



CHEMISTRY

BOOKS - NTA MOCK TESTS

NTA NEET TEST 111

Chemistry

1. What is the position of the element $Z = 20$ in the modern periodic table?

A. 4th period

B. 3rd period

C. 2nd period

D. 1st period

Answer: A



Watch Video Solution

2. The correct order of ionization energy in the following second-period elements is:

A. B It Be It C It N It O

B. B It Be It N It C It O

C. Be It B It C It N gt O

D. B It Be It C It O It N

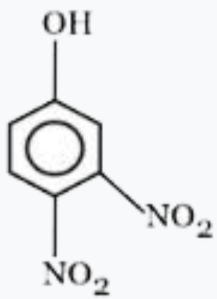
Answer: D



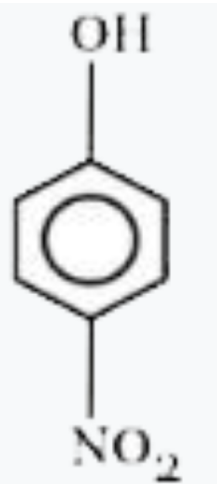
Watch Video Solution

3. Most acidic hydrogen containing compound among the following is

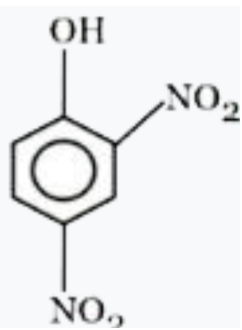
A.

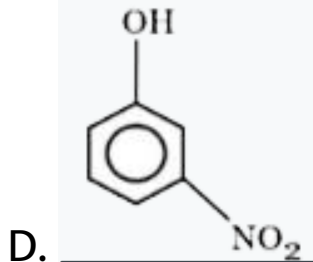


B.



C.





Answer: C

 [Watch Video Solution](#)

4. During the test of halogens by silver nitrate test, the sodium extract is first boiled with a few drops of conc. HNO_3 to

A. Decompose sodium halides present

B. Help in the precipitation of $AgCl$

C. Increase the concentration of NO_3^- ions

D. Decompose Na_2S and $NaCN$ if formed

Answer: D



Watch Video Solution

5. Which of the following is definitely true, if for a reaction activation energies of forward and backward reactions are equal?

A. $\Delta H = 0$

B. $\Delta G = 0$

C. There is no catalyst

D. The order is zero

Answer: A



Watch Video Solution

6. For three reactions of first, second and third-order, the numerical value of the rate constant is the same. Which of the following is

correct?

Given , $[A]$ = the concentration of the reactant
& r_1 , r_2 and r_3 are the rates of first, second
and third-order reaction respectively

A. If $[A] = 1$, then $r_1 = r_2 = r_3$

B. If $[A] < 1$, then , $r_1 > r_2 > r_3$

C. If $[A] > 1$, then $r_3 > r_2 > r_1$

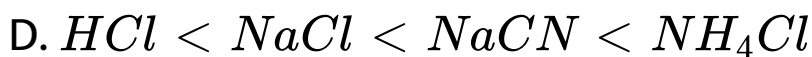
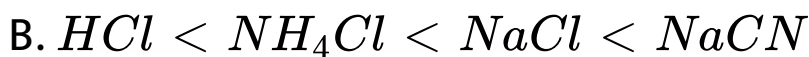
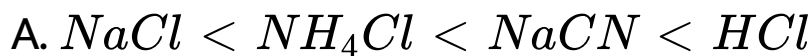
D. All of the above

Answer: D



Watch Video Solution

7. The correct increasing order of pH of 0.1 M solution of the following salts/acids is:



Answer: B



Watch Video Solution

8. Determine the solubility of $Cr(OH)_3$ in $molL^{-1}$, if its K_{sp} is $2.7 \times 10^{-31} M^4$.

A. 1×10^{-8}

B. 8×10^{-8}

C. 1.1×10^{-8}

D. 0.18×10^{-8}

Answer: A



Watch Video Solution

9. If 965 coulombs of electricity is passed through a metal cup dipped in silver(I) salt solution, in order to plate it with silver. Then the amount of silver deposited on its surface is (Given : the molar mass of $Ag = 108 \text{ gmol}^{-1}$, $1F = 96500$ coulombs)

A. $1.08g$

B. $1.002g$

C. $108g$

D. $9.89g$

Answer: A



Watch Video Solution

10. The standard electrode potentials $\left(E_{M^+/M}^\circ\right)$ of four metals A, B, C and D are $-1.2V$, $0.6V$, $0.85V$ and $-0.76V$, respectively. The sequence of deposition of metals on applying potential is

A. B gt D gt C gt A

B. A gt C gt B gt D

C. C gt B gt D gt A

D. D gt A gt B gt C

Answer: C



Watch Video Solution

11. What is the molar conductance (in $S\text{cm}^2\text{mol}^{-1}$) of 1M solution of acetic acid, if the resistance of that solution is 250 ohm and cell constant is equal to 1.15cm^{-1} ?

A. 18.4

B. 9.2

C. 4.6

D. 2.3

Answer: C



Watch Video Solution

12. Find the natural polymer among the following

A. Nylon

B. Teflon

C. PVC

D. Cellulose

Answer: D



Watch Video Solution

13. What does cellulose give on complete hydrolysis?

A. D - ribose

B. D - glucose

C. L - glucose

D. D - fructose

Answer: B



Watch Video Solution

14. Find the enthalpy of dissociation of $H_2C_2O_4$ from the given data: Enthalpy of neutralisation of strong acid and strong base

is -13.7kcalmol^{-1} and that of oxalic acid by a strong base is -25kcalmol^{-1}

A. -11.3kcalmol^{-1}

B. 2.4kcalmol^{-1}

C. 1.2kcalmol^{-1}

D. 11.7kcalmol^{-1}

Answer: B



Watch Video Solution

15. In which of the following conditions, a reaction will definitely be spontaneous:

- A. Exothermic and increasing disorder
- B. Exothermic and decreasing disorder
- C. Endothermic and increasing disorder
- D. Endothermic and decreasing disorder

Answer: A



Watch Video Solution

16. The number of isomers of C_6H_{14} is

A. 4

B. 5

C. 6

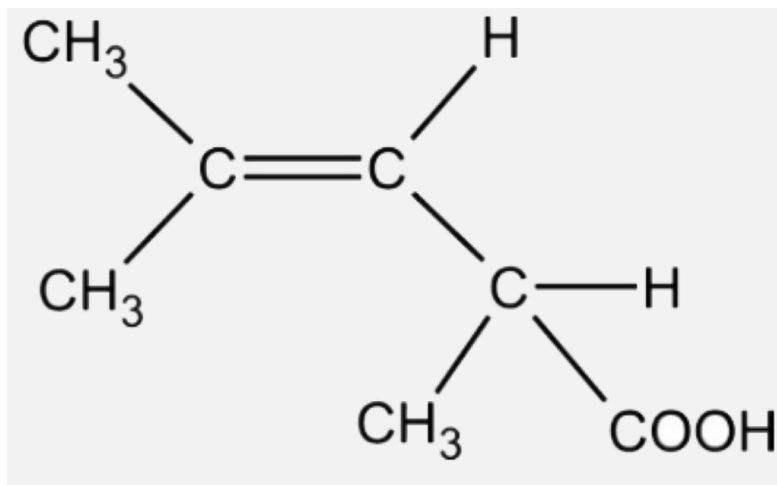
D. 3

Answer: B



Watch Video Solution

17. Among the given options, this compound will exhibit:



- A. Geometrical isomerism
- B. Optical isomerism
- C. Geometrical and optical isomerism
- D. Tautomerism

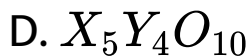
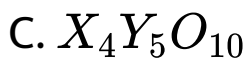
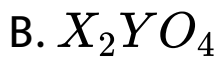
Answer: B



Watch Video Solution

18. The empirical formula of a mixed oxide. In which the oxide ions are present in the CCP lattice positions, half of the octahedral voids are occupied by trivalent ions Y^{3+} and one-fifth of tetrahedral voids are occupied by divalent X^{2+} ions, will be



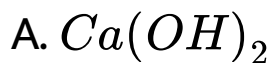


Answer: C



Watch Video Solution

19. The suspension milk of lime is composed of:



B. CaO

C. $CaCl_2$

D. $CaSO_4$

Answer: A



Watch Video Solution

20. A metal M readily forms water soluble sulphate, and water insoluble hydroxide $M(OH)_2$. Its oxide MO is amphoteric, hard

and having high melting point. The alkaline earth metal M must be :

A. *Be*

B. *Mg*

C. *Ca*

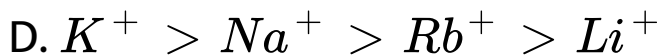
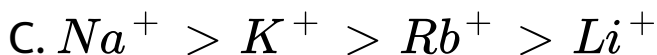
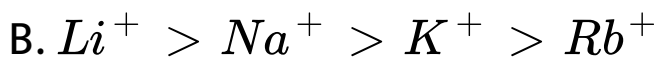
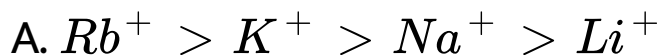
D. *Sr*

Answer: A



Watch Video Solution

21. The correct order of mobility of alkali metal ions in aqueous solution is



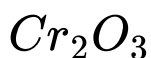
Answer: A



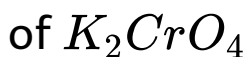
Watch Video Solution

22. In an acidified solution of $K_2Cr_2O_7$, H_2O_2 is added. Then

A. solution turns green due to formation of



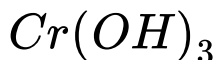
B. solution turns yellow due to formation



C. a blue coloured compound $CrO(O_2)_2$ is

formed

D. solution gives green precipitate of



Answer: C



Watch Video Solution

23. What is the use of Clark's method?

- A. Remove temporary hardness of water by adding quick lime or slaked lime
- B. Remove permanent hardness by adding washing soda

C. Remove permanent hardness by adding permunit.

D. Remove temporary hardness by boiling

Answer: A



Watch Video Solution

24. Which of the following process is used based on the ability of metal being converted into into volatile compound ?

- A. Hydraulic washing
- B. Forth flotation
- C. Vapour phase refining
- D. Electrolytic refining

Answer: C



Watch Video Solution

25. What will be the geometry of $XeOF_4$ according to VSEPR theory ?

A. Trigonal bidpyramidal

B. Square pyramidal

C. Pentagonal planar

D. Square planer

Answer: B



Watch Video Solution

26. Assuming $2s - 2p$ mixing is NOT operative ,
the paramagnetic among the following is

A. Be_2

B. B_2

C. C_2

D. N_2

Answer: C



Watch Video Solution

27. The vapour pressure of water at 20° is 17.5mmHg . If 18g of glucose ($C_6H_{12}O_6$) is

added to 178.2g of water at 20°C , the vapour pressure of the resulting solution will be

A. 17.675mm of Hg

B. 15.750mm of Hg

C. 16.500mm of Hg

D. 17.325mm of Hg

Answer: D



Watch Video Solution

28. What is the possible product of the reaction in which 1 mole of HNO_3 is reduced by absorption of 4 moles electrons?

A. 0.5mole of N_2

B. 0.5mole of N_2O

C. 1 mole of NO_3

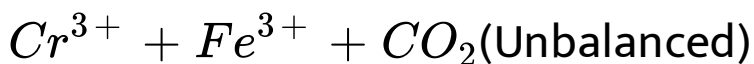
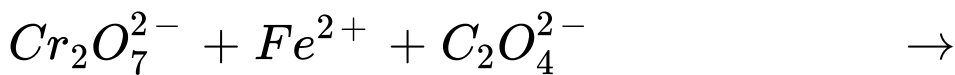
D. 1 mole of NH_3

Answer: B



Watch Video Solution

29. The number of electrons donated from substance(s) getting oxidized to the substance(s) getting reduced in the chemical equation for the following reaction is:



A. 6

B. 5

C. 3

D. 4

Answer: A



Watch Video Solution

30. The maximum number of moles of $Ba_3(PO_4)_2$ that can be formed if 2 mole $BaCl_2$ is mixed with 1 mole Na_3PO_4 is

A. 0.66

B. 0.25

C. 0.33

D. 0.5

Answer: D



Watch Video Solution

31. Give the number of characteristic bond(s) found in the various oxy-acids of phosphorous as given below.

(a) Number of $P - O - P$ bond(s) in tricyclometaphosphoric acid.

(b) Number of $P - P$ bond(s) in hypophosphoric acid

(c) Number of $P - OH$ bond(s) in

pyrophosphoric acid.

(d) Number of $P - H$ bond(s) in hypophosphorous acid.

A. Two

B. Three

C. Four

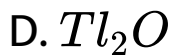
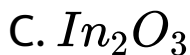
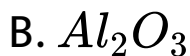
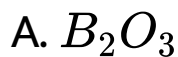
D. One

Answer: C



Watch Video Solution

32. Which of the following oxides is most alkaline in nature?



Answer: D



Watch Video Solution

33. There are two different percentage solutions of phenol which are 0.2% and 1%. They will act as _____ and _____ respectively.

A. antiseptic, disinfectant

B. disinfectant, antiseptic

C. analgesic

D. antipyretic

Answer: A



Watch Video Solution

34. Biodegradable detergents contains:

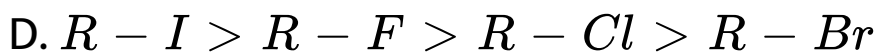
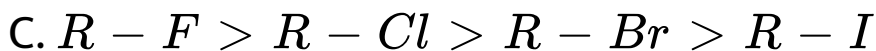
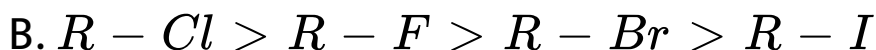
- A. n-alkyl chain
- B. polyester group
- C. phenyl side chain
- D. cyclohexyl side chain

Answer: A



Watch Video Solution

35. From which of the following sequences does the reactivity of alkyl halides in the nucleophilic substitution reaction follows :



Answer: A



Watch Video Solution

36. The correct order of decreasing second ionisation enthalpy of $Ti(22)$, $V(23)$, $Cr(24)$ and $Mn(25)$ is

A. (i)

B. (ii)

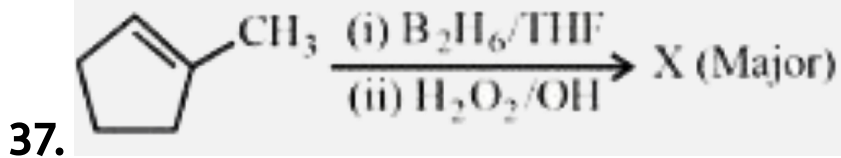
C. (iii)

D. (iv)

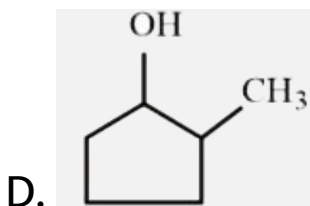
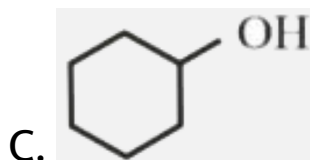
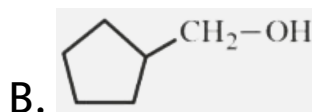
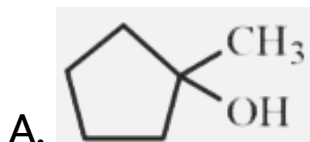
Answer: B



Watch Video Solution



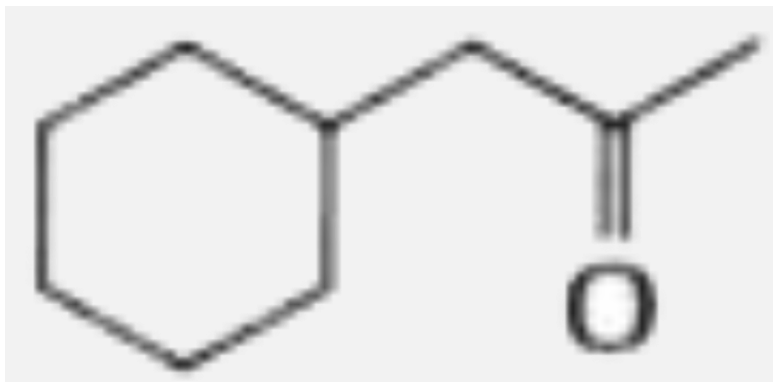
Identify X :



Answer: D



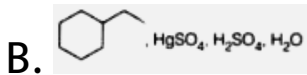
Watch Video Solution



38.

On the reaction of an alkyne with a reagent, the above given compound is formed. Which is the correct pair of an alkyne and a reagent from the following?





Answer: A

 **Watch Video Solution**

39. Reaction of a carbonyl compound with dilute *NaOH* gives 4-methylpent-3-en-2-one.

The carbonyl compound is:

A. Acetaldehyde

B. Acetone

C. Formaldehyde

D. Propanal

Answer: B



Watch Video Solution

40.



Identify X and Y in the above reaction?

A. $X: C_6H_5OH, Y: CH_3CH_3$

B. $X: C_2H_5I, Y: C_6H_5CHO$

C. $X: C_6H_5I, Y: CH_3CH_2OH$

D. $X: C_6H_5OH, Y: CH_3CH_2I$

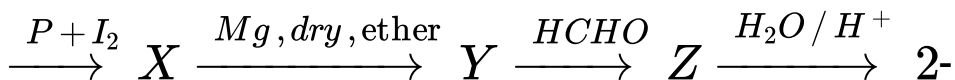
Answer: D



Watch Video Solution

41.

Alcohol



methylpropanol

In this sequence of reaction, the starting alcohol is

A. ethanol

B. propan-2-ol

C. propanol

D. butan-2-ol

Answer: B



Watch Video Solution

42. An electron in C^{5+} ion during the transition from $n = 3$ to $n = 1$ emits light of wavelength

A. $2.85nm$

B. $3.6nm$

C. $8.7nm$

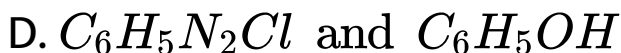
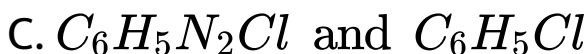
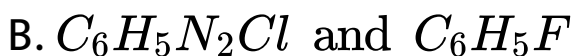
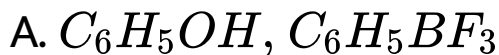
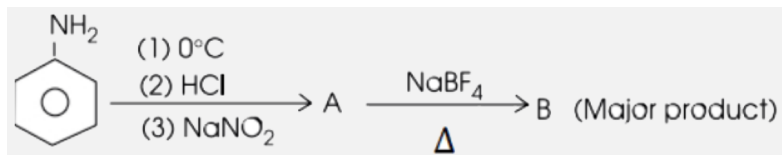
D. $9.8nm$

Answer: A



Watch Video Solution

43. Determine A and B from the following road map reaction :



Answer: B



Watch Video Solution

44. Ammonia is more easy to liquefy than oxygen, then which of the following is true about oxygen as the reason for this fact?

A. It has high critical temperature.

B. It has low critical temperature

C. It has high bond dissociation

D. Its electronegativity is high

Answer: B



Watch Video Solution

45. Which one of the following is incorrect for chemisorption?

- A. Heat of adsorption is negative
- B. It takes place at high temperature
- C. It is reversible
- D. It is highly specific in nature

Answer: C



Watch Video Solution

