourized molecular bromine.
B. Reacted with HBr.
C. Addition of ozone and then cleavage of the ozonide by Zn/H_2O gave the product $C_4H_6O_2$.

అణుసూత్రంలో C_4H_6గల ఒక హైడ్రోకార్బన్ క్రింది చర్యలలో పాల్గొంటుంది:
A. బ్రోమిన్ అణువును విపక్షం చేసినది.
B. HBr తో చర్యనొందినది.
C. ఓజోనిత్ సంకలనం పొందగా విచ్ఛిన్న ఓజోనైడ్ Zn/H_2O సమక్షంలో విడిపాయి $C_4H_6O_2$ ను ఇచ్చినది.

Then, the structure of the hydrocarbon is
హైడ్రోకార్బన్ నిర్మాణం

Options :

1.
2. $CH_3CH_2C \equiv CH$
3.
4.

(A) *see figure*
(B) $CH_3CH_2C{\equiv}CH$
(C) *see figure*
(D) *see figure*

Options (2) or (3) were accepted. More than one answer was accepted. · Official TGCHE final key

Q231 TS EAMCET 2019 · 4 May · Shift 2 MCQ

The order of stability of aromatic hydrocarbons given below is
(see the figure above)

Question Number : 141 Question Id : 7512364941 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The order of stability of aromatic hydrocarbons given below is

క్రింది ఎరోమాటిక్ హైడ్రోకార్బన్‌ల స్థిరత్వ క్రమము ఏది?

Structure (నిర్మాణము)	A	B	C	D
Resonance stabilization energy in k cal/mol రెజోనెన్స్ స్థిరత్వ శక్తి k cal/mol	36	61	84	92

Options :

1. $A < D < B < C$
2. $D < A < B < C$
3. $B > C > D > A$
4. $A > D > B > C$

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(A) $A < D < B < C$
(B) $D < A < B < C$
(C) $B > C > D > A$
(D) $A > D > B > C$

Answer: (D) $A > D > B > C$ · Official TGCHE final key

Q232 TS EAMCET 2019 · 4 May · Shift 2 MCQ

The final product "B" of the below reaction sequence is

(see the figure above)

Question Number : 156 Question Id : 7512364956 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The final product "B" of the below reaction sequence is

క్రింది చర్యాక్రమంలోని చివరి ఉత్పన్నము, "B" ఏది?

$$CH_3 - \underset{\displaystyle Br}{\underset{|}{CH}} - CH_3 \xrightarrow{KOH/C_2H_5OH} A \xrightarrow[HBr]{(C_6H_5CO)_2O_2} B$$

Options :

1. $CH_3CH_2CH_2OH$
2. $CH_3CH = CH_2$
3. $CH_3CH_2CH_2Br$
4. $(CH_3CH_2CH_2)_2O$

TS EAMCET 2019

(A) $CH_3CH_2CH_2OH$
(B) $CH_3CH{=}CH_2$
(C) $CH_3CH_2CH_2Br$
(D) $(CH_3CH_2CH_2)_2O$

Answer: (C) $CH_3CH_2CH_2Br$ · Official TGCHE final key

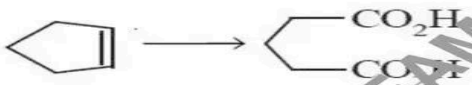
Q233 TS EAMCET 2019 · 4 May · Shift 2 MCQ

What are the suitable conditions for the following transformation?
(see the figure above)

Question Number : 159 Question Id : 7512364959 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

What are the suitable conditions for the following transformation?

క్రింది మార్పిడికి సరియైన పరిస్థితులు ఏవి?



Options :

1. $KMnO_4 - H_2SO_4/\Delta$
2. O_3/O_2 , $Zn + H_2O$
3. OsO_4
4. $Pb(OAc)_4$

(A) $KMnO_4 - H_2SO_4/\Delta$
(B) O_3/O_2, Zn + H_2O
(C) OsO_4
(D) $Pb(OAc)_4$

Answer: (A) $KMnO_4 - H_2SO_4/\Delta$ · Official TGCHE final key

Q234 TS EAMCET 2019 · 3 May · Shift 1 MCQ

Which of the following reactions produce alkane as the product?
(see the figure above)

Question Number : 140 Question Id : 7512364300 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which of the following reactions produce alkane as the product?

క్రింది చర్యలలో ఆల్కేన్‌ను ఉత్పన్నముగా ఏర్పరిచేది ఏది?

I. $R-COO^{\ominus}Na^{\oplus}+NaOH \xrightarrow[\Delta]{CaO}$

II. $CH_3-\overset{\overset{O}{\|}}{C}-CH_3 \xrightarrow[\text{conc.HCl}]{Zn-Hg}$ (గాఢ)

III. $CH_3C\equiv CCH_3 \xrightarrow{LiAlH_4}$

IV. $CH_3-\overset{\overset{CH_3}{|}}{\underset{\underset{CH_3}{|}}{C}}-Cl \xrightarrow{NaBH_4}$

Options :

1. I, II, III
2. I, III, IV
3. I, II, IV
4. II, III, IV

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(A) I, II, III

(B) I, III, IV

(C) I, II, IV

(D) II, III, IV

Answer: (C) I, II, IV · Official TGCHE final key

Q235 TS EAMCET 2019 · 3 May · Shift 2 MCQ

Which one of the following is used to obtain the maximum percentage of terminal alkene by dehydrohalogenation of $CH_3CH_2C(CH_3)_2Br$?

(A) Sodium ethoxide in ethanol

(B) Potassium ethoxide in ethanol

(C) Potassium tert-butoxide in tert-butyl alcohol

(D) Potassium alkoxide derived from 3-ethyl-3-pentanol in $HO-C(C_2H_5)_3$

Answer: (D) Potassium alkoxide derived from 3-ethyl-3-pentanol in $HO-C(C_2H_5)_3$ · Official TGCHE final key

Q236 AP EAMCET 2019 · 23 Apr · Shift 1 MCQ

What are X and Y in the following reaction?

$Hex-2-ene \xrightarrow{O_3} Ozonide \xrightarrow{Zn+H_2O} X+Y$

(A) X = CH_3CH_2CHO, Y = $(H_3C)_2CO$

(B) X = $CH_3CH(CH_3)COOH$, Y = CH_3COOH

(C) X = $CH_3CH_2CH_2CHO$, Y = CH_3CHO

(D) X = $CH_3CH(CH_3)CHO$, Y = CH_3CHO

Answer: (C) X = $CH_3CH_2CH_2CHO$, Y = CH_3CHO · Official APSCHE final key

Q237 AP EAMCET 2019 · 23 Apr · Shift 1 MCQ

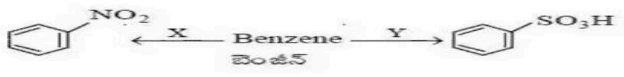
What are X and Y in the following reactions?

(see the figure above)

Question Number : 138 Question Id : 1874634778 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

What are X and Y in the following reactions?

క్రింది చర్యలలో X, Y లు ఏవి? (conc = గాఢ, dilute = పలీన)



Options :

	X	Y
1.	Conc.HNO_3	$H_2SO_4(SO_3)$
2.	Conc.HNO_3 + Conc.H_2SO_4/333K	$H_2SO_4(SO_3)$
3.	$NaNO_2$/HCl	H_2SO_4
4.	Dilute HNO_3	SO_3

(A) X = Conc.HNO_3, Y = $H_2SO_4(SO_3)$

(B) X = Conc.HNO_3 + Conc.H_2SO_4/333K, Y = $H_2SO_4(SO_3)$

(C) X = $NaNO_2$/HCl, Y = H_2SO_4

(D) X = Dilute HNO_3, Y = SO_3

Answer: (B) X = Conc.HNO_3 + Conc.H_2SO_4/333K, Y = $H_2SO_4(SO_3)$ · Official APSCHE final key

Q238 AP EAMCET 2019 · 22 Apr · Shift 1 MCQ

Wurtz reaction of bromoethane gives n-butane. Sodium salt of X on heating with sodalime also results in n-butane. Compound X is

(A) $CH_3CH_2CH_2COOH$
(B) $CH_3(CH_2)_3COOH$
(C) $CH_3(CH_2)_4COOH$
(D) CH_3CH_2COOH

Answer: (B) $CH_3(CH_2)_3COOH$ · Official APSCHE final key

Q239 AP EAMCET 2019 · 22 Apr · Shift 1 MCQ

Identify ortho and para directing groups from the following
I) $-CHO$
II) $-NHCOCH_3$
III) $-OCH_3$
IV) $-SO_3H$

(A) III, IV
(B) II, III
(C) II, IV
(D) I, IV

Answer: (B) II, III · Official APSCHE final key

Q240 AP EAMCET 2019 · 22 Apr · Shift 2 MCQ

In which of the following reactions alkane is not formed?

(A) $CH_3Br \xrightarrow{Na/\text{ dry ether}}$
(B) $CH_3COONa \xrightarrow[\Delta]{NaOH/CaO}$
(C) $CH_3COONa \xrightarrow[\text{Electrolysis}]{H_2O}$
(D) $BrCH_2 - CH_2Br \xrightarrow{alc.KOH/\Delta}$

Answer: (D) $BrCH_2 - CH_2Br \xrightarrow{alc.KOH/\Delta}$ · Official APSCHE final key

Q241 AP EAMCET 2019 · 22 Apr · Shift 2 MCQ

The number of monochloroderivatives possible, when 2, 2-Dimethylpropane reacts with Chlorine in the presence of UV-light is

(A) 4
(B) 3
(C) 2
(D) 1

Answer: (D) 1 · Official APSCHE final key

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Q242 AP EAMCET 2019 · 21 Apr · Shift 1 MCQ

Which of the following statements are correct?
I) In nitrating mixture nitric acid participates as an acid
II) σ complex is the intermediate substance in electrophilic substitution of benzene
III) Benzene on Friedel-Crafts alkylation with n-propyl chloride gives isopropyl benzene

(A) II, III only
(B) I, II only
(C) I, III only
(D) I, II, III

Answer: (A) II, III only · Official APSCHE final key

Q243 AP EAMCET 2019 · 21 Apr · Shift 1 MCQ

Which one of the following functional groups is not meta directing?

(A) $-COOH$
(B) $-NO_2$
(C) $-CHO$
(D) $-OCH_3$

Answer: (D) $-OCH_3$ · Official APSCHE final key

Q244 AP EAMCET 2019 · 21 Apr · Shift 2 MCQ

Identify Z in the following sequence of reactions.

$$C_2H_4Br_2 \xrightarrow[(ii)\ NaNH_2]{(i)\ alc.\ KOH} X \xrightarrow[873K]{Red\ hot\ Fe\ tube} Y \xrightarrow[Anhyd.\ AlCl_3]{(CH_3CO)_2O/\Delta} Z$$

(A) Acetophenone
(B) Anisole
(C) Toluene
(D) Chlorobenzene

Answer: (A) Acetophenone · Official APSCHE final key

Q245 AP EAMCET 2019 · 21 Apr · Shift 2 MCQ

Which one of the following is not present in the nitration mixture?

(A) $\overset{+}{N}O_2$
(B) HSO_4^-
(C) SO_4^{2-}
(D) H_2O

Answer: (C) SO_4^{2-} · Official APSCHE final key

Q246 AP EAMCET 2019 · 20 Apr · Shift 1 MCQ

Sodium acetate was electrolysed by Kolbe's method to form two gases A and B at anode. C and D are formed when B is heated with regulated supply of O_2 or air in the presence of $(CH_3COO)_2Mn$. C reacts with NaOH to form a salt. A and D are respectively.

(A) $CO_2,\ CH_3COOH$

(B) $CO_2,\ H_2O$

(C) $C_2H_6,\ H_2O$

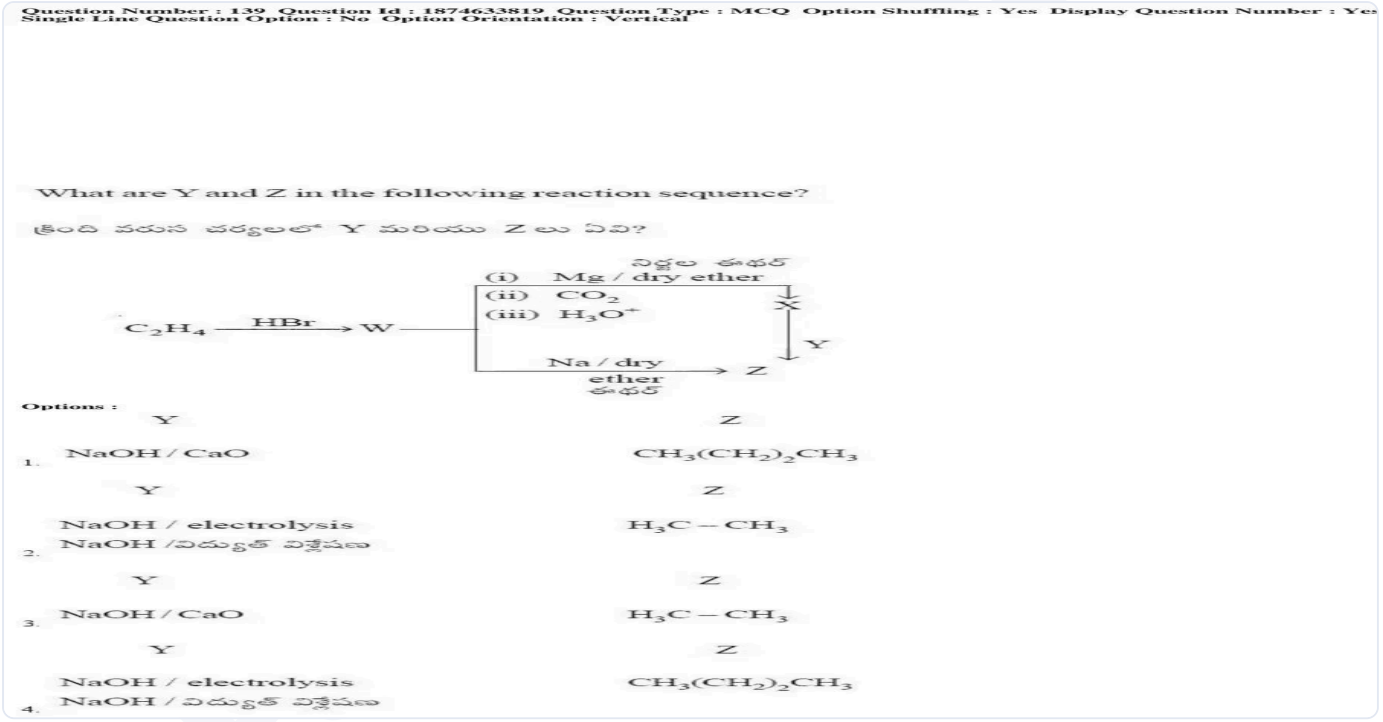
(D) $CO_2,\ H_2O_2$

Answer: (B) $CO_2,\ H_2O$ · Official APSCHE final key

Q247 AP EAMCET 2019 · 20 Apr · Shift 1 MCQ

What are Y and Z in the following reaction sequence?

