## SUBJECT : GHEMISTRY

## Date: 26 April, 2019 | Duration: 2 Hours | Max. Marks: 80 <br> Paper 1 : Physics and Chemistry <br> :: IMPORTANT INSTRUCTIONS ::

1. There will be 40 questions for Physics and 40 questions for Chemistry. The questions will be of Objective type (Multiple Choice Questions) for both the subjects (Physics and Chemistry). Each question carries 1 mark. The maximum marks for Paper 1 is 80 .
2. This test is of 1 hr . duration.
3. Use Black Ball Point Pen only for writing particulars on OMR Answer Sheet and marking answer by darkening the circle ' $\cdot$ '.
4. Rough work is to be done on the space provided for this purpose in the Test Booklet only.
5. On completion of the test, the candidate must handover the Answer Sheet to the Invigilator in the Room/Hall. The candidates are allowed to take away this Test Booklet with them.
6. The Set No. for this Booklet is 05. Make sure that the Set No. printed on the Answer Sheet is the same as that on this booklet. In case of discrepancy, the candidate should immediately.
7. The candidate should ensure that the Answer Sheet is not folded. Do not make any stray marks on the Answer Sheet.
8. Do not write you Seat No. anywhere else, except in the specified space in the Test Booklet/Answer Sheet.
9. Use of White fluid for correction is not permissible on the Answer Sheet.
10. Each candidate must show on demand his/her Admission Card to the Invigilator.
11. No candidate, without special permission of the Superintendent or Invigilator, should leave his/her sent.
12. Use of Manual Calculator is permissible.
13. The candidate should not leave the Examination Hall without handing over their Answer Sheet to the Invigilator on duty and must sign the Attendance Sheet (Patrak - 01). Cases where a candidate has not signed the Attendance Sheet (Patrak - 01) will be deemed not to have handed over the Answer Sheet and will be dealt with as an unfair means case.
14. The candidates are governed by all Rules and Regulations of the Board with regard to their conduct in the Examination Hall. All cases of unfair means will be dealt with as per Rules and Regulations of the Board.
15. No part of the Test Booklet and Answer Sheet shall be detached under any circumstances.
16. The candidates will write the Correct Test Booklet Set No. As given in the Test Booklet/Answer Sheet in the Attendance Sheet. (Patrak - 01)

## Candidate's Name

Exam. Seat No. (in figures)............................................(in words).
Name of Exam. Centre : ...............................................Exam. Centre No.
Test Booklet Set No. : .......................................................Test Booklet No.

Candidate's Sign.
.Block Supervisor Sign. $\qquad$

## Resonance Eduventures Ltd.

Registered \& Corporate Office: CG Tower, A-46 \& 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.)-324005 Tel.No.: 0744-6607777, 3012100, 3012222, 6635555 | Toll Free: 18002585555 | Fax: +91-022-39167222| 08003444888 Website: www.resonance.ac.in | E-mail: contact@resonance.ac.in | CIN: U80302RJ2007PLC024029
blog.resonance.ac.in

## HIGHEST number of CLASSROOM Students Qualified for JEE（Advanced） 2019 from any Institute of India＊



Top Category Ranks in JEE Main 2019

Students qualified for JEE Advanced 2019
students from Repeaters＇Batches
students from Freshers＇Batches

HIGHEST CLASSROOM GIRLS
Student Qualified for JEE（Advanced） 2019 from any Institute of India＊
1506

HIGHEST CLASSROOM HINDI MEDIUM
Students Qualified for JEE（Advanced） 2019 from any Institute of India＊
1450

For scholarship on the basis of JEE Main 2019，SMS RESO SCHO at 56677

## ADMISSIONS

 OPENFOR 2019－20

Classes：V to XII \＆XII＋
Target：JEE（Main＋Advanced） JEE（Main）｜AllMS／NEET Pre－foundation｜Commerce \＆CLAT

ResoNET Dates $9^{\text {th }} \& \mathbf{1 6}^{\text {th }}$ June 2019

## Resonance Eduventures Limited

Registered \＆Corporate Office：CG Tower，A－46 \＆52，IPIA，Near City Mall， Jhalawar Road，Kota（Rajasthan）－ 324005
Tel．No．：0744－2777777，2777700｜CIN：U80302RJ2007PLC024029

Toll Free：
18002585555
website：www．resonance．ac．in

## COURSE：VIJAY（JR） FOR CLASS：XIII <br> Target：JEE（Main＋Advanced） 2020 <br> Course Starts from <br> 10＂h JUNE 2019

## CHEMISTRY

41. Element $A$ and $B$ do not form an alloy because
(A) Both elements have similar crystal structures
(B) Radius of $A$ is 115 pm while radius of $B$ is 187 pm
(C) Both are the members of same group
(D) Both have similar electronic configuration in valence shell

Ans. (B)
Sol. For alloy formation radius of components should be almost same.
42. What is the correct order for energy of d orbitals during splitting in Tetra Chlorido Nickelate(II) complex ion?
(A) $d_{x y} \cong d_{y z} \cong d_{x z}<d_{x^{2}-y^{2}} \cong d_{z^{2}}$
(B) $\mathrm{d}_{\mathrm{xy}} \cong \mathrm{d}_{\mathrm{yz}} \cong \mathrm{d}_{\mathrm{xz}} \cong \mathrm{d}_{\mathrm{x}^{2}-\mathrm{y}^{2}} \cong \mathrm{~d}_{\mathrm{z}^{2}}$
(C) $\mathrm{d}_{\mathrm{xy}} \cong \mathrm{d}_{\mathrm{yz}} \cong \mathrm{d}_{\mathrm{xz}}>\mathrm{d}_{\mathrm{x}^{2}-\mathrm{y}^{2}} \cong \mathrm{~d}_{\mathrm{z}^{2}}$
(D) $d_{x^{2}-y^{2}}>d_{z^{2}}>d_{x y} \cong d_{y z} \cong d_{x z}$

Ans. (C)
Sol. Ligands are coming off axis.
43. Which of the following complex ion is the most stable?
(A) $\left[\mathrm{Co}\left(\mathrm{NH}_{3}\right)_{6}\right]^{3+}$
(B) $\left[\mathrm{CoCl}_{6}\right]^{3-}$
(C) $\left[\mathrm{CoF}_{6}\right]^{3-}$
(D) $\left[\mathrm{Co}\left(\mathrm{H}_{2} \mathrm{O}\right)_{6}\right]^{3+}$

Ans. (A)
Sol. $\mathrm{NH}_{3}$ is strongest ligand amongs the following $\mathrm{Co}^{+3}$ complexes.
44. The primary valency and secondary valency of central metal ion and the no. of total ions produced in aqueous solution for $\mathrm{K}\left[\mathrm{Co}(\mathrm{OX})_{2}\left(\mathrm{NH}_{3}\right)_{2}\right]$ complex respectively is $\qquad$
(D) $3,6,1$

Ans. (C)
Sol. $\quad(1)+(x)+2(-2)+2(0)=0$
Or $\quad x=3$
45. Which of the following complexes possess meridional isomer?
(A) $\left[\mathrm{Co}\left(\mathrm{NH}_{3}\right)_{3} \mathrm{Cl}_{3}\right]$
(B) $\left[\mathrm{Co}\left(\mathrm{NH}_{3}\right)_{4} \mathrm{Cl}_{2}\right]$
(C) $\left[\mathrm{Co}\left(\mathrm{NH}_{3}\right)_{2} \mathrm{Cl}_{4}\right]$
(D) $\left[\mathrm{Co}\left(\mathrm{NH}_{3}\right)_{5} \mathrm{Cl}\right]$

Ans. (A)
Sol. $\left[\mathrm{Ma}_{3} \mathrm{~b}_{3}\right]$ exhibits fac \& mer isomerism.
46. Which of the following compound undergoes aldol condensation?
(A) Formaldehyde
(B) Trichloro acetaldehyde
(C) Trimethyl acetaldehyde
(D) Acetaldehyde

Ans. (D)
Sol. Only aldehyde and ketones with BaH as $\mathrm{CH}_{3}-\mathrm{C}{\underset{\mathrm{H}}{\mathrm{H}}}_{\mathrm{O}}^{\text {(acetaldehyde) undergoes Aldol condensation. }}$
47. Benzoyl chloride + Sodium benzoate $\xrightarrow{\Delta}$ $\qquad$
(A) Benzaldehyde
(B) Benzyl alcohol
(C) Benzyl benzoate
(D) Benzoic anhydride

Ans. (D)

Sol.


## Resonance Eduventures Limited

REGISTERED \& CORPORATE OFFICE : CG Tower, A-46 \& 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005 Ph.No. : 0744-2777777, 0744-2777700 | Toll Free : 18002585555 | FAX No. : +91-022-39167222 | To Know more: sms RESO at 56677
48. $\mathrm{P} \xrightarrow[\Delta]{\mathrm{KMnO}_{4} / \mathrm{KOH}} \mathrm{Q} \xrightarrow[\text { Anloyd } \mathrm{AlCl}_{3}]{\text { Sodalime }} \mathrm{S}$
If $P$ and $S$ are toluene, $Q \& R$ are $\qquad$ and $\qquad$ respectively.
(A) Benzaldehyde, Benzoic acid
(B) Benzaldehyde, Sodium benzoate
(C) Benzoic acid, Benzene
(D) Benzene, Benzoic acid

Ans. (C)

Sol.

49. Type of Hybridisation of N and $\mathrm{C}-\mathrm{N}-\mathrm{C}$ bond angle in $\left(\mathrm{CH}_{3}\right)_{3} \mathrm{~N}$ are $\qquad$ and $\qquad$ respectively.
(A) $\mathrm{sp}^{3}, 10 \mathbf{1 0}^{\circ}$
(B) $\mathrm{sp}^{2}, 120^{\circ}$
(C) $\mathrm{sp}^{3}, 1099^{\circ}$
(D) $\mathrm{sp}^{2}, 117.5^{\circ}$

Ans. (A)
Sol. Steric number $=4\left(\mathrm{sp}^{3}\right) \& 3 B P+1 L P$
50. Identify $X$ and $Y$ in following reaction.

(A)


(B)


(C)


(D)



Ans. (A)

Sol.

51. Why glucose is called gluco-pyranose?
(A) glucose is aldohexose.
(B) glucose is a cyclic compound containing five carbon atoms and one oxygen atom.
(C) glucose is ketohexose.
(D) glucose is a cyclic compound containing six carbon atoms.

Ans. (B)
Sol.

$\alpha$-D-gluco-pyranose

## Resonance Eduventures Limited

REGISTERED \& CORPORATE OFFICE : CG Tower, A-46 \& 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005
52. Which protein present in muscle is insoluble in water?
(A) Carotene
(B) Insulin
(C) Albumin
(D) Myosin

Ans. (D)
Sol. Mysin is found in muscle.
53. Giving 'T' symbol for true statement and ' $F$ ' symbol for false statement, select suitable option from the given options for following statements.
i) Cytosine base is the derivative of pyrimidine.
ii) $\beta$-D Ribose sugar is present in DNA.
iii) The message for the synthesis of a specific protein is present in RNA.
iv) DNA is responsible for maintaining the identify of different species of organisms for one century
(A) TFFT
(B) FFFT
(C) FTFF
(D) FFTF

Ans. (A)

Sol.
 (i) Thymine are pyrimidines bone.
(i) Thymine are pyrinidines bane.
54. Terylene is a condensation polymer of $\qquad$ and
(A)
 and

(B)
 and

(C)

and

(D)
 and


Ans. (A)
Sol. None is correct
Terylene is a condenoation polymers of and Ethyle slyod.
55. Which of the following acid has property of flexibility?
(A) $\mathrm{HO}-\mathrm{CH}-\mathrm{CH}_{2}-\mathrm{COOH}$
(B) $\mathrm{HOOC}-\left(\mathrm{CH}_{2}\right)_{4}-\mathrm{COOH}$
(C) $\underset{\substack{\mathrm{CO} \\ \mathrm{CH}_{3}}}{\mathrm{CH}-\mathrm{CH}_{2}-\mathrm{COOH}}$
(D) $\mathrm{HOOC}-\left(\mathrm{CH}_{2}\right)_{2}-\mathrm{COOH}$

Ans. (C)
Sol. Polymers derved from 3-hydroxy butyricial has the property of flexibility.
56. What is cellulose diacetate?
(A) Semisynthetic polymer
(B) Plasticizer
(C) Natural polymer
(D) Synthetic polymer

Ans. (A)
Sol. Cellulose of semisynthetic polymers

## Resonance Eduventures Limited

REGISTERED \& CORPORATE OFFICE : CG Tower, A-46 \& 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005 Ph.No. : 0744-2777777, 0744-2777700 | Toll Free : 18002585555 |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

57. What is the packing efficiency of arrangement in a body centred unit cell.
(A) $53.26 \%$
(B) $74.00 \%$
(C) $68.00 \%$
(D) $64.00 \%$

Ans. (C)
Sol. Packing praction $=0.68$
58. Which one of the following compounds show both Schottky and Frenkel defects?
(A) AgCl
(B) AgBr
(C) AgI
(D) KCl

Ans. (B)
Sol. Theory based.
59. Calculate Van't Hoff factor (i) for an aqueous solution of $\mathrm{K}_{3}\left[\mathrm{Fe}(\mathrm{CN})_{6}\right]$ having a degree of dissociation ( $\alpha$ ) equal to 0.778 .
(A) 4.334
(B) 3.334
(C) 0.222
(D) 2.334

Ans. (B)
Sol. İdiss $=1+(n-1) \alpha$

$$
\begin{aligned}
& =1+(4-1) \alpha \\
& =3.334
\end{aligned}
$$

60. If molality of a solution is 0.05 and elevation in boiling point is 0.16 K then, what is the molal elevation constant of the solvent?
(A) 3.2
(B) 1.6
(C) 2.2
(D) 2.3

Ans. (A)
Sol.

$$
\Delta \mathrm{T}_{\mathrm{b}}=\mathrm{K}_{\mathrm{b}} \mathrm{~m}
$$

or $\quad 0.16=K_{b} \times 0.05$
61. The value of which of the following unit of concentration will not change with the change in temperature?
(A) Molarity
(B) Molality
(C) Normality
(D) Formality

Ans. (B)
Sol. It is mass- mass unit
62. $\quad \mathrm{Zn}_{(\mathrm{s})} / \mathrm{Zn}_{(\mathrm{aq})}^{2+}(1 \mathrm{M}) / / \mathrm{Ni}_{(\mathrm{aq})}^{2+}(1 \mathrm{M}) / \mathrm{Ni}_{(\mathrm{s})}$

Which is incorrect for the above given cell?
(A) Electrochemical cell
(B) Voltaic cell
(C) Galvanic cell
(D) Daniel cell

Ans. (D)
Sol. Cell reaction in Daniel cell is :

$$
\mathrm{Zn}(\mathrm{~s})+\mathrm{Cu}^{+2}(\mathrm{aq}) \longrightarrow \mathrm{Zn}^{+2}(\mathrm{aq})+\mathrm{Cu}(\mathrm{~s})
$$

63. If one mole electrons is passed through the solutions of $\mathrm{AlCl}_{3}, \mathrm{AgNO}_{3}$ and $\mathrm{MgSO}_{4}$, in what ratio $\mathrm{Al}, \mathrm{Ag}$ and Mg will be deposited at the electrodes?
(A) $3: 6: 2$
(B) $2: 6: 3$
(C) $1: 2: 3$
(D) $3: 2: 1$

Ans. (B)
Sol. $\quad$ eqAl $=e q_{A g}=e q M g$
eq $=$ moles $\times \mathrm{n}$-factor
$\mathrm{Al}^{+3}+3 \mathrm{e}^{-} \longrightarrow \mathrm{Al}$
$\mathrm{Ag}^{+}+\mathrm{e}^{-} \longrightarrow \mathrm{Ag}$
$\mathrm{Mg}^{+2}+2 \mathrm{e}^{-} \longrightarrow \mathrm{Mg}$
$\frac{1}{3} \mathrm{~mol} \mathrm{Al} \mathrm{:} 1 \mathrm{~mol} \mathrm{Ag} \mathrm{:} \frac{1}{2} \mathrm{~mol} \mathrm{Mg}$
or $2: 6: 3$
64. At which temperature, ceramic materials behave as super conductors?
(A) 0 K
(B) 15 K
(C) 200 K
(D) 150 K

Ans. (D)
Sol. Theory based

## Resonance Eduventures Limited

REGISTERED \& CORPORATE OFFICE : CG Tower, A-46 \& 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005 Ph.No. : 0744-2777777, 0744-2777700 | Toll Free : 18002585555 | 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

65. Which of the following mineral of Iron is in the form of carbonate?
(A) Haematite
(B) Siderite
(C) Magnetite
(D) Iron Pyrites

Ans. (B)
Sol. Siderite : $\mathrm{FeCO}_{3}$
66. Which of the following hydride is the most stable?
(A) $\mathrm{PH}_{3}$
(B) $\mathrm{SbH}_{3}$
(C) $\mathrm{NH}_{3}$
(D) $\mathrm{AsH}_{3}$

Ans. (C)
Sol. Less size difference.
67. In which of the following pair of oxyacid of phosphorous, oxidation states of $P$ are not the same?
(A) $\mathrm{H}_{3} \mathrm{PO}_{4}$ and $\mathrm{H}_{4} \mathrm{P}_{2} \mathrm{O}_{7}$
(B) $\mathrm{H}_{3} \mathrm{PO}_{4}$ and $\mathrm{H}_{5} \mathrm{P}_{3} \mathrm{O}_{10}$
(C) $\mathrm{H}_{4} \mathrm{P}_{2} \mathrm{O}_{7}$ and $\mathrm{H}_{5} \mathrm{P}_{3} \mathrm{O}_{10}$
(D) $\mathrm{H}_{4} \mathrm{P}_{2} \mathrm{O}_{7}$ and $\mathrm{H}_{3} \mathrm{PO}_{3}$

Ans. (D)
Sol. $\mathrm{H}_{4} \mathrm{P}_{2} \mathrm{O}_{7}$ and $\mathrm{H}_{3} \mathrm{PO}_{3}$
68. Which of the following order of acidic strength is correct?
(A) $\mathrm{HClO}>\mathrm{HClO}_{2}>\mathrm{HClO}_{3}>\mathrm{HClO}_{4}$
(B) $\mathrm{HClO}_{4}>\mathrm{HClO}_{2}>\mathrm{HClO}_{3}>\mathrm{HClO}$
(C) $\mathrm{HClO}_{2}>\mathrm{HClO}>\mathrm{HClO}_{4}>\mathrm{HClO}_{3}$
(D) $\mathrm{HClO}_{4}>\mathrm{HClO}_{3}>\mathrm{HClO}_{2}>\mathrm{HClO}$

Ans. (D)
Sol. $\mathrm{HClO}_{4}>\mathrm{HClO}_{3}>\mathrm{HClO}_{2}>\mathrm{HClO}$
69. 1,2-dichloro ethane is which type of halide?
(A) Geminal halide
(B) Vicinal halide
(C) Alkylidene halide
(D) Allylic halide

Ans. (B)
Sol. Dihalides with halogen atoms on adjaxement as 1, 2-dichlose ethane is alsocalled vicinal haldies.
70. Polarimeter is used to determine $\qquad$ of compounds.
(A) D and L configuration
(B) d and I configuration
(C) R and S configuration
(D) Both D and L as well as d \& I configuration

## Ans. (B)

71. Which of the following group of compounds are extinguisher, antiseptic, insecticide and anesthetic respectively?
(A) $\mathrm{CHCl}_{3}, \mathrm{CHI}_{3}, \mathrm{DDT}, \mathrm{CCl}_{4}$
(B) $\mathrm{DDT}, \mathrm{CHCl}_{3}, \mathrm{CCl}_{4}, \mathrm{CH}_{3}$,
(C) $\mathrm{CCl}_{4}, \mathrm{CH}_{3}$, DDT, $\mathrm{CHCl}_{3}$
(D) $\mathrm{CCl}_{4}, \mathrm{CH}_{3}, \mathrm{CHCl}_{3}$, DDT

Ans. (C)
Sol. $\mathrm{CCl}_{4}$ is used as firer extinguisher, $\mathrm{CH}_{3}$, as antiseptic, DDT used as insection and CHCl 3 (Chloroform) also as aneethetic.
72. Which of the following alcohol has the highest boiling point?
(A) Butan-2-ol
(B) 2-Methylpropan-2-ol
(C) Propan-2-ol
(D) Butan-1-ol

Ans. (B)
Sol. Creakr the molecules mass, higher the boiling point, further greather the branching, lesser the boiling. Point.
73. Which is the major product obtained by hydrolysis of compound formed by reaction between formaldehyde and ethyl magnesium bromide?
(A) Ethan-1-ol
(B) Propan-2-ol
(C) Propan-1-ol
(D) 2-Methyl-propan-2-ol

Ans. (C)

Sol.


## Resonance Eduventures Limited

REGISTERED \& CORPORATE OFFICE : CG Tower, A-46 \& 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005 Ph.No. : 0744-2777777, 0744-2777700 | Toll Free : 18002585555 |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

74. Give the IUPAC name for methyl salicylate.
(A) Methoxy benzoic acid
(B) 2'-Hydroxy benzoic acid
(C) Methyl-2'-hydroxy benzoate
(D) Methyl-3-hydroxy benzoate

Ans. (C)

Sol.


Merthyl-2'-Hydrocarbon benzoate.
75. Instantaneous rate of reaction for the reaction $3 A+2 B \longrightarrow 5 C$ is $\qquad$ .
(A) $+\frac{1}{3} \frac{\mathrm{~d}[\mathrm{~A}]}{\mathrm{dt}}=-\frac{1}{2} \frac{\mathrm{~d}[\mathrm{~B}]}{\mathrm{dt}}=+\frac{1}{5} \frac{\mathrm{~d}[\mathrm{C}]}{\mathrm{dt}}$
(B) $-\frac{1}{3} \frac{\mathrm{~d}[\mathrm{~A}]}{\mathrm{dt}}=-\frac{1}{2} \frac{\mathrm{~d}[\mathrm{~B}]}{\mathrm{dt}}=+\frac{1}{5} \frac{\mathrm{~d}[\mathrm{C}]}{\mathrm{dt}}$
(C) $-\frac{1}{3} \frac{\mathrm{~d}[\mathrm{~A}]}{\mathrm{dt}}=+\frac{1}{2} \frac{\mathrm{~d}[\mathrm{~B}]}{\mathrm{dt}}=-\frac{1}{5} \frac{\mathrm{~d}[\mathrm{C}]}{\mathrm{dt}}$
(D) $+\frac{1}{3} \frac{\mathrm{~d}[\mathrm{~A}]}{\mathrm{dt}}=-\frac{1}{2} \frac{\mathrm{~d}[\mathrm{~B}]}{\mathrm{dt}}=-\frac{1}{5} \frac{\mathrm{~d}[\mathrm{C}]}{\mathrm{dt}}$

Ans. (B)
Sol. $r= \pm \frac{1}{S C} \frac{d c}{d t}$
76. In a reactdion $A \longrightarrow B$, if the concentration of reactant is increased by 9 times then rate of reaction increases 3 times. What is the order of reaction?
(A) 2
(B) 3
(C) $\frac{1}{2}$
(D) $\frac{1}{3}$

Ans. (C)
Sol. $\quad r=K[A]^{n}$
or $\quad r^{\prime}=3 r=k[9 A]^{1 / 2}$
77. Which statement is incorrect for collision theory?
(A) The collision between the reacting molecules is essential
(B) The collision of the reactant molecules should be from any direction
(C) There must be certain minimum energy for the reactant experiencing collision
(D) The reactant experiencing fruitful collisions are converted to products

Ans. (B)
Sol. Theory based
78. The formation of association of colloidal particles by addition of electrolyte to form an insoluble precipitate is called $\qquad$ -.
(A) Flocculation
(B) Emulsification
(C) Coagulation
(D) Micelle

Ans. (C)
Sol. Theory based
79. Which of the following reaction is used to prepare colloidal sol by double decomposition?
(A) $\mathrm{As}_{2} \mathrm{O}_{3}+3 \mathrm{H}_{2} \mathrm{~S} \rightarrow \mathrm{As} \mathrm{s}_{3}+3 \mathrm{H}_{2} \mathrm{O}$
(B) $2 \mathrm{AuCl}_{3} \cdot 3 \mathrm{HCHO}+3 \mathrm{H}_{2} \mathrm{O} \rightarrow 2 \mathrm{Au}+3 \mathrm{HCOOH}+6 \mathrm{HCl}$
(C) $\mathrm{SO}_{2}+2 \mathrm{H}_{2} \mathrm{~S} \rightarrow 3 \mathrm{~S}+2 \mathrm{H}_{2} \mathrm{O}$
(D) $\mathrm{FeCl}_{3}+3 \mathrm{H}_{2} \mathrm{O} \rightarrow \mathrm{Fe}(\mathrm{OH})_{3}+3 \mathrm{HCl}$

Ans. (A)
Sol. Theory based.
80. Which of the following pair has similar magnetic moment?
(A) $\mathrm{Cr}^{3+}, \mathrm{Mn}^{3+}$
(B) $\mathrm{Fe}^{3+}, \mathrm{Mn}^{2+}$
(C) $\mathrm{Fe}^{2+}, \mathrm{Mn}^{2+}$
(D) $\mathrm{Ni}^{2+}, \mathrm{Co}^{2+}$

Ans. (B)
Sol. 5 unpaired electrons in both.

## Resonance Eduventures Limited

REGISTERED \& CORPORATE OFFICE : CG Tower, A-46 \& 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005 Ph.No. : 0744-2777777, 0744-2777700 | Toll Free : 18002585555 | FAX No. : +91-022-39167222| To Know more : sms RESO at 56677

Website : www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLCO24029



