



# JEE (Main)

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

# 2021

## COMPUTER BASED TEST (CBT)

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

**Date: 22 July, 2021 (SHIFT-2) | TIME : (3.00 p.m. to 6.00 p.m)**

**Duration: 3 Hours | Max. Marks: 300**

**SUBJECT: CHEMISTRY**

### Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No. : +91-022-39167222

To Know more : sms RESO at 56677 | Website : [www.resonance.ac.in](http://www.resonance.ac.in) | E-mail : [contact@resonance.ac.in](mailto:contact@resonance.ac.in) | CIN : U80302RJ2007PLC024029

Toll Free : 1800 258 5555 | 7340010333 | [facebook.com/ResonanceEdu](https://www.facebook.com/ResonanceEdu) | [twitter.com/ResonanceEdu](https://twitter.com/ResonanceEdu) | [www.youtube.com/resawitch](https://www.youtube.com/resawitch) | [blog.resonance.ac.in](http://blog.resonance.ac.in)

This solution was download from Resonance JEE [MAIN] 2021 Solution portal

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

**5 AIRs in TOP-50 in JEE (Adv.) 2020 from Classroom**

|   |   |   |  |   |
|---|---|---|--|---|
|  |  |  |  |  |
| AIR-2<br>(GEN-EWS)  | Zonal Topper<br>IIT-Kharagpur   | 2nd Rank in<br>IIT-Kharagpur Zone   |  |   |
| <b>AIR-15</b>   | <b>AIR-25</b>   | <b>AIR-29</b>   | <b>AIR-30</b>  | <b>AIR-41</b>   |
| DHANAJAY  | SAMARTH   | SANKALP   | AARYAN K.  | UTKARSH P.  |

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

|   |   |                                 |
|---|---|---------------------------------|
| Total Selections in JEE (Advanced) 2020 | Eligible for JEE (Advanced) Through JEE (Main) 2020 | NEET 2020                       |
| <b>4505</b>                             | <b>14755</b>  | <b>2646</b>                     |
| Classroom: 3441   Distance: 1064        | Classroom: 11047   Distance: 3708                   | Classroom: 1633   Distance: 813 |

**ADMISSION OPEN for Session 2021-22**

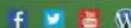
ONLINE + OFFLINE PROGRAMS

**CLASS 11, 12 & 12+**

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

**Scholarship Upto 90%\***

Toll Free: 1800 258 5555 | Visit us: [www.resonance.ac.in](http://www.resonance.ac.in)



**Resonance®** | JEE MAIN-2021 | DATE: 22-07-2021 (SHIFT-2) | PAPER-1 | MEMORY BASED | CHEMISTRY

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

1. Find total number of electrons in p-orbitals of vanadium (Z = 23)

Ans. (12)

Sol.  ${}_{23}\text{V} = 1s^2 2s^2 2p^6 3s^2 3p^6 3d^3 4s^2$

2. Identify the correct sequence of hybridization of following species

$\text{NH}_4^+$ ,  $\text{NO}_2^+$ ,  $\text{SF}_4$ ,  $\text{IF}_5$

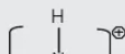
(1)  $sp^3$ ,  $sp$ ,  $sp^3d$ ,  $sp^3d^2$

(3)  $sp^3$ ,  $sp$ ,  $sp^3d$ ,  $sp^3d$

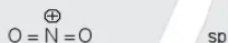
(2)  $sp$ ,  $sp^2$ ,  $sp^3$ ,  $sp^3d$

(4)  $sp^3$ ,  $sp^2$ ,  $sp^3d$ ,  $sp^3d^2$

Ans. (1)



$\text{NO}_2^+$



$sp$

$\text{SF}_4$



$sp^3d$

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

IF<sub>5</sub>



sp<sup>3</sup>d<sup>2</sup>

3. Identify the incorrect statement regarding Mendeleev.

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

(2) Mendeleev proposed the periodic table when salicature of atoms were unknown

(3) Atomic number 101 element named after Mendeleev

(4) Mendeleev developed accurate barometer.

Ans. (2)

## Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No.: +91-022-39167222

To Know more : sms RESO at 56677 | Website : www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029

Toll Free : 1800 258 5555 | 7340010333 | facebook.com/Resonanceedu | twitter.com/Resonanceedu | www.youtube.com/reswatch | blog.resonance.ac.in

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029



| JEE MAIN-2021 | DATE : 22-07-2021 (SHIFT-2) | PAPER-1 | MEMORY BASED | CHEMISTRY

4. Identify the correct set which is paramagnetic and coloured.

(1) Cu<sup>2+</sup>, Sc<sup>+</sup>, Cr<sup>3+</sup>

(2) Mn<sup>7+</sup>, Cr<sup>3+</sup>, Hg<sup>2+</sup>

(3) Cu<sup>+</sup>, Sc<sup>3+</sup>, Co<sup>+</sup>

(4) Mn<sup>7+</sup>, Cu<sup>+</sup>, Cr<sup>3+</sup>

Ans. (1)

Sol. Ion                      No. of unpaired e<sup>-</sup>

Cu<sup>2+</sup>

1

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

This set is "paramagnetic & coloured"

5. Identify the correct statement regarding diborane (B<sub>2</sub>H<sub>6</sub>)

(1) Hybridisation of boron is sp<sup>2</sup>

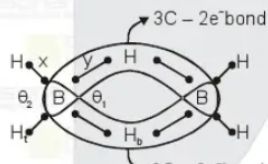
(2) It contain one 3 center- 2 electron bond.

(3) It is planer molecule

(4) NaBH<sub>4</sub> on oxidation with I<sub>2</sub> give B<sub>2</sub>H<sub>6</sub>

Ans. (4)

Sol.  $2\text{NaBH}_4 + \text{I}_2 \xrightarrow{\text{ether}} \text{B}_2\text{H}_6 + 2\text{NaI} + \text{H}_2 \uparrow$



© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

6. K<sub>P</sub> for the reaction N<sub>2</sub>O<sub>4</sub>(g) ⇌ 2NO<sub>2</sub>(g) at 288 k is 47.9, then value of K<sub>C</sub> is -

[Report your answer to nearest integer]

[Given R = 0.083 bar lit / mole K]

Ans. (2)

Sol.  $K_P = K_C(RT)^{\Delta n_g}$

47.9 = K<sub>C</sub> (0.083 × 288)<sup>1</sup>

K<sub>C</sub> = 2

7. How many total number of unpaired electrons are present in [Co(NH<sub>3</sub>)<sub>6</sub>]Cl<sub>2</sub> and [Co(NH<sub>3</sub>)<sub>6</sub>]Cl<sub>3</sub>

Ans. (1)

Sol. Complex

(i)  $[\text{Co}(\text{NH}_3)_6] \text{Cl}_2 \Rightarrow \text{Co}^{2+} = 3d^7$  unpaired electron = 1

## Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No.: +91-022-39167222

To Know more : sms RESO at 56677 | Website : www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029

Toll Free : 1800 258 5555 | 7340010333 | facebook.com/ResonanceEdu | twitter.com/ResonanceEdu | www.youtube.com/Resonance | blog.resonance.ac.in

This solution was download from Resonance JEE (MAIN) 2021 Solution portal PAGE # 2

8. Isotopes of hydrogen which emits low energy  $\beta^-$  particle with half life greater than 12 year is :

- (1) Tritium and Deuterim (2) Deuterium  
(3\*) Tritium (4) Protium

Sol. Only tritium is radioactive and emits low energy  $\beta^-$  particles ( $t_{1/2}$ , 12.33 years)

9. The concentration of glucose ( $\text{C}_6\text{H}_{12}\text{O}_6$ ) in blood is 0.72 gram/lit, the molarity of glucose is  $[x] \times 10^{-3}$  M, then value of x is

Ans. (4)

$$\begin{aligned} \text{Sol. } M &= \frac{W_{\text{solute}}}{M_{\text{solute}} \times V_{\text{soln}}(\text{in lit.})} \\ &= \frac{0.72}{180} \\ &= 0.004 = 4 \times 10^{-3} \end{aligned}$$

- (1)  $\text{K}_2\text{SO}_4$  (2) KI (3)  $\text{C}_6\text{H}_{12}\text{O}_6$  (4)  $\text{Al}_2(\text{SO}_4)_3$

Ans. (4)

Sol.  $\Delta T_f = i K_f m$

Greater the  $i$  value lower will be freezing point

11.  $\text{N}_2\text{O}_5$  dissociate according to 1<sup>st</sup> order kinetic as  $2\text{N}_2\text{O}_5(\text{g}) \rightarrow 4\text{NO}_2(\text{g}) + \text{O}_2(\text{g})$ . kinetics initial concentration of  $\text{N}_2\text{O}_5$  is  $2.4 \times 10^{-2}$  M and concentration of  $\text{N}_2\text{O}_5$  after 1 hour is  $1.6 \times 10^{-2}$  M, then the rate constant  $k$  in  $\text{min}^{-1}$  for this dissociation is  $[x] \times 10^{-5} \text{ min}^{-1}$ , then x is.

Ans. 346

Sol.  $2\text{N}_2\text{O}_5(\text{g}) \rightarrow 4\text{NO}_2(\text{g}) + \text{O}_2(\text{g})$

Initial  $2.4 \times 10^{-2}$  M

After 1 hour  $1.6 \times 10^{-2}$  M

$$t = \frac{1}{k} \ln \left( \frac{a}{a-x} \right)$$

$$k = \frac{2.303}{2 \times 60} \log \left( \frac{2.4 \times 10^{-2}}{1.6 \times 10^{-2}} \right)$$

$$k = \frac{2.303}{2 \times 60} \log \left( \frac{3}{2} \right)$$

$$= \frac{2.303}{2 \times 60} \times [0.48 - 0.30]$$

$$= 0.00346$$

$$= 346 \times 10^{-5} \text{ min}^{-1}$$

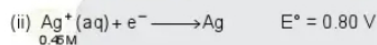
## Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No.: +91-022-39167222

To Know more : sms RESO at 56677 | Website : www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029





[Given  $\log 2.5 = 0.4$ ]  $\frac{2.303RT}{F} = 0.06$

Report your answer as  $[E_{\text{cell}}] \times 10^{-3}$ .

**Ans.** (448)

**Sol.**  $E^\circ_{\text{cell}} = (E^\circ_{\text{RP}})_\text{C} - (E^\circ_{\text{RP}})_\text{A}$   
 $= 0.80 - 0.34 = 0.46 \text{ V}$

$E_{\text{cell}} = E^\circ_{\text{cell}} - \frac{0.06}{2} \log \frac{[\text{Cu}^{2+}]}{[\text{Ag}^+]^2} = 0.46 - \frac{0.06}{2} \log \left\{ \frac{0.5}{(0.46)^2} \right\}$   
 $= 0.46 - \frac{0.06}{2} \log 2.5 = 0.46 - \frac{0.06}{2} \times 2.5$

14. Match column-I with Column-II

**Column-I**

- (a) Li
- (b) Na
- (c) Ca
- (d) Ba

**Column-II**

- (i) soluble in organic compound
- (ii) outer electronic configuration is  $6s^2$
- (iii) oxalate is not soluble in aqueous solution
- (iv) form strong monobasic compound

(1\*) a-i, b-iv, c-iii, d-ii

(2) a-i, b-ii, c-iii, d-iv

(3) a-iii, b-iv, c-i, d-ii

(4) a-i, b-iv, c-iii, d-ii

**Ans.** (1)

15. Find the sum of magnetic moment (spin only) of following ion  $\text{Co}^+$ ,  $\text{Zn}^{2+}$ ,  $\text{V}^{5+}$

[Report your answer to nearest integer]

## Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No.: +91-022-39167222

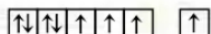
To Know more : sms RESO at 56677 | Website : www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029

Toll Free : 1800 258 5555 | 7340010333 | [facebook.com/ResonanceEdu](https://www.facebook.com/ResonanceEdu) | [twitter.com/ResonanceEdu](https://twitter.com/ResonanceEdu) | [www.youtube.com/reswatch](http://www.youtube.com/reswatch) | [blog.resonance.ac.in](http://blog.resonance.ac.in)

This solution was download from Resonance JEE (MAIN) 2021 Solution portal

PAGE # 4

**Sol.**  $_{27}\text{Co}^+ = [_{18}\text{Ar}]3d^7 4s^1$



Unpaired electron = 4

$_{30}\text{Zn}^{2+} = [_{18}\text{Ar}]3d^{10}$  unpaired electron = 0

$_{23}\text{V}^{5+} = [_{18}\text{Ar}]3d^0$  unpaired electron = 0

So  $\mu = \sqrt{n(n+2)} \text{ BM}$

$= \sqrt{24} \text{ BM}$

$= 4.89 \text{ BM}$

16. Which of the following have strong reducing power  
 (1) PH<sub>3</sub> (2) BiH<sub>3</sub> (3) AsH<sub>3</sub> (4) SbH<sub>3</sub>

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

Sol. NH<sub>3</sub>  
 PH<sub>3</sub>  
 AsH<sub>3</sub>  
 SbH<sub>3</sub>  
 BiH<sub>3</sub>

As we move down the group reducing power is increase.

17. When AgNO<sub>3</sub> solution is added to KI, the sol produced is  
 (1) KI/NO<sub>3</sub><sup>-</sup> (2\*) AgI /Ag<sup>+</sup> (3) AgI/I<sup>-</sup> (4) AgNO<sub>3</sub>/NO<sub>3</sub><sup>-</sup>

Sol. AgNO<sub>3</sub> + KI → AgI | Ag<sup>+</sup>

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

[Report your answer to nearest integer]

Ans. 2

Sol. C(graphite) + O<sub>2</sub> → CO<sub>2</sub>(g) ΔH = -2.48 kJ mole  $\frac{10}{12}$  mole

$$\text{Total heat released} = 2.48 \times \frac{10}{12} = 1.90 \text{ kJ}$$

## Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005  
 Ph. No.: +91-744-2777777, 2777700 | FAX No.: +91-022-39167222

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

This solution was download from Resonance JEE (MAIN) 2021 Solution portal PAGE # 5

Resonance® Educating for better tomorrow | JEE MAIN-2021 | DATE : 22-07-2021 (SHIFT-2) | PAPER-1 | MEMORY BASED | CHEMISTRY

19. 10 gram Benzene (GMM = 78) on methylation give 9.2 gram of Toluene (GMM = 92), then percentage yield of process is :

Ans. 78.00

Sol.  $\text{C}_6\text{H}_6 \xrightarrow{\text{Methylation}} \text{C}_6\text{H}_5\text{CH}_3$   
 $\frac{10}{78} \text{ mole} \quad \quad \quad \frac{10}{92} \text{ mole}$

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

$$\% \text{ yield} = \frac{W_{\text{actual}}}{W_{\text{theoretical}}} \times 100$$

$$= \left[ \frac{9.2}{10 \times 92} \times 78 \right] \times 100 = 78\%$$

20. The total number of isomers of square planar complex [MCl(SCN)(NO<sub>2</sub>)] is  
 (1) 12 (2) 6 (3) 8 (4) 4

Ans. (1)

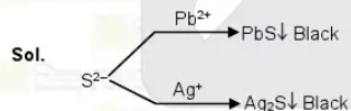
Sol. SCN/NO<sub>2</sub> - 3 arrangements  
 NCS/NO<sub>2</sub> - 3 arrangements  
 SCN/ONO - 3 arrangements  
 NCS/ONO - 3 arrangements

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

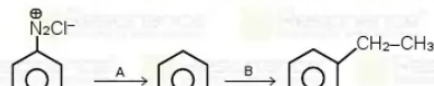
21. Consider sulphide ion [S<sup>2-</sup> ion] as a soft base. Which of the following ion will form sulphide [36 T]

- (1) Pb<sup>2+</sup>, Ag<sup>+</sup>      (2) Ag<sup>+</sup>, Mg<sup>2+</sup>      (3) Al<sup>3+</sup>, Ag<sup>+</sup>      (4) Al<sup>3+</sup>, Mg<sup>2+</sup>

Ans. (3)



22. In the following sequence of reactions identify A & B respectively : [OC, Aromatic, XII, M]



- (3) CH<sub>3</sub>-CH<sub>2</sub>-OH      H<sub>3</sub>PO<sub>2</sub>      (4) CH<sub>3</sub>-CH<sub>2</sub>-Cl      H<sub>3</sub>PO<sub>2</sub>

Ans. (1)

## Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No.: +91-022-39167222

To Know more : sms RESO at 56677 | Website : www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029

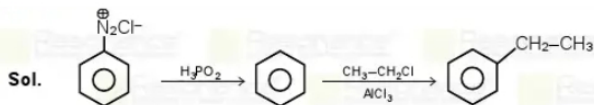
Toll Free : 1800 258 5555      7340010333      facebook.com/ResonanceEdu      twitter.com/ResonanceEdu      www.youtube.com/resowatch      blog.resonance.ac.in

This solution was download from Resonance JEE (MAIN) 2021 Solution portal

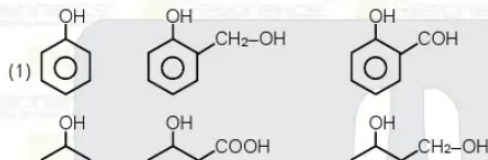
PAGE # 6

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

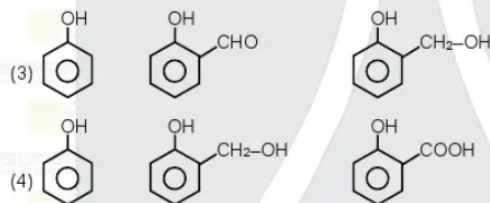
**JEE MAIN-2021 | DATE : 22-07-2021 (SHIFT-2) | PAPER-1 | MEMORY BASED | CHEMISTRY**



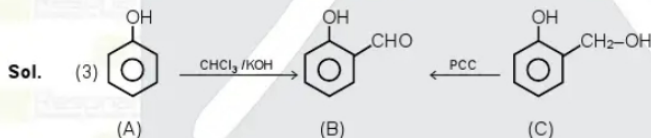
23. A (C<sub>6</sub>H<sub>6</sub>O) gives dark green colouration with FeCl<sub>3</sub>. A on reaction with CHCl<sub>3</sub>, KOH gives B. B can also be prepared from C by PCC. The correct option for A, B and C is :



© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029



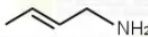
Ans. (3)



© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029



Ans. (3)

Sol.  has no conjugation between  $\pi$ -bond and lone-pair hence there will be no resonance in this compound.

## Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029

Toll Free - 1800 258 5555 | 7340010333

This solution was download from Resonance JEE (MAIN) 2021 Solution portal

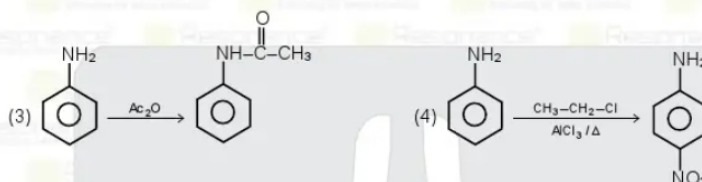
PAGE # 7

Resonance® Educating for better tomorrow | JEE MAIN-2021 | DATE : 22-07-2021 (SHIFT-2) | PAPER-1 | MEMORY BASED | CHEMISTRY

25. Which of the following reaction is not possible :



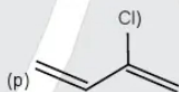
© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029



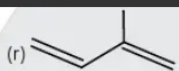
Sol. Friedel-craft alkylation is not possible in aniline due to formation of highly deactivated cationic salt.

26. Match the following :

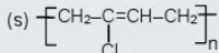
(a) Chloroprene



(c) Neoprene



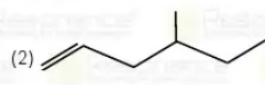
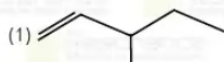
(d) Acrylonitrile



Ans. (1\*) (a)  $\rightarrow$  (p), (b)  $\rightarrow$  (r), (c)  $\rightarrow$  (s), (d)  $\rightarrow$  (q) (2) (a)  $\rightarrow$  (r), (b)  $\rightarrow$  (s), (c)  $\rightarrow$  (p), (d)  $\rightarrow$  (q)  
(3) (a)  $\rightarrow$  (r), (b)  $\rightarrow$  (p), (c)  $\rightarrow$  (q), (d)  $\rightarrow$  (s) (4) (a)  $\rightarrow$  (q), (b)  $\rightarrow$  (r), (c)  $\rightarrow$  (p), (d)  $\rightarrow$  (s)

Sol. NCERT

27. Which of the following does not show stereoisomerism



© Resonance Eduventures Limited | Toll-Free 1800-258-5555 | (0)744 2777777, 2777700 | contact@resonance.ac.in | CIN - U80302RJ2007PLC024029



Ans. (4)

## Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No.: +91-022-39167222

To Know more : sms RESO at 56677 | Website : www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029

Toll Free : 1800 258 5555 | 7340010333 | facebook.com/ResonanceEdu | twitter.com/ResonanceEdu | www.youtube.com/resowatch | blog.resonance.ac.in

This solution was download from Resonance JEE (MAIN) 2021 Solution portal

PAGE # 8



**28.** Total acyclic number of structures including geometrical of pentene is

**Ans.** 6

**Sol.** C-C-C-C=C (1)

C-C-C=C-C (2)

C-C-C=C (1)

C-C-C=C (1)

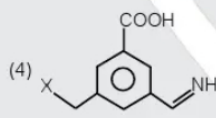
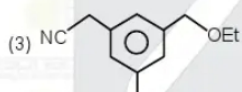
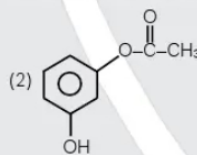
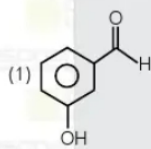
C-C=C-C-C (1)

**29.** Thiamin & pyridoxine vitamin are respectively :

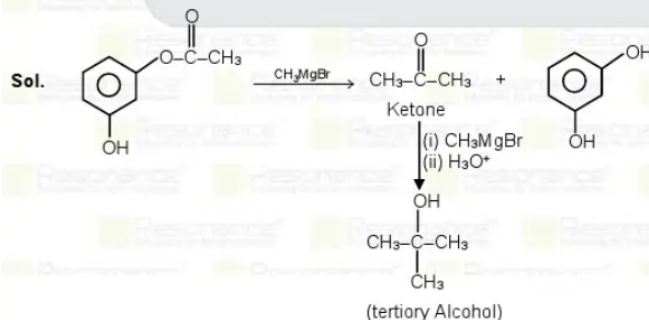
**Ans.** (1)

**Sol.** NCERT

**30.** Which of the following give tertiary alcohol with excess Grignard reagent ( $\text{CH}_3\text{MgBr}$ )



**Ans.** (2)



## Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No.: +91-022-39167222

To Know more : sms RESO at 56677 | Website : [www.resonance.ac.in](http://www.resonance.ac.in) | E-mail : [contact@resonance.ac.in](mailto:contact@resonance.ac.in) | CIN : U80302RJ2007PLC024029

Toll Free : 1800 258 5555

7340010333

[facebook.com/ResonanceEdu](https://www.facebook.com/ResonanceEdu)

[twitter.com/ResonanceEdu](https://twitter.com/ResonanceEdu)

[www.youtube.com/resonance](https://www.youtube.com/resonance)

[blog.resonance.ac.in](http://blog.resonance.ac.in)

This solution was download from Resonance JEE [MAIN] 2021 Solution portal

PAGE # 9