(see the figure above)



(A) Y = NaOH / CaO; Z = $CH_3(CH_2)_2CH_3$

(B) Y = NaOH / electrolysis; Z = H_3C-CH_3

(C) Y = NaOH / CaO; Z = H_3C-CH_3

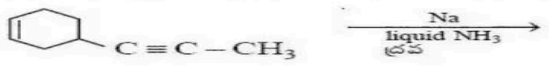
(D) Y = NaOH / electrolysis; Z = $CH_3(CH_2)_2CH_3$

Answer: (D) Y = NaOH / electrolysis; Z = $CH_3(CH_2)_2CH_3$ · Official APSCHE final key

Q248 AP EAMCET 2019 · 20 Apr · Shift 2 MCQ

see figure

Question Number : 137 Question Id : 1874633977 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

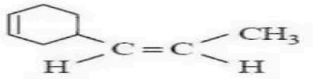


The product formed in the above reaction is

పై చర్యలో ఏర్పడే ఉత్పన్నము

Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · Official APSCHE final key

Q249 AP EAMCET 2019 · 20 Apr · Shift 2 MCQ

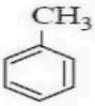
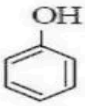
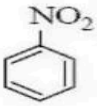
The correct order of reactivity of the following compounds, towards electrophilic substitution reactions is

(a) *(see the figure above)* benzene (b) *(see the figure above)* toluene (CH_3 on ring) (c) *(see the figure above)* phenol (OH on ring) (d) *(see the figure above)* nitrobenzene (NO_2 on ring)

Question Number : 138 Question Id : 1874633978 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The correct order of reactivity of the following compounds, towards electrophilic substitution reactions is

ఎలక్ట్రోఫిలిక్ ప్రతిక్షేపణ చర్యల పట్ల క్రింది సమ్మేళనాల చర్యాశీలతల సరియైన క్రమం

(a)  (b)  (c)  (d) 

Options :

1. (a) > (b) > (c) > (d)
2. (d) > (c) > (b) > (a)
3. (c) > (b) > (a) > (d)
4. (b) > (c) > (a) > (d)

(A) (a) > (b) > (c) > (d)

(B) (d) > (c) > (b) > (a)

(C) (c) > (b) > (a) > (d)

(D) (b) > (c) > (a) > (d)

Answer: (C) (c) > (b) > (a) > (d) · Official APSCHE final key

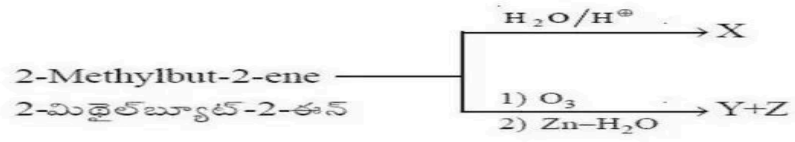
Q250 TS EAMCET 2018 · 7 May · Shift 1 MCQ

Identify X, Y and Z in the following reactions *(see the figure above)*

Question Number : 140 Question Id : 4928632700 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Correct : 1 Wrong : 0

Identify X, Y and Z in the following reactions

క్రింది చర్యలలో X, Y, Z లను గుర్తించుము



Options :

1. X $(H_3C)_3CCH_2OH$ Y CH_3CHO Z CH_3CH_2CHO
2. X $(H_3C)_2CHCH(OH)CH_3$ Y $(CH_3)_2CO$ Z $(CH_3)_2CO$
3. X $(H_3C)_2C(OH)CH_2CH_3$ Y $(CH_3)_2CO$ Z CH_3CHO
4. X $CH_3CH_2CH(OH)CH_2CH_3$ Y CH_3CH_2CHO Z CH_3COOH

(A) X: $(H_3C)_3CCH_2OH$; Y: CH_3CHO; Z: CH_3CH_2CHO

(B) X: $(H_3C)_2CH\,CH(OH)CH_3$; Y: $(CH_3)_2CO$; Z: $(CH_3)_2CO$

(C) X: $(H_3C)_2C(OH)CH_2CH_3$; Y: $(CH_3)_2CO$; Z: CH_3CHO

(D) X: $CH_3CH_2CH(OH)CH_2CH_3$; Y: CH_3CH_2CHO; Z: CH_3COOH

Answer: (C) X: $(H_3C)_2C(OH)CH_2CH_3$; Y: $(CH_3)_2CO$; Z: CH_3CHO · The council's preliminary key

Q251 TS EAMCET 2018 · 7 May · Shift 1 MCQ

Which of the following statements are correct with respect to benzene?

a) It forms triozonide with O_3

b) It is non-planar

c) It forms only one monosubstituted product with CH_3COCl in the presence of anhyd. $AlCl_3$

d) If forms hexachlorobenzene on heating with Cl_2 under photochemical condition (sic)

(A) a, b

(B) b, c

(C) a, c

(D) c, d

Answer: (C) a, c · The council's preliminary key

Q252 TS EAMCET 2018 · 5 May · Shift 1 MCQ

Identify the correct catalyst and reaction conditions for the controlled oxidation of methane to (i) methanol (X), (ii) methanal (Y) and ethane to (iii) ethanoic acid (Z)

(A) (X) Mo_2O_3/Δ; (Y) $(CH_3COO)_2Mn/\Delta$; (Z) Cu/523K/100atm

(B) (X) Cu/523K/100atm; (Y) Mo_2O_3/Δ; (Z) $(CH_3COO)_2Mn/\Delta$

(C) (X) $(CH_3COO)_2Mn/\Delta$; (Y) Cu/523K/100atm; (Z) Mo_2O_3/Δ

(D) (X) Mo_2O_3/Δ; (Y) Cu/523K/100 atm; (Z) $(CH_3COO)_2Mn/\Delta$

Answer: (B) (X) Cu/523K/100atm; (Y) Mo_2O_3/Δ; (Z) $(CH_3COO)_2Mn/\Delta$ · The council's preliminary key

Q253 TS EAMCET 2018 · 5 May · Shift 1 MCQ

The major product (P) formed in the below reaction is

$$H-C\equiv C-CH_2-CH=CH_2 \xrightarrow[CCl_4,\,253K]{Br_2\ (1\ mole)} P$$

(A) $H-C\equiv C-CH_2-CH(Br)-CH_2\,(Br)$

(B) $CH(Br)_2-C(Br)_2-CH_2-CH=CH_2$

(C) $CH_2(Br)-CH(Br)-CH_2-CH=CH_2$

(D) $CH_2=CH(Br)-CH(Br)-CH=CH_2$

Answer: (A) $H-C\equiv C-CH_2-CH(Br)-CH_2\,(Br)$ · The council's preliminary key

Q254 TS EAMCET 2018 · 5 May · Shift 2 MCQ

2-Pentyne on reaction with sodium in liquid ammonia produced compound A. What is A?

(A) n-Pentane
(B) 1-Pentyne
(C) cis-2-Pentene
(D) trans-2-Pentene

Answer: (D) trans-2-Pentene · The council's preliminary key

Q255 TS EAMCET 2018 · 4 May · Shift 1 MCQ

What are the products formed in the reaction given below?

$\mathrm{Ph-CH_2-CH=CH-CH_3} \xrightarrow[2)\ \mathrm{Zn+H_2O}]{1)\ \mathrm{O_3}} ?$

(A) Acetic acid and 2 - phenyl acetic acid
(B) 2 - Phenyl ethanal and ethanal
(C) 2 - Phenyl ethanol and ethanol
(D) 1 - Phenyl butane - 2, 3 - diol

Answer: (B) 2 - Phenyl ethanal and ethanal · The council's preliminary key

Q256 TS EAMCET 2018 · 4 May · Shift 1 MCQ

The major product obtained in the reaction of isobutyl benzene with acetic anhydride in the presence of anhydrous $\mathrm{AlCl_3}$ is

(A) p - isobutyl acetophenone
(B) acetophenone
(C) m - isobutyl acetophenone
(D) o - isobutyl acetophenone

Answer: (A) p - isobutyl acetophenone · The council's preliminary key

Q257 TS EAMCET 2018 · 4 May · Shift 2 MCQ

In the process of formation of nitronium ion, nitric acid acts as

(A) a base
(B) an acid
(C) a catalyst
(D) a solvent

Answer: (A) a base · The council's preliminary key

EdLoop EAPCET

Q258 AP EAMCET 2018 · 24 Apr · Shift 1 MCQ

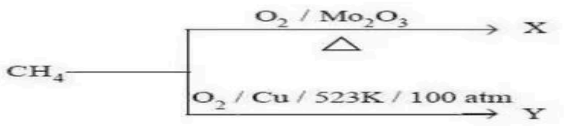
Identify X and Y in the following reactions

(see the figure above)

Question Number : 137 Question Id : 4557344457 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Identify X and Y in the following reactions

క్రింది చర్యలలో X,Y లను గుర్తించండి



Options :

1. X: CH_3OH, Y: HCO_2H
2. X: HCO_2H, Y: CH_2O
3. X: CH_3OH, Y: CH_2O
4. X: CH_2O, Y: CH_3OH

(A) X = CH_3OH, Y = HCO_2H

(B) X = HCO_2H, Y = CH_2O

(C) X = CH_3OH, Y = CH_2O

(D) X = CH_2O, Y = CH_3OH

Answer: (D) X = CH_2O, Y = CH_3OH · The council's preliminary key

Q259 AP EAMCET 2018 · 24 Apr · Shift 2 MCQ

Assertion (A) : Reaction of 1-butene with HBr gives 1-bromobutane as major product.
Reason (R) : Addition of HBr to unsymmetrical alkenes proceeds according to Markovnikov's rule
The correct answer is

(A) (A) and (R) are correct, (R) is the correct explanation of (A)

(B) (A) and (R) are correct but (R) is not the correct explanation of (A)

(C) (A) is correct but (R) is not correct

(D) (A) is not correct but (R) is correct

Answer: (D) (A) is not correct but (R) is correct · The council's preliminary key

Q260 AP EAMCET 2018 · 24 Apr · Shift 2 MCQ

Pent-1-ene reacts with diborane to form X. X on oxidation using H_2O_2 in the presence of aqueous NaOH gives Y. Compound Y is

(A) $CH_3CH_2CH_2CH(OH)CH_3$
(B) $CH_3CH_2CH_2CH_2CH_2OH$
(C) $CH_3CH_2CH(OH)CH_2CH_3$
(D) $CH_3CH_2C(OH)(CH_3)CH_3$

Answer: (B) $CH_3CH_2CH_2CH_2CH_2OH$ · The council's preliminary key

Q261 AP EAMCET 2018 · 23 Apr · Shift 1 MCQ

Assertion (A) : Propene on addition with hydrogen bromide in the presence of peroxide gives 1 - Bromopropane as the major product
Reason (R) : 1 - Bromopropane is the major product because it is formed through the stable carbocation

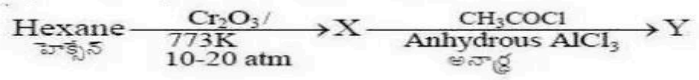
(A) (A) and (R) are correct, (R) is the correct explanation of (A)
(B) (A) and (R) are correct but (R) is not the correct explanation of (A)
(C) (A) is correct but (R) is not correct
(D) (A) is not correct but (R) is correct

Answer: (C) (A) is correct but (R) is not correct · The council's preliminary key

Q262 AP EAMCET 2018 · 23 Apr · Shift 1 MCQ

see figure

Question Number : 138 Question Id : 4557344138 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical



Y in the above sequence of reactions is

పై క్రమాను చర్యలలో Y అనునది

Options :

1. $C_6H_5-\overset{\overset{O}{\|}}{C}-H$
2. $C_6H_5-\overset{\overset{O}{\|}}{C}-OH$
3. $C_6H_5-CH_3$
4. $C_6H_5-\overset{\overset{O}{\|}}{C}-CH_3$

(A) *see figure*
(B) *see figure*
(C) $C_6H_5 - CH_3$
(D) *see figure*

Answer: (D) · The council's preliminary key

Q263 AP EAMCET 2018 · 23 Apr · Shift 2 MCQ

Propyne reacts with HBr to form Z. The compound Z is

(A) $CH_2(Br)CH_2CH_2Br$
(B) $CH_3CH_2CHBr_2$
(C) $CH_3CH(Br)CH_2Br$
(D) $CH_3CBr_2CH_3$

Answer: (D) $CH_3CBr_2CH_3$ · The council's preliminary key

Q264 AP EAMCET 2018 · 22 Apr · Shift 1 MCQ

Identify the correct statements from the following
a. Petrol and CNG operated automobiles cause less pollution
b. Alkanes having tertiary hydrogen can be oxidized to alcohols by $KMnO_4$
c. Methane can be prepared by Kolbe's electrolytic method
d. Alkyl chloride on reduction with zinc and dilute hydrochloric acid gives alkane

(A) b, c, d
(B) a, b
(C) a, b, d
(D) c, d

Answer: (C) a, b, d · The council's preliminary key

Q265 AP EAMCET 2018 · 22 Apr · Shift 1 MCQ

What are X and Y in the following reaction?

$$\text{Pent} - 2 - \text{ene} \xrightarrow[\text{(ii) } Zn/H_2O]{\text{(i) } O_3} X + Y$$

X Y

(A) CH_3CHO ; CH_3CH_2CHO
(B) CH_3CH_2CHO ; CH_3CH_2CHO
(C) CH_3CHO ; $(CH_3)_2CO$
(D) CH_3CHO ; CH_3CHO

Answer: (A) CH_3CHO ; CH_3CH_2CHO · The council's preliminary key

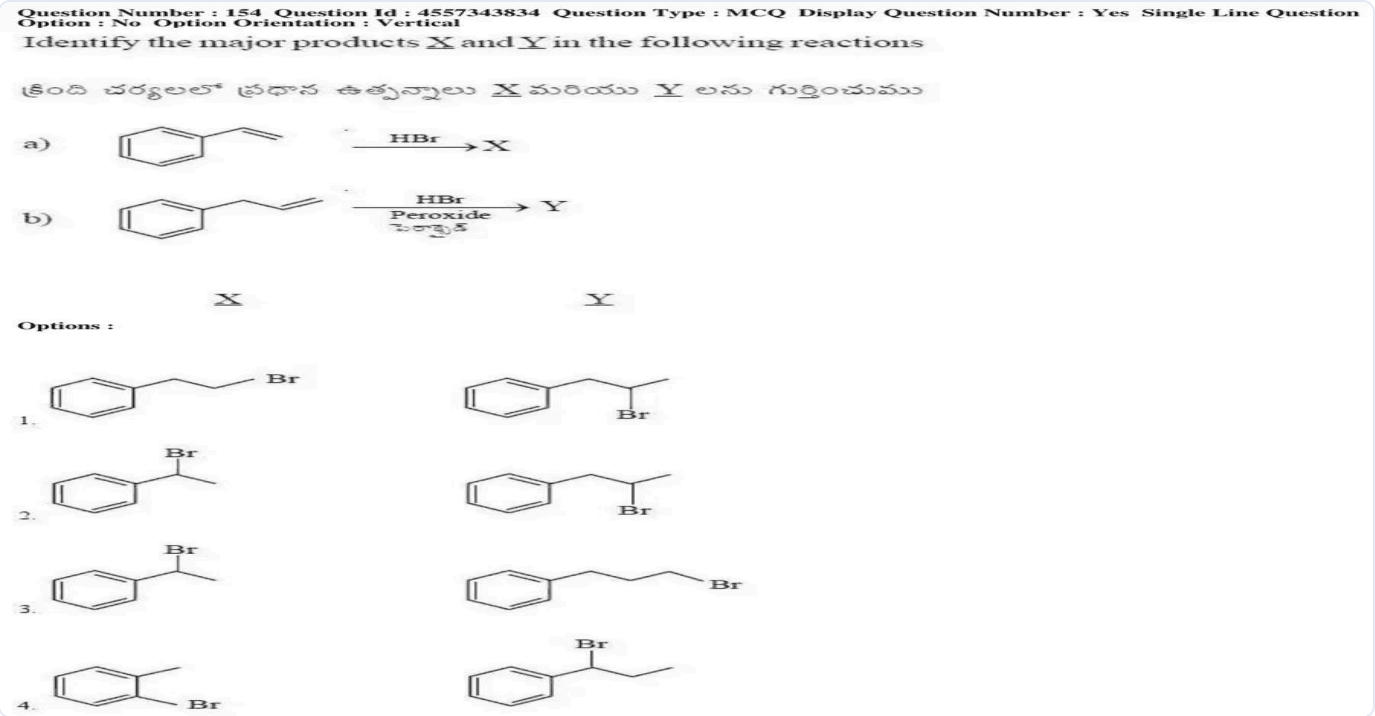
EdLoop EAPCET

Q266 AP EAMCET 2018 · 22 Apr · Shift 1 MCQ

Identify the major products X and Y in the following reactions

a) *(see the figure above)* $\xrightarrow{HBr}$ X

b) *(see the figure above)* $\xrightarrow[Peroxide]{HBr}$ Y



(A) X: *(see the figure above)* 2-phenylethyl bromide (benzene-CH2CH2-Br) ; Y: *(see the figure above)* 1-phenylpropan-2-yl bromide (benzene-CH2-CH(Br)-CH3)

(B) X: *(see the figure above)* (1-bromoethyl)benzene (benzene-CH(Br)-CH3) ; Y: *(see the figure above)* benzene-CH2-CH(Br)-CH3

(C) X: *(see the figure above)* (1-bromoethyl)benzene (benzene-CH(Br)-CH3) ; Y: *(see the figure above)* benzene-CH2CH2CH2-Br

(D) X: *(see the figure above)* ring-brominated toluene (bromine on the ring ortho to the methyl) ; Y: *(see the figure above)* benzene-CH(Br)-CH2CH3

Answer: (C) X: *(see the figure above)* **(1-bromoethyl)benzene (benzene-CH(Br)-CH3) ; Y:** *(see the figure above)* **benzene-CH2CH2CH2-Br** · The council's preliminary key

Q267 AP EAMCET 2018 · 22 Apr · Shift 2 MCQ

What are X, Y and Z in the following reations? (sic)

$CH_3 - CH_2 - COO^{\ominus}Na^{\oplus} \xrightarrow{X} Y \xleftarrow{\text{Kolbe's Electrolysis}} Z + H_2O$

Options give X, Y, Z in order:

(A) X = $NaOH + CaO/\Delta$, Y = $CH_3CH_2CH_2CH_3$, Z = $CH_3CH_2COO^{\ominus}Na^{\oplus}$

(B) X = Mo_2O_3, Y = C_2H_6, Z = $CH_3CH_2COO^{\ominus}Na^{\oplus}$

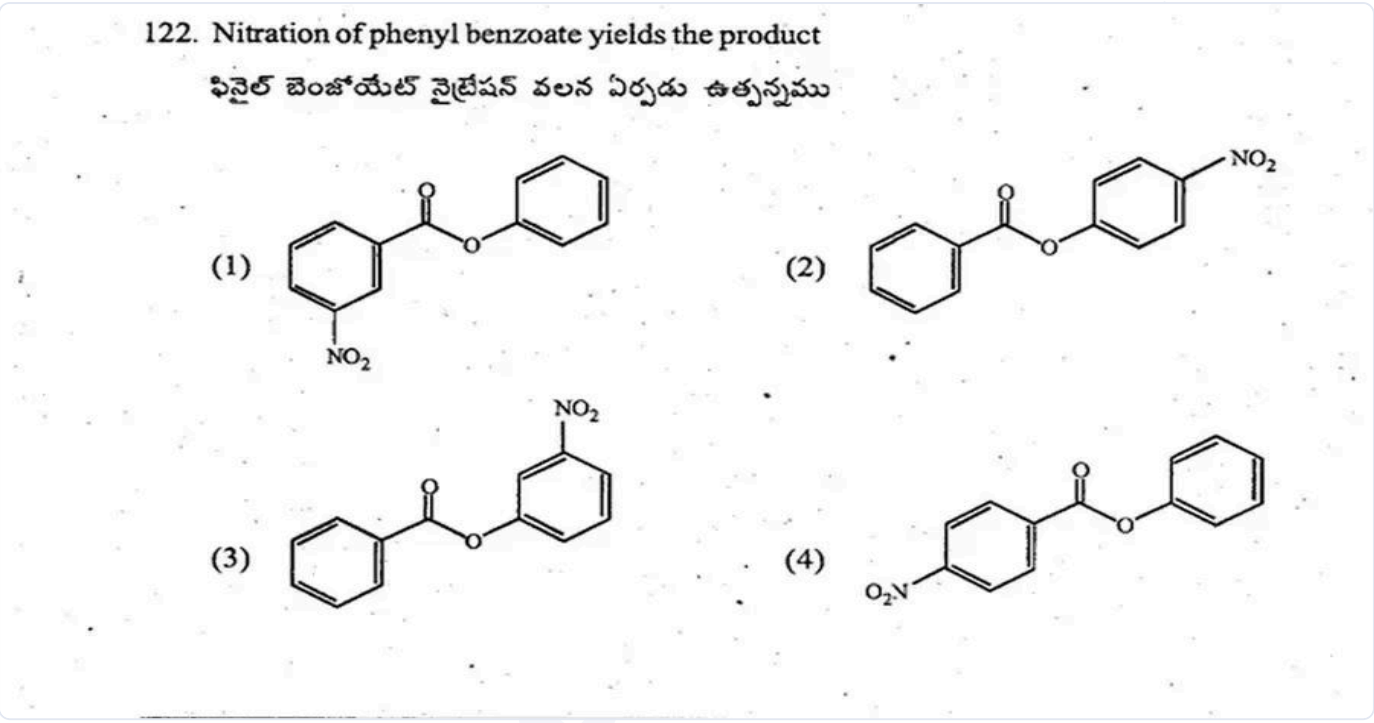
(C) X = $NaOH + CaO/\Delta$, Y = C_2H_6, Z = $CH_3COO^{\ominus}Na^{\oplus}$

(D) X = $(CH_3COO)_2Mn/\Delta$, Y = C_3H_8, Z = $CH_3CH_2COO^{\ominus}Na^{\oplus}$

Answer: (C) X = $NaOH + CaO/\Delta$, Y = C_2H_6, Z = $CH_3COO^{\ominus}Na^{\oplus}$ · The council's preliminary key

Q268 TS EAMCET 2017 · 12 May · Offline MCQ

Nitration of phenyl benzoate yields the product



(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (B) · The council's preliminary key

Q269 TS EAMCET 2017 · 12 May · Offline MCQ

Oxidation of cyclohexene in presence of acidic potassium permanganate leads to

(A) glutaric acid

(B) adipic acid

(C) pimelic acid

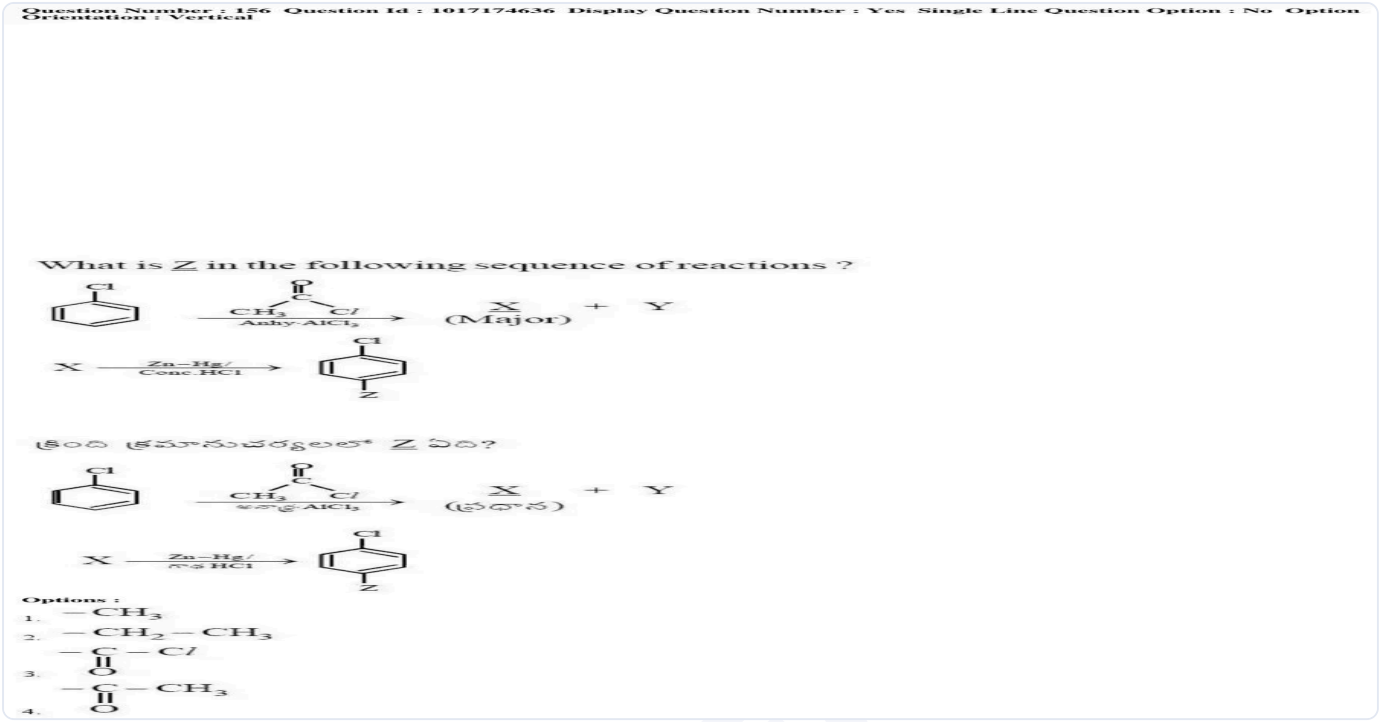
(D) succinic acid

Answer: (B) adipic acid · The council's preliminary key

Q270 AP EAMCET 2017 · 26 Apr · Shift 1 MCQ

What is Z in the following sequence of reactions ?

(see the figure above)



(A) $-CH_3$

(B) $-CH_2-CH_3$

(C) $-C(=O)-Cl$

(D) $-C(=O)-CH_3$

Answer: (B) $-CH_2-CH_3$ · The council's preliminary key

Q271 AP EAMCET 2017 · 26 Apr · Shift 2 MCQ

The trend in acidic behaviour of the following hydrocarbons is

a) $HC\equiv CH$ b) $CH_2=CH_2$ c) CH_3-CH_3 d) $CH_3-C\equiv CH$

(A) c > d > a > b

(B) d > a > b > c

(C) a > d > b > c

(D) b > a > d > c

Answer: (C) a > d > b > c · The council's preliminary key

Q272 AP EAMCET 2017 · 26 Apr · Shift 2 MCQ

Consider the following reaction

(see the figure above)

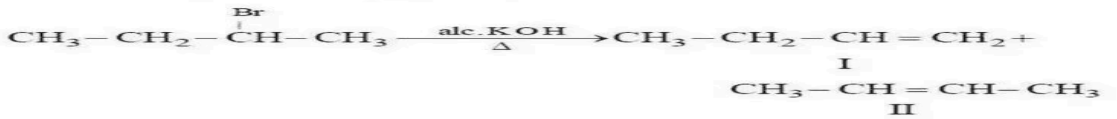
Which of the following statements are correct ?

a. I is the major product of the reaction

b. II is the major product of the reaction
c. Formation of I is in accordance with Saytzeff's rule
d. II is more stable because it is more substituted

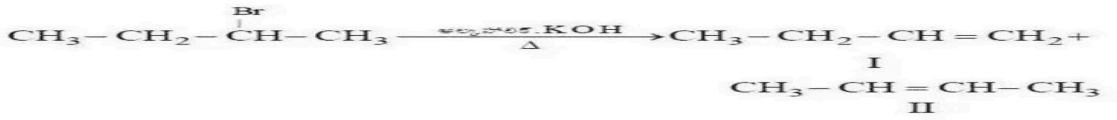
Question Number : 155 Question Id : 1017174795 Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Consider the following reaction



Which of the following statements are correct ?
a. I is the major product of the reaction
b. II is the major product of the reaction
c. Formation of I is in accordance with Saytzeff's rule
d. II is more stable because it is more substituted

క్రింది చర్యను పరిశీలించుము



క్రింది వాటిలో ఏవి సరియైన వివరణలు?
a. చర్యలో I ప్రధాన ఉత్పన్నం
b. చర్యలో II ప్రధాన ఉత్పన్నం
c. I సేటసెఫ్ నియమంననుసరించి ఏర్పడును
d. II అధిక స్థిరమైనది. కారణం అది అధికంగా ప్రతిక్షేపితమైనది

Options :
1. a, c
2. b, c
3. a, d
4. b, d

(A) a, c
(B) b, c
(C) a, d
(D) b, d

Answer: (D) b, d · The council's preliminary key

Q273 AP EAMCET 2017 · 25 Apr · Shift 1 MCQ

Identify 'D' in the following sequence of reactions.

Ethylene $\xrightarrow{Br_2/CCl_4}$ A $\xrightarrow[(ii)\ NaNH_2]{(i)\ Alc.\ KOH}$ B $\xrightarrow[Metal\ tube]{Hot}$ C $\xrightarrow[Conc.\ H_2SO_4,\ 60^\circ C]{Conc.\ HNO_3}$ D

Question Number : 137 Question Id : 1017174297 Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

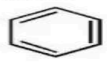
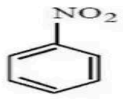
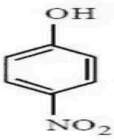
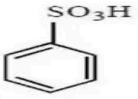
Identify 'D' in the following sequence of reactions.

$$\text{Ethylene} \xrightarrow{Br_2/CCl_4} A \xrightarrow[(ii)\ NaNH_2]{(i)\ Alc.KOH} B \xrightarrow[\text{Metal tube}]{\text{Hot}} C \xrightarrow[Conc.H_2SO_4, 60°C]{Conc.HNO_3} D$$

క్రింది చర్యాక్రమంలో 'D' ను గుర్తించుము.

$$\text{ఇథిలీన్} \xrightarrow{Br_2/CCl_4} A \xrightarrow[(ii)\ NaNH_2]{(i)\ \text{ఆల్కహాలిక్ KOH}} B \xrightarrow[\text{లోహ గొట్టం}]{\text{వేడి}} C \xrightarrow[\text{గాఢ } H_2SO_4, 60°C]{\text{గాఢ } HNO_3} D$$

Options :

1. 
2. 
3. 
4. 

