CHEMISTRY TEST PAPER - 1

CHEMISTRY : Principles Related to Practical Chemistry

1. Sodium nitroprusside $Na_2[Fe(CN)_5NO]$ is used as reagent for detection of and the compound formed is
   (1) Sulphur, $Na_4[Fe(CN)_5NOS]$
   (2) Nitrogen, $Na_4[Fe(CN)_6$
   (3) Sulphur, $Na_2[Fe(CN)_4NOS]$
   (4) Sulphur, $Na_2[Fe(CN)_5NOS]$

2. Which of the following observations is correct and is used in the identification of carboxylic acids?
   (1) Carboxylic acids liberate CO_2 gas from $NaHCO_3$ solution
   (2) They produce fruity smell of esters when heated with alcohol in presence of concentrated H_2SO_4.
   (3) Both (1) and (2)
   (4) Iodoform test

3. Reagent that can distinguish a set of benzaldehyde and acetophenone is:
   (1) Iodine and $NaOH$
   (2) Tollen's reagent
   (3) Lucas Test
   (4) Both (1) and (2)

4. Which of the following tests are correctly matched?
   (1) Phenol - Phthalein test
   (2) Benzyl amine - Azo dye test
   (3) Phthalic acid - Fluorescence test
   (4) CH_3CONH_2 - Carbylamine test

5. Which of the following compounds can be detected using neutral $FeCl_3$ solution?
   (1) $CH_3COCH_2COOCH_3$
   (2) $CH_3COCOCH_3$
   (3) $CH_3-CH_2-CH_2-CH_3$
   (4) $CH_3CHOHC_6H_5$

6. In Lucas test, an alcohol reacts immediately and gives insoluble chloride. The alcohol is:
   (1) CH_3OH
   (2) CH_3CH_2OH
   (3) $(CH_3)_2CHOH$
   (4) $(CH_3)_3COH$

7. Benzaldehyde and acetone can be best distinguished using:
   (1) Fehling's solution

(2) Sodium hydroxide solution
(3) 2,4-DNP
(4) Tollen's reagent

8. Which of the following statements is incorrect?
(1) Phenol gives positive bromine water test.
(2) Aniline gives foul smelling compound on reaction with $CHCl_3 + KOH$
(3) Formic acid gives positive Tollen's test.
(4) Nitrobenzene gives positive Tollen's test

9. The ion which is not precipitated by H_2S in the presence of HCl is:
(1) Cu^{2+}
(2) Ag^{+}
(3) Pb^{2+}
(4) Al^{3+}

10. Ca and Ba ions are precipitated in fifth group as their :
(1) Oxides
(2) Sulphates
(3) Carbonates
(4) Sulphides

11. Silver mirror test is given by which one of the following compounds?
(1) Acetaldehyde
(2) Acetone
(3) 2-Butanone
(4) Benzophenone

12. Brown ring test is made for:
(1) NO_3^-
(2) Cl
(3) $\vdash$
(4) Br

13. An aqueous solution of a sodium salt having anion X^{n-} gave the following results:
$X^{n-} \xrightarrow{K_2Cr_2O_7/H^+}$ Green solution + Gas
Gas $\xrightarrow{Pb(NO_3)_2}$ Black ppt $\mathbf{X}^{n-}$ is:
(1) I^-
(2) NO_2^-
(3) S^{2-}
(4) SO_4^{2-}

14. Which reagent is used to remove SO_4^{2-} and Cl^-?
(1) NaOH
(2) $Pb(NO_3)_2$

(3) $BaSO_4$

(4) KOH

15. How do you characterize $PbCrO_4$?

(1) It is yellow in colour

(2) It is soluble in $NaOH$

(3) It is insoluble in CH_3COOH

(4) All of the above

16. Which sulphides is/are only soluble in aqua regia?

(1) NiS

(2) Cos

(3) HgS

(4) All of these

17. Which of the following(s) give(s) coloured gases?

(1) $K_2Cr_2O_7 + KCl + H_2SO_4$ (conc.) $\xrightarrow{\Delta}$

(2) $Il^- + H_2SO_4$ (conc.) $\xrightarrow{\Delta}$

(3) $NO_3^- + H_2SO_4$ (conc.) $\xrightarrow{\Delta}$

(4) All of these

18. Which of the following amine does not react with Hinsberg's reagent?

(1) $CH_3CH_2NH_2$

(2) $(CH_3CH_2)_2NH$

(3) $(CH_3CH_2)_3N$

(4) All of these

19. 'Lake test' is meant to identify which of the following ions?

(1) Cr^{3+}

(2) Bi^{3+}

(3) Sb^{3+}

(4) Al^{3+}

20. Which of the following compounds does not leave any residue on heating?

(1) $Pb(NO_3)_2$

(2) NH_4NO_3

(3) $Cu(NO_3)_2$

(4) $NaNO_3$

21. A salt gives effervescence with dil H_2SO_4. The gas released gives white turbidity with lime water which slowly disappears on prolonged passage. The anion radical present in salt is:

(1) NO_2^-

(2) CO_3^{2-}

(3) S^{2-}
(4) NO_3^-

22. Black sulphide is not formed by:
(1) Cu^{2+}
(2) Zn^{2+}
(3) Pb^{2+}
(4) Ni^{2+}

23. Which of the following statements is correct with reference to the ferric ions?
(1) Fe^{3+} gives brown colour with potassium ferricyanide
(2) Fe^{3+} gives blue precipitate with potassium ferricyanide
(3) Fe^{3+} gives yellow colour with potassium thiocyanate.
(4) Fe^{3+} gives white colour with ammonium hydroxide

24. An aqueous solution of a substance gives white precipitate on treatment with dilute hydrochloric acid, which dissolves on heating. When hydrogen sulfide is passed through the hot acidic solution, a black precipitate is obtained. The substance is:
(1) Hg_2^{2+} salt
(2) Cu^{2+} salt
(3) Ag^+ salt
(4) Pb^{2+} salt

25. A gas ' X ' is passed through water to form a saturated solution. The aqueous solution on treatment with silver nitrate gives a white precipitate. The saturated aqueous solution also dissolves magnesium ribbon with evolution of colourless gas ' Y '. Identify ' X ' and ' Y '.
(1) $X = CO_2, Y = Cl_2$
(2) $X = Cl_2, Y = CO_2$
(3) $X = Cl_2, Y = H_2$
(4) $X = H_2, Y = Cl_2$

26. Lead(II) ions on reaction with potassium iodide give a yellow ppt of:
(1) PbO
(2) PbI_2
(3) PbI_4
(4) $PbCrO_4$

27. $K_2[HgI_4]$ helps in the detection of:
(1) Cu^{2+}
(2) Pb^{2+}
(3) Mg^{2+}
(4) NH_4^+

28. Carbon dioxide turns:
(1) Lime water milky & clears it again when CO_2 is in excess
(2) Lime water milky permanently
(3) Acidified potassium permanganate colourless
(4) Acidified potassium dichromate green

29. On heating a small lump of borax on a platinum loop, a glassy bead containing:
(1) $Na_2\ B_4O_7$ is formed
(2) $NaBO_2$ and B_2O_3 is formed
(3) Na_2O is formed
(4) $Na_2\ B$ is formed

30. A solution acidified with acetic acid is employed to separate Ca^{2+} and Ba^{2+} by use of potassium chromate. Which of the following statement is correct
(1) Barium chromate is soluble in acetic acid
(2) Calcium chromate is insoluble in acetic acid
(3) Barium chromate is a blue precipitate in acetic acid
(4) Calcium charomate is soluble in acetic acid.

31. A white solid (X) produces reddish brown fumes when warmed with concentrated sulphuric acid. Addition of a copper piece to the test tube intensifies the evolution of fumes. The aqueous solution of (X) produces an yellow precipitate (soluble in hot water), on reaction with potassium iodide. (X) is
(1) Lead bromide
(2) Silver nitrate
(3) Copper nitrate
(4) None of these

32. Statement-I: Aldehydes and ketones are distinguished based on tests using mild oxidising reagents, like Tollen's reagent and Fehling's reagent or Benedict's reagent.
Statement- II : A test given by both aldehydes and ketones is 2,4-DNP test.
(1) If both assertion and reason are true and the reason is the correct explanation of the assertion.
(2) If both assertion and reason are true, but reason is not the correct explanation of the assertion.
(3) If assertion is true, but reason is false.
(4) If both assertion and reason are false.

33. Statement-I : Measurement of heat changes are carried out in vessels called calorimeters
Statement- II : During measurement of heat changes, calorimeter, thermometer and stirrer also absorb some heat; this amount of heat is measured as calorimeter constant.
(1) If both assertion and reason are true and the reason is the correct explanation of the assertion.
(2) If both assertion and reason are true, but reason is not the correct explanation of the assertion.

(3) If assertion is true, but reason is false.
(4) If both assertion and reason are false.

34. Match column I with column II and select the correct option the given with their respective:

Column- I	Column- I
A. CO^{2+} and Ni^{2+}	(i) Group- II
B. Al^{3+} and Fe^{3+}	(ii) Group- III
C. Cu^{2+} and Cd^{2+}	(iii) Group- V
D. Ca^{2+} and Sr^{2+}	(iv) Group- VI

(1) (A) $\rightarrow$ (ii); (B) $\rightarrow$ (i); (C) $\rightarrow$ (iii); (D) $\rightarrow$ (iv)
(2) (A) $\rightarrow$ (i); (B) $\rightarrow$ (iv); (C) $\rightarrow$ (ii); (D) $\rightarrow$ (iii)
(3) (A) $\rightarrow$ (iv); (B) $\rightarrow$ (ii); (C) $\rightarrow$ (i); (D) