Chemistry

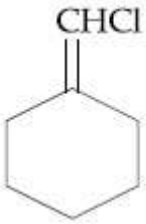
Section Id :	405036434
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	25
Number of Questions to be attempted :	25
Section Marks :	100
Display Number Panel :	Yes
Group All Questions :	Yes
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	405036835
Question Shuffling Allowed :	Yes

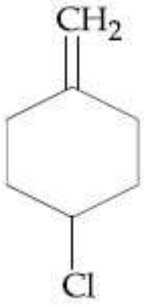
Question Number : 26 Question Id : 40503611856 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

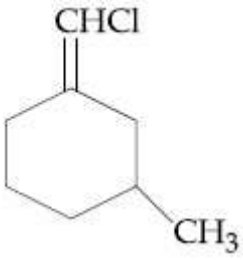
Correct Marks : 4 Wrong Marks : 1

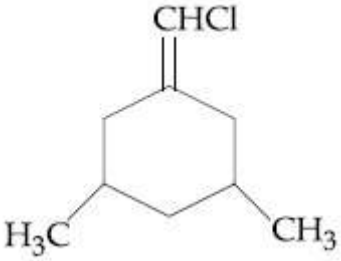
Among the following compounds, geometrical isomerism is exhibited by :

Options :

40503642901. 

40503642902. 

40503642903. 

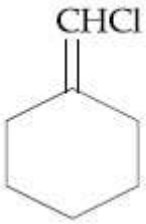
40503642904. 

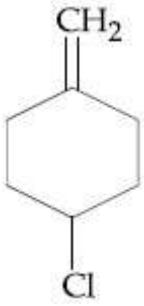
Question Number : 26 Question Id : 40503611856 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

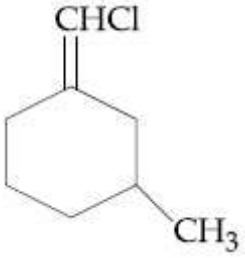
Correct Marks : 4 Wrong Marks : 1

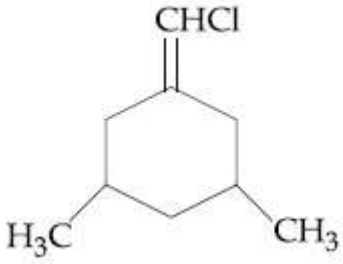
निम्नलिखित यौगिकों में से ज्यामितीय समावयवता प्रदर्शित करने वाला यौगिक है :

Options :

40503642901. 

40503642902. 

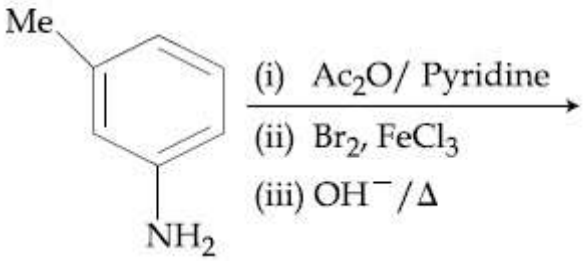
40503642903. 

40503642904. 

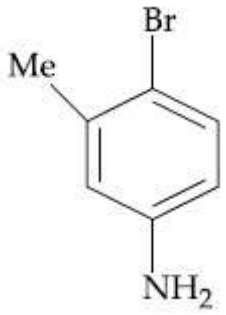
Question Number : 27 Question Id : 40503611857 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

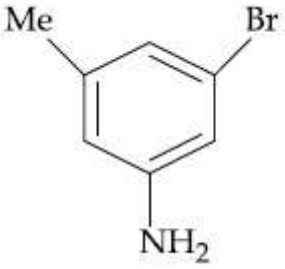
Correct Marks : 4 Wrong Marks : 1

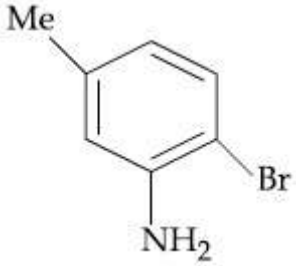
The final major product of the following reaction is :

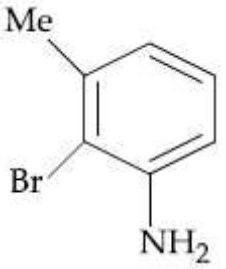


Options :

40503642905. 

40503642906. 

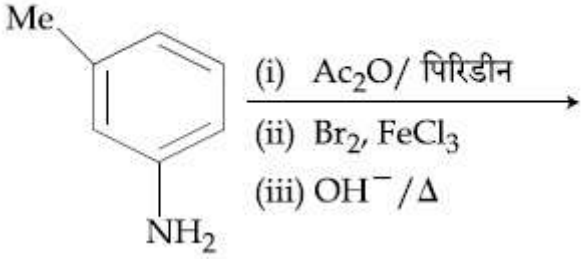
40503642907. 

40503642908. 

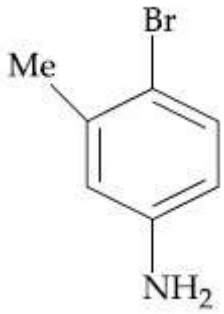
Question Number : 27 Question Id : 40503611857 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

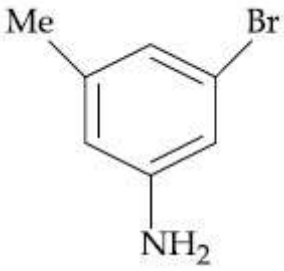
Correct Marks : 4 Wrong Marks : 1

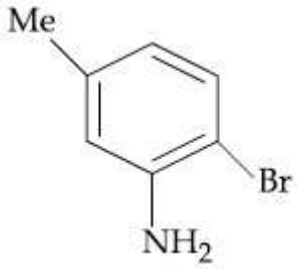
निम्नलिखित अभिक्रिया का अंतिम मुख्य उत्पाद है :

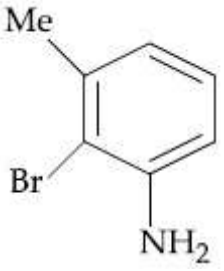


Options :

40503642905. 

40503642906. 

40503642907. 

40503642908. 

Question Number : 28 Question Id : 40503611858 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following polymers is not obtained by condensation polymerisation?

Options :

40503642909. Nylon 6, 6

40503642910. Nylon 6

40503642911. Bakelite

40503642912. Buna - N

Question Number : 28 Question Id : 40503611858 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

निम्नलिखित बहुलकों में से कौन-सा संघनन बहुलकन के द्वारा नहीं प्राप्त होता है?

Options :

40503642909. नाइलॉन 6, 6

40503642910. नाइलॉन 6

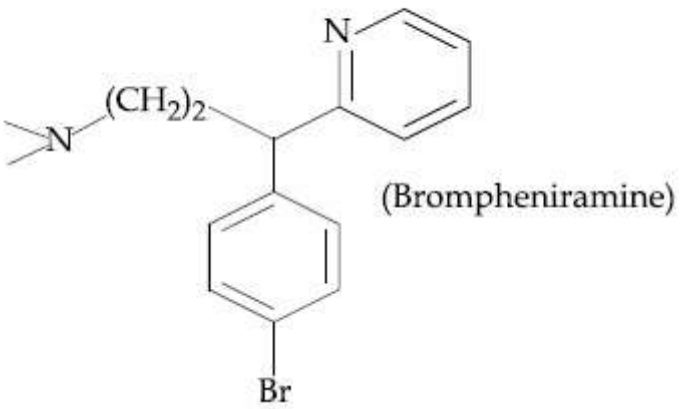
40503642911. बेकेलाइट

40503642912. ब्यूना - N

Question Number : 29 Question Id : 40503611859 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The following molecule acts as an :



(Brompheniramine)

Options :

40503642913. Anti-depressant

40503642914. Anti-bacterial

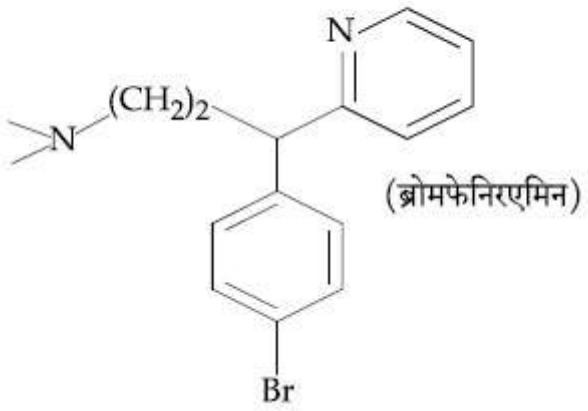
40503642915. Antiseptic

40503642916. Anti-histamine

Question Number : 29 Question Id : 40503611859 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

निम्नलिखित अणु किसकी तरह उपयोग में आता है?



(ब्रोमफेनिरएमिन)

Options :

40503642913. प्रति-अवसादक

40503642914. प्रति-सूक्ष्मजैविक

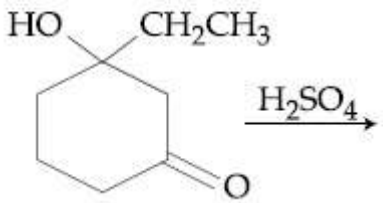
40503642915. प्रतिरोधी

40503642916. प्रति-हिस्टैमिन

Question Number : 30 Question Id : 40503611860 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

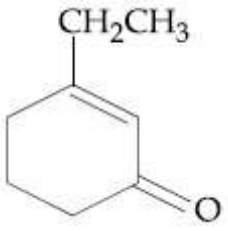
Correct Marks : 4 Wrong Marks : 1

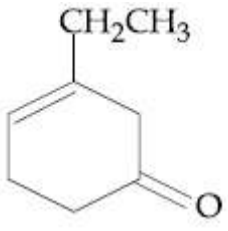
The major product of the following reaction is :

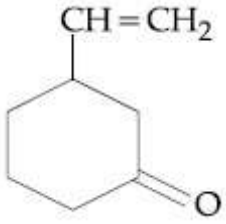


Options :

40503642917. 

40503642918. 

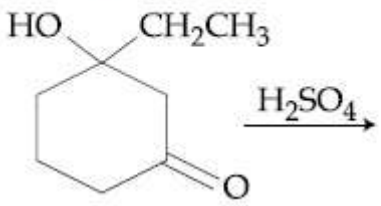
40503642919. 

40503642920. 

Question Number : 30 Question Id : 40503611860 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

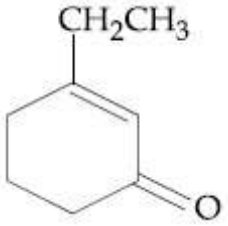
Correct Marks : 4 Wrong Marks : 1

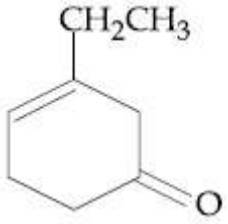
निम्नलिखित अभिक्रिया का मुख्य उत्पाद है :

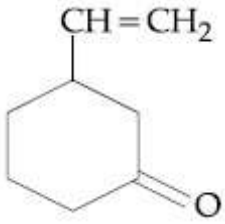


Options :

40503642917. 

40503642918. 

40503642919. 

40503642920. 

Question Number : 31 Question Id : 40503611861 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The major product formed in the following reaction is :

$$CH_3CH=CHCH(CH_3)_2 \xrightarrow{HBr}$$

Options :

40503642921. $CH_3\,CH(Br)\,CH_2\,CH(CH_3)_2$

40503642922. $CH_3\,CH_2\,CH(Br)\,CH(CH_3)_2$

40503642923. $CH_3\,CH_2\,CH_2\,C(Br)\,(CH_3)_2$

40503642924. $Br(CH_2)_3\ CH(CH_3)_2$

Question Number : 31 Question Id : 40503611861 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

निम्नलिखित अभिक्रिया में बनने वाला मुख्य उत्पाद है :

$$CH_3CH=CHCH(CH_3)_2 \xrightarrow{HBr}$$

Options :

40503642921. $CH_3\ CH(Br)\ CH_2\ CH(CH_3)_2$

40503642922. $CH_3\ CH_2\ CH(Br)\ CH(CH_3)_2$

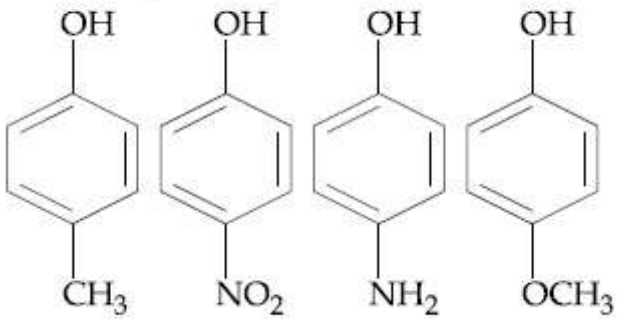
40503642923. $CH_3\ CH_2\ CH_2\ C(Br)\ (CH_3)_2$

40503642924. $Br(CH_2)_3\ CH(CH_3)_2$

Question Number : 32 Question Id : 40503611862 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The increasing order of boiling points of the following compounds is :



Options :

40503642925. IV < I < II < III

40503642926. I < IV < III < II

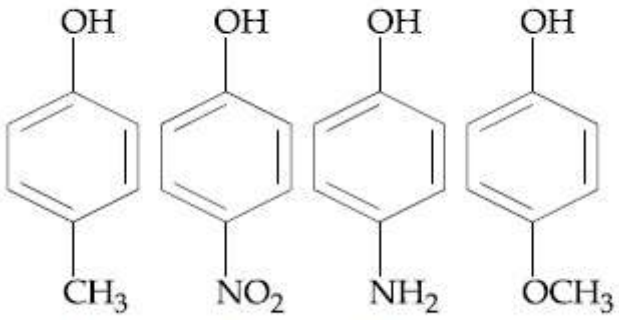
40503642927. $III < I < II < IV$

40503642928. $I < III < IV < II$

Question Number : 32 Question Id : 40503611862 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

निम्नलिखित यौगिकों के क्वथनांकों का बढ़ता क्रम है :



Options :

40503642925. $IV < I < II < III$

40503642926. $I < IV < III < II$

40503642927. $III < I < II < IV$

40503642928. $I < III < IV < II$

Question Number : 33 Question Id : 40503611863 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The correct order of the ionic radii of $O^{2-}, N^{3-}, F^{-}, Mg^{2+}, Na^{+}$ and Al^{3+} is :

Options :

40503642929. $N^{3-} < O^{2-} < F^{-} < Na^{+} < Mg^{2+} < Al^{3+}$

40503642930. $Al^{3+} < Mg^{2+} < Na^{+} < F^{-} < O^{2-} < N^{3-}$

40503642931. $Al^{3+} < Na^{+} < Mg^{2+} < O^{2-} < F^{-} < N^{3-}$

40503642932. $N^{3-} < F^{-} < O^{2-} < Mg^{2+} < Na^{+} < Al^{3+}$

Question Number : 33 Question Id : 40503611863 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

O^{2-}, N^{3-}, F^{-}, Mg^{2+}, Na^{+} तथा Al^{3+} के आयनिक त्रिज्याओं का सही क्रम है :

Options :

40503642929. $N^{3-} < O^{2-} < F^{-} < Na^{+} < Mg^{2+} < Al^{3+}$

40503642930. $Al^{3+} < Mg^{2+} < Na^{+} < F^{-} < O^{2-} < N^{3-}$

40503642931. $Al^{3+} < Na^{+} < Mg^{2+} < O^{2-} < F^{-} < N^{3-}$

40503642932. $N^{3-} < F^{-} < O^{2-} < Mg^{2+} < Na^{+} < Al^{3+}$

Question Number : 34 Question Id : 40503611864 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Boron and silicon of very high purity can be obtained through :

Options :

40503642933. electrolytic refining

40503642934. liquation

40503642935. vapour phase refining

40503642936. zone refining

Question Number : 34 Question Id : 40503611864 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

अति शुद्ध बोरॉन तथा सिलिकन निम्नलिखित में से किसके द्वारा बनाये जा सकते हैं?

Options :

40503642933. वैद्युतअपघटनी परिष्करण

40503642934. गलनिक पृथक्करण

40503642935. वाष्प प्रावस्था परिष्करण

40503642936. मंडल परिष्करण

Question Number : 35 Question Id : 40503611865 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Hydrogen peroxide, in the pure state, is :

Options :

40503642937. linear and almost colorless

40503642938. planar and blue in color

40503642939. non-planar and almost colorless

40503642940. linear and blue in color

Question Number : 35 Question Id : 40503611865 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

हाइड्रोजन परॉक्साइड शुद्ध प्रावस्था में होती है :

Options :

40503642937. रैखिक तथा लगभग रंगहीन

40503642938. समतली तथा नीले रंग की

40503642939. असमतली तथा लगभग रंगहीन

40503642940. रैखिक तथा नीले रंग की

Question Number : 36 Question Id : 40503611866 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The one that is NOT suitable for the removal of permanent hardness of water is :

Options :

40503642941. Ion-exchange method

40503642942. Treatment with sodium carbonate

40503642943. Calgon's method

40503642944. Clark's method

Question Number : 36 Question Id : 40503611866 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

जल के स्थायी कठोरता को दूर करने के लिए निम्नलिखित में से कौन-सी विधि उपयुक्त **नहीं** है?

Options :

40503642941. आयन-विनिमय विधि

40503642942. सोडियम कार्बोनेट के साथ उपचार

40503642943. काल्गॉन विधि

40503642944. क्लार्क विधि

Question Number : 37 Question Id : 40503611867 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Reaction of ammonia with excess Cl_2 gives :

Options :

40503642945. NH_4Cl and N_2

40503642946. NH_4Cl and HCl

40503642947. NCl_3 and HCl

40503642948. NCl_3 and NH_4Cl

Question Number : 37 Question Id : 40503611867 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

अमोनिया, Cl_2 के आधिक्य में, अभिक्रिया देती है :

Options :

40503642945. NH_4Cl तथा N_2

40503642946. NH_4Cl तथा HCl

40503642947. NCl_3 तथा HCl

40503642948. NCl_3 तथा NH_4Cl

Question Number : 38 Question Id : 40503611868 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The compound that has the largest $H-M-H$ bond angle ($M=N, O, S, C$), is :

Options :

40503642949. NH_3

40503642950. H_2O

40503642951. H_2S

40503642952. CH_4

Question Number : 38 Question Id : 40503611868 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

निम्नलिखित में से बृहत्तम $H-M-H$ आबंध कोण ($M=N, O, S, C$) रखने वाला यौगिक है :

Options :

40503642949. NH_3

40503642950. H_2O

40503642951. H_2S

40503642952. CH_4

Question Number : 39 Question Id : 40503611869 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Consider the complex ions,
trans-$[Co(en)_2Cl_2]^+$ (A) and
cis-$[Co(en)_2Cl_2]^+$ (B). The correct statement regarding them is :

Options :

40503642953. both (A) and (B) can be optically active.

40503642954. both (A) and (B) cannot be optically active.

40503642955. (A) can be optically active, but (B) cannot be optically active.

40503642956. (A) cannot be optically active, but (B) can be optically active.

Question Number : 39 Question Id : 40503611869 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

ट्रान्स-$[Co(en)_2Cl_2]^+$ (A) तथा
सिस-$[Co(en)_2Cl_2]^+$ (B) संकुल आयनों पर विचार कीजिए।
इनके संबंध में सही कथन है :

Options :

40503642953. (A) तथा (B) दोनों ध्रुवण घूर्णक हो सकते हैं।

40503642954. (A) तथा (B) दोनों ध्रुवण घूर्णक नहीं हो सकते हैं।

40503642955. (A) ध्रुवण घूर्णक हो सकता है, परन्तु (B) ध्रुवण घूर्णक नहीं हो सकता है।

40503642956. (A) ध्रुवण घूर्णक नहीं हो सकता है, परन्तु (B) ध्रुवण घूर्णक हो सकता है।

Question Number : 40 Question Id : 40503611870 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

An element crystallises in a face-centred cubic (fcc) unit cell with cell edge a. The distance between the centres of two nearest octahedral voids in the crystal lattice is :

Options :

40503642957. $\sqrt{2}a$

40503642958. a

40503642959. $\frac{a}{\sqrt{2}}$

40503642960. $\frac{a}{2}$

Question Number : 40 Question Id : 40503611870 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

एक तत्व फलक-केन्द्रित घनीय (fcc) एकक सेल में क्रिस्टलित होता है जिसका सेल कोर a है। क्रिस्टल जालक में दो सबसे समीपी अष्टफलकीय रिक्तियों के केन्द्रों के बीच की दूरी है :

Options :

40503642957. $\sqrt{2}a$

40503642958. a

40503642959. $\frac{a}{\sqrt{2}}$

40503642960. $\frac{a}{2}$

Question Number : 41 Question Id : 40503611871 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The correct statement about probability density (except at infinite distance from nucleus) is :

Options :

40503642961. It can never be zero for 2s orbital

40503642962. It can be zero for 1s orbital

40503642963. It can be negative for 2p orbital

40503642964. It can be zero for 3p orbital

Question Number : 41 Question Id : 40503611871 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

प्रायिकता घनत्व के सम्बन्ध में सही कथन (नाभिक से अनन्त दूरी पर होने के अतिरिक्त) है :

Options :

40503642961. यह 2s कक्षक के लिए कभी शून्य नहीं हो सकता ।

40503642962. यह 1s कक्षक के लिए शून्य हो सकता है।

40503642963. यह 2p कक्षक के लिए ऋणात्मक हो सकता है।

40503642964. यह 3p कक्षक के लिए शून्य हो सकता है ।

Question Number : 42 Question Id : 40503611872 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Lattice enthalpy and enthalpy of solution of NaCl are 788 kJ mol^{-1} and 4 kJ mol^{-1}, respectively. The hydration enthalpy of NaCl is :

Options :

40503642965. $780\ kJ\ mol^{-1}$

40503642966. $784\ kJ\ mol^{-1}$

40503642967. $-780\ kJ\ mol^{-1}$

40503642968. $-784\ kJ\ mol^{-1}$

Question Number : 42 Question Id : 40503611872 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

NaCl की जालक एंथैल्पी तथा विलयन एंथैल्पी क्रमश: 788 kJ mol^{-1} तथा 4 kJ mol^{-1} हैं। NaCl की जल योजन एंथैल्पी है :

Options :

40503642965. $780\ kJ\ mol^{-1}$

40503642966. $784\ kJ\ mol^{-1}$

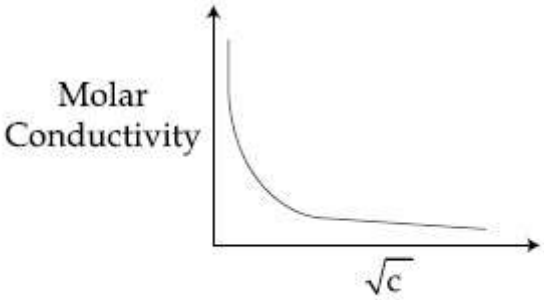
40503642967. $-780\ kJ\ mol^{-1}$

40503642968. $-784\ kJ\ mol^{-1}$

Question Number : 43 Question Id : 40503611873 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The variation of molar conductivity with concentration of an electrolyte (X) in aqueous solution is shown in the given figure.



The electrolyte X is :

Options :

40503642969. HCl

40503642970. $NaCl$

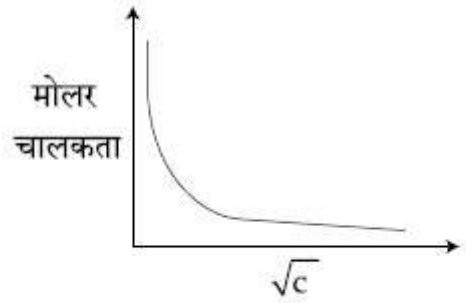
40503642971. KNO_3

40503642972. CH_3COOH

Question Number : 43 Question Id : 40503611873 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

जलीय विलयन में, एक वैद्युत अपघट्य (X) की सान्द्रता के सापेक्ष मोलर चालकता के विचलन को निम्नलिखित चित्र के द्वारा निरूपित किया जाता है।



वैद्युत अपघट्य X है :

Options :

40503642969. HCl

40503642970. $NaCl$

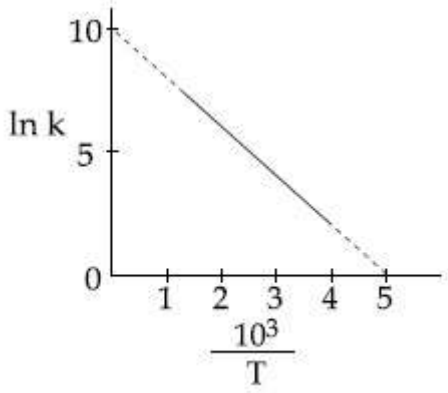
40503642971. KNO_3

40503642972. CH_3COOH

Question Number : 44 Question Id : 40503611874 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The rate constant (k) of a reaction is measured at different temperatures (T), and the data are plotted in the given figure. The activation energy of the reaction in kJ mol^{-1} is : (R is gas constant)



Options :

40503642973. R

40503642974. $1/R$

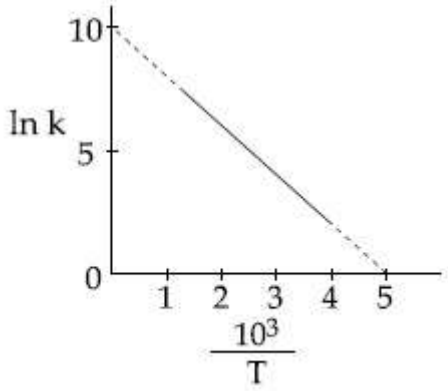
40503642975. $2/R$

40503642976. $2R$

Question Number : 44 Question Id : 40503611874 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

एक अभिक्रिया के वेग स्थिरांक (k) को विभिन्न तापों (T) पर मापा जाता है तथा आकड़ों को नीचे दिये गये चित्र में प्लाट किया जाता है। अभिक्रिया की सक्रियण ऊर्जा kJ mol^{-1} में है : (R गैस स्थिरांक है)



Options :

40503642973. R

40503642974. 1/R

40503642975. 2/R

40503642976. 2R

Question Number : 45 Question Id : 40503611875 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

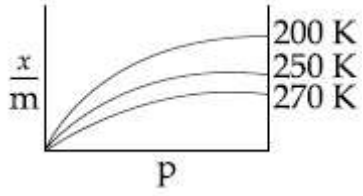
Correct Marks : 4 Wrong Marks : 1

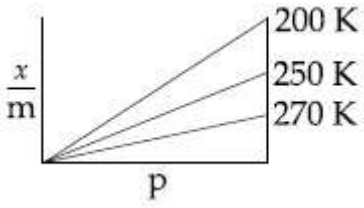
Adsorption of a gas follows Freundlich adsorption isotherm. If x is the mass of the gas adsorbed on mass m of the adsorbent,

the correct plot of $\frac{x}{m}$ versus p is :

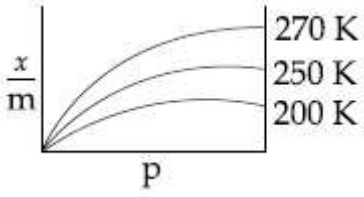
Options :

40503642977.

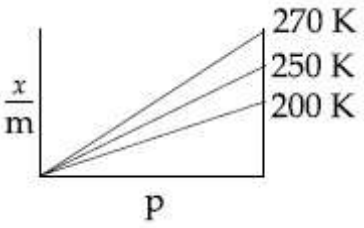




40503642978.



40503642979.



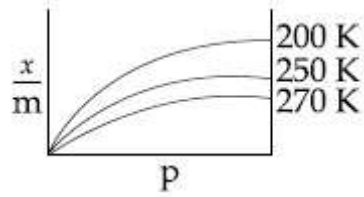
40503642980.

Question Number : 45 Question Id : 40503611875 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

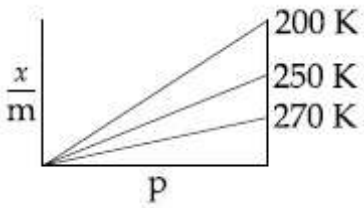
Correct Marks : 4 Wrong Marks : 1

एक गैस का अधिशोषण फ्रायन्डलिक अधिशोषण समतापी वक्र का अनुसरण करता है। यदि अधिशोषक के संहति m पर अधिशोषित गैस की संहति x है तो p के सापेक्ष $\frac{x}{m}$ का सही प्लाट है :

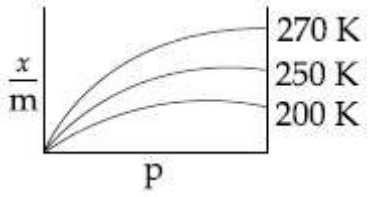
Options :



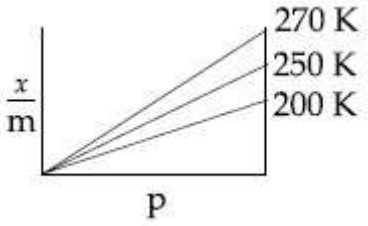
40503642977.



40503642978.



40503642979.



40503642980.

Sub-Section Number : 2
Sub-Section Id : 405036836
Question Shuffling Allowed : Yes

Question Number : 46 Question Id : 40503611876 Question Type : SA Display Question Number : Yes Correct Marks : 4 Wrong Marks : 0

Considering that $\Delta_0 > P$, the magnetic moment (in BM) of $[Ru(H_2O)_6]^{2+}$ would be _____ .

Response Type : Numeric
Evaluation Required For SA : Yes
Show Word Count : Yes
Answers Type : Range
Text Areas : PlainText
Possible Answers :
5 to 5.002

Question Number : 46 Question Id : 40503611876 Question Type : SA Display Question Number : Yes Correct Marks : 4 Wrong Marks : 0

$\Delta_0 > P$ पर विचार करते हुए, $[Ru(H_2O)_6]^{2+}$ का चुंबकीय आघूर्ण (BM में) होगा _____ ।

Response Type : Numeric
Evaluation Required For SA : Yes
Show Word Count : Yes
Answers Type : Range
Text Areas : PlainText
Possible Answers :
5 to 5.002

Question Number : 47 Question Id : 40503611877 Question Type : SA Display Question Number : Yes Correct Marks : 4 Wrong Marks : 0

The volume, in mL, of 0.02 M $K_2Cr_2O_7$ solution required to react with 0.288 g of ferrous oxalate in acidic medium is _____.
(Molar mass of Fe = 56 g mol^{-1})

Response Type : Numeric
Evaluation Required For SA : Yes
Show Word Count : Yes
Answers Type : Range
Text Areas : PlainText
Possible Answers :
5 to 5.002

Question Number : 47 Question Id : 40503611877 Question Type : SA Display Question Number : Yes Correct Marks : 4 Wrong Marks : 0

0.288 g फेरस ऑक्सैलेट के, अम्लीय माध्यम में, अभिक्रिया हेतु 0.02 M $K_2Cr_2O_7$ के जिस आयतन (mL में) की आवश्यकता होगी, वह है _____।
(Fe का मोलर द्रव्यमान = 56 g mol^{-1})

Response Type : Numeric
Evaluation Required For SA : Yes
Show Word Count : Yes
Answers Type : Range
Text Areas : PlainText
Possible Answers :
5 to 5.002

Question Number : 48 Question Id : 40503611878 Question Type : SA Display Question Number : Yes Correct Marks : 4 Wrong Marks : 0

For a dimerization reaction,

$2\,A(g) \rightarrow A_2(g)$,

at 298 K, $\Delta U^{\ominus} = -20$ kJ mol^{-1}, $\Delta S^{\ominus} = -30$ J K^{-1} mol^{-1}, then the $\Delta G^{\ominus}$ will be _____ J.

Response Type : Numeric
Evaluation Required For SA : Yes
Show Word Count : Yes
Answers Type : Range

Text Areas : PlainText
Possible Answers :
5 to 5.002

Question Number : 48 Question Id : 40503611878 Question Type : SA Display Question Number : Yes Correct Marks : 4 Wrong Marks : 0

एक द्वितयन अभिक्रिया,

$2\,A(g) \rightarrow A_2(g)$,

के लिए, 298 K पर, $\Delta U^{\ominus} = -20\ kJ\ mol^{-1}$,

$\Delta S^{\ominus} = -30\ J\ K^{-1}\ mol^{-1}$ हैं। तब अभिक्रिया के लिए $\Delta G^{\ominus}$ होगा _____ J।

Response Type : Numeric
Evaluation Required For SA : Yes
Show Word Count : Yes
Answers Type : Range
Text Areas : PlainText
Possible Answers :
5 to 5.002

Question Number : 49 Question Id : 40503611879 Question Type : SA Display Question Number : Yes Correct Marks : 4 Wrong Marks : 0

For a reaction $X+Y \rightleftharpoons 2Z$, 1.0 mol of X, 1.5 mol of Y and 0.5 mol of Z were taken in a 1 L vessel and allowed to react. At equilibrium, the concentration of Z was 1.0 mol L^{-1}. The equilibrium constant of the reaction is _____ $\frac{x}{15}$. The value of x is _____ .

Response Type : Numeric
Evaluation Required For SA : Yes
Show Word Count : Yes
Answers Type : Range
Text Areas : PlainText
Possible Answers :
5 to 5.002

Question Number : 49 Question Id : 40503611879 Question Type : SA Display Question Number : Yes Correct Marks : 4 Wrong Marks : 0

अभिक्रिया, $X+Y \rightleftharpoons 2Z$ के लिए, X का 1.0 मोल, Y का 1.5 मोल तथा Z के 0.5 मोल को 1 L पात्र में लिया जाता है तथा उन्हें अभिक्रिया करने दिया जाता है। साम्य पर, Z की सान्द्रता 1.0 मोल प्रतिलीटर है। अभिक्रिया का साम्य स्थिरांक है _____

$\frac{x}{15}$। x का मान है _____।

Response Type : Numeric
Evaluation Required For SA : Yes
Show Word Count : Yes
Answers Type : Range
Text Areas : PlainText
Possible Answers :
5 to 5.002

Question Number : 50 Question Id : 40503611880 Question Type : SA Display Question Number : Yes Correct Marks : 4 Wrong Marks : 0

The number of chiral carbons present in sucrose is _____ .

Response Type : Numeric
Evaluation Required For SA : Yes
Show Word Count : Yes
Answers Type : Range
Text Areas : PlainText
Possible Answers :
5 to 5.002

Question Number : 50 Question Id : 40503611880 Question Type : SA Display Question Number : Yes Correct Marks : 4 Wrong Marks : 0

सुक्रोस में काइरल कार्बनों की संख्या है _____।

Response Type : Numeric
Evaluation Required For SA : Yes
Show Word Count : Yes
Answers Type : Range
Text Areas : PlainText
Possible Answers :
5 to 5.002