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (B) · The council's preliminary key

Q274 AP EAMCET 2017 · 25 Apr · Shift 1 MCQ

The reaction of anisole with acetyl chloride in the presence of anhydrous $AlCl_3$ gives X and Y. X and Y are

(A) o - Methoxyacetophenone and p - methoxyacetophenone

(B) o - Ethoxyacetophenone and p - ethoxyacetophenone

(C) o - Methoxypropiophenone and p - methoxypropiophenone

(D) o - Ethoxypropiophenone and p - ethoxypropiophenone

Answer: (A) o - Methoxyacetophenone and p - methoxyacetophenone · The council's preliminary key

Q275 AP EAMCET 2017 · 25 Apr · Shift 2 MCQ

Identify the initiation step/s (X) and termination step/s (Y) of free radical chlorination [of] CH_4 from the following:

a) $\dot{C}H_3 + \dot{C}l \rightarrow CH_3 - Cl$

b) $\dot{C}l + \dot{C}l \rightarrow Cl - Cl$

c) $\dot{C}H_3 + Cl_2 \rightarrow CH_3 - Cl + \dot{C}l$

d) $Cl_2 \rightarrow 2\dot{C}l$

e) $CH_4 + \dot{C}l \rightarrow \dot{C}H_3 + HCl$

f) $\dot{C}H_3 + \dot{C}H_3 \rightarrow CH_3 - CH_3$

(A) X: c, d; Y: a, b

(B) X: b, d; Y: a, c, e

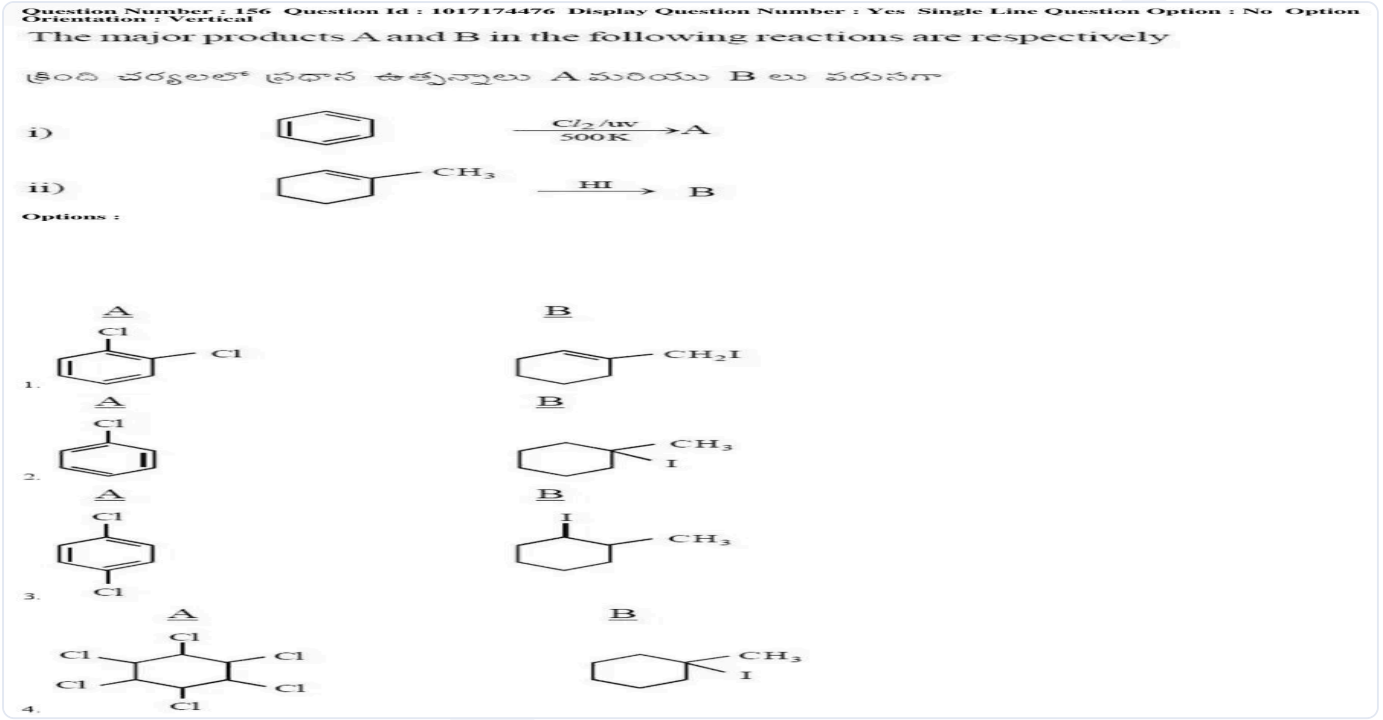
(C) X: d, e; Y: b, c, f

(D) X: d; Y: a, b, f

Answer: (D) X: d; Y: a, b, f · The council's preliminary key

Q276 AP EAMCET 2017 · 25 Apr · Shift 2 MCQ

The major products A and B in the following reactions are respectively
(see the figure above)



(A) A: 1,2-dichlorobenzene (benzene ring with two adjacent Cl); B: methylenecyclohexene-type ring with CH_2I *(see the figure above)*

(B) A: chlorobenzene; B: 1-iodo-1-methylcyclohexane (I and CH_3 on the same ring carbon) *(see the figure above)*

(C) A: 1,4-dichlorobenzene; B: 2-iodo-1-methylcyclohexane (ring with I on one carbon and CH_3 on the adjacent carbon) *(see the figure above)*

(D) A: hexachlorocyclohexane (cyclohexane ring with six Cl); B: 1-iodo-1-methylcyclohexane (I and CH_3 on the same ring carbon) *(see the figure above)*

Answer: (D) A: hexachlorocyclohexane (cyclohexane ring with six Cl); B: 1-iodo-1-methylcyclohexane (I and CH_3 on the same ring carbon) *(see the figure above)* · The council's preliminary key

Q277 AP EAMCET 2017 · 24 Apr · Shift 1 MCQ

Meta directing groups among the following are
(a) $-CN$ (b) $-COR$ (c) $-NHCOR$ (d) $-SO_3H$ (e) $-OCH_3$

(A) a, b, d
(B) b, c, d
(C) a, b, c, d
(D) b, c, d, e

Answer: (A) a, b, d · The council's preliminary key

Q278 AP EAMCET 2017 · 24 Apr · Shift 2 MCQ

From which of the following, the major product is formed, in the addition of HBr to propene in the presence of peroxide?

(A) $CH_3 - CH_2 - \dot{C}H_2$
(B) $CH_3 - \dot{C}H - CH_2Br$
(C) $CH_3 - CH(Br) - \dot{C}H_2$
(D) $CH_3 - \dot{C}H - CH_3$

Answer: (B) $CH_3 - \dot{C}H - CH_2Br$ · The council's preliminary key

Q279 AP EAMCET 2017 · 24 Apr · Shift 2 MCQ

Alkenes react with water in the presence of acid to form alcohols. Identify the steps involved in the mechanism of the reaction from the following :
a) Nucleophilic addition of hydroxide ion to alkene
b) Protonation of alkene by electrophilic attack of H_3O^+
c) Electrophilic attack of H_2O on carbanion
d) Nucleophilic attack of H_2O on carbocation
e) Loss of $^{\ominus}OH$ to form an alcohol
f) Loss of $H^{\oplus}$ to form an alcohol

(A) a, c, e
(B) b, c, e
(C) b, d, f
(D) a, c, f

Answer: (C) b, d, f · The council's preliminary key

Q280 AP EAMCET 2017 · 24 Apr · Shift 2 MCQ

But - 1 - ene reacts with diborane to give 'X'. On oxidation of 'X' with H_2O_2 in the presence of aqueous NaOH forms alcohol 'Y'. What are 'X' and 'Y' ?

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(A) X: $(CH_3CH_2CH)_3B$ with CH_3 on each CH (sec-butyl)$_3$B; Y: $CH_3CH_2CH(OH)-CH_3$

(B) X: $[(CH_3)_2CH-CH_2]_3B$; Y: $(CH_3)_2CH-CH_2OH$

(C) X: $(CH_3CH_2CH_2CH_2)_3B$; Y: $CH_3CH_2CH_2CH_2OH$

(D) X: $(CH_3CH_2CH_2)_3B$; Y: $CH_3CH_2CH_2OH$

Answer: (C) X: $(CH_3CH_2CH_2CH_2)_3B$; Y: $CH_3CH_2CH_2CH_2OH$ · The council's preliminary key

Q281 TS EAMCET 2016 · 15 May · Offline MCQ

The product Z of the following reaction is :

$H_3CC{\equiv}CH \xrightarrow{2HBr} Z$

(A) $H_3CCH_2CHBr_2$

(B) $H_3CCBr_2CH_3$

(C) $H_3CCHBrCH_2Br$

(D) $BrCH_2CH_2CH_2Br$

Answer: (B) $H_3CCBr_2CH_3$ · Official TGCHE final key

Q282 TS EAMCET 2016 · 15 May · Offline MCQ

Identify X and Y in the following reaction sequence

$X \xrightarrow{Zn} Y \xrightarrow[Zn-H_2O]{O_3} (CH_3)_2CO + CH_2O$

(A) X = $(CH_3)_2CHCH_3$ with a vertical bond to Br drawn below the CH carbon (as printed) ; Y = $CH_3CH{=}CHCH_3$

(B) X = $(CH_3)_2CHCH_2Br$; Y = $CH_3CH{=}CHCH_3$

(C) X = $(CH_3)_2CBrCH_2Br$; Y = $(CH_3)_2C{=}CH_2$

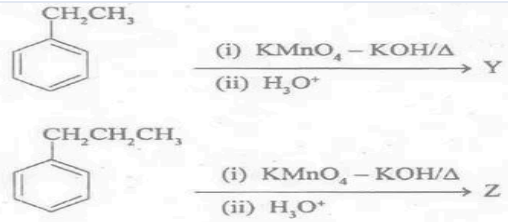
(D) X = $(CH_3)_2CHCHBr_2$; Y = $(CH_3)_2C{=}CH_2$

Answer: (C) X = $(CH_3)_2CBrCH_2Br$; Y = $(CH_3)_2C{=}CH_2$ · Official TGCHE final key

Q283 TS EAMCET 2016 · 15 May · Offline MCQ

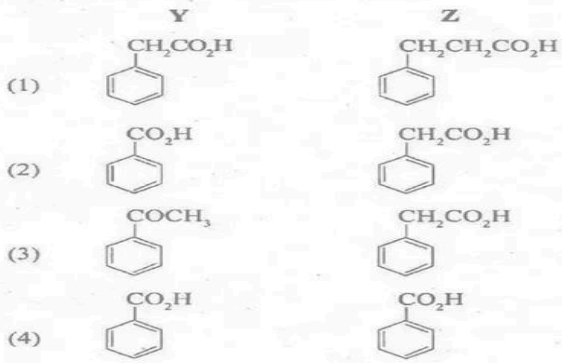
see figure

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159. 

What are the structures of Y and Z ?

Y మరియు Z ల నిర్మాణాలు ఏవి ?



(A) Y = *(see the figure above)* $C_6H_5CH_2CO_2H$; Z = *(see the figure above)* $C_6H_5CH_2CH_2CO_2H$

(B) Y = *(see the figure above)* $C_6H_5CO_2H$; Z = *(see the figure above)* $C_6H_5CH_2CO_2H$

(C) Y = *(see the figure above)* $C_6H_5COCH_3$; Z = *(see the figure above)* $C_6H_5CH_2CO_2H$

(D) Y = *(see the figure above)* $C_6H_5CO_2H$; Z = *(see the figure above)* $C_6H_5CO_2H$

Answer: (D) Y = *(see the figure above)* $C_6H_5CO_2H$; Z = *(see the figure above)* $C_6H_5CO_2H$ · Official TGCHE final key

Q284 AP EAMCET 2014 · 22 May · Offline MCQ

What is Z in the following reaction ?

$$CH_3-CH_2-CO_2^{\ominus}Na^{\oplus} \xrightarrow[\Delta]{NaOH/CaO} Z$$

(A) propane

(B) n-butane

(C) ethane

(D) ethyne

Answer: (C) ethane · The council's preliminary key

Q285 AP EAMCET 2014 · 22 May · Offline MCQ

Which one of the following gives sooty flame on combustion ?

(A) C_2H_4
(B) CH_4
(C) C_2H_6
(D) C_6H_6

Answer: (D) C_6H_6 · The council's preliminary key

Q286 AP EAMCET 2013 · 10 May · Offline MCQ

$C_2H_6 \xrightarrow{450^\circ C} C_2H_4 + H_2$

Above reaction is called as _____.

(A) Combustion
(B) Rearrangement
(C) Pyrolysis
(D) Cleavage

Answer: (C) Pyrolysis · The council's preliminary key

Q287 AP EAMCET 2012 · 12 May · Offline MCQ

The chlorination of ethane is an example for which type of the following reactions ?

(A) Nucleophilic substitution
(B) Electrophilic substitution
(C) Free radical substitution
(D) Rearrangement

Answer: (C) Free radical substitution · Official APSCHE final key

Q288 AP EAMCET 2012 · 12 May · Offline MCQ

Which of the following statements is NOT correct ?

(A) The six carbons in benzene are sp^2 hybridised
(B) Benzene has $(4n + 2)\pi$ electrons
(C) Benzene undergoes substitution reactions
(D) Benzene has two carbon-carbon bond lengths, 1.54 Å and 1.34 Å

Answer: (D) Benzene has two carbon-carbon bond lengths, 1.54 Å and 1.34 Å · Official APSCHE final key

Q289 AP EAMCET 2012 · 12 May · Offline MCQ

With respect to chlorobenzene, which of the following statements is NOT correct ?

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(A) Cl is ortho/para directing
(B) Cl exhibits +M effect
(C) Cl is ring deactivating
(D) Cl is meta directing

Answer: (D) Cl is meta directing · Official APSCHE final key

Q290 AP EAMCET 2011 · 8 May · Offline MCQ

Which one of the following alkenes gives only ethanal on ozonolysis ?

(A) Propene
(B) 2-Butene
(C) 1-Butene
(D) 2-Pentene

Answer: (B) 2-Butene · The council's preliminary key

Q291 AP EAMCET 2011 · 8 May · Offline MCQ

Which one of the following does not give precipitate with ammonical cuprous chloride ?

(A) $H_3C - CH_2 - C \equiv CH$
(B) $H_3C - C \equiv CH$
(C) $HC \equiv CH$
(D) $H_3C - C \equiv C - CH_3$

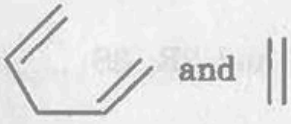
Answer: (D) $H_3C - C \equiv C - CH_3$ · The council's preliminary key

Q292 AP EAMCET 2010 · 30 May · Offline MCQ

Diels-Alder reaction will *not* take place with which of the following reactants ?

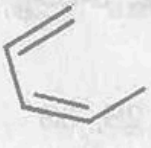
150. Diels-Alder reaction will *not* take place with which of the following reactants ?

ఈ కింది క్రియాజనకాలలో వేటితో డీల్స్-ఆల్డర్ చర్య జరగదు?

(1)  and

(2)  and

(3)  and 

(4)  and 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (A) · Official APSCHE final key

Q293 AP EAMCET 2010 · 30 May · Offline MCQ

In which of the following, ortho/para substitution by an electrophile is very facile ?

(A) Nitrobenzene
(B) Phenol
(C) Benzoic acid
(D) Acetophenone

Answer: (B) Phenol · Official APSCHE final key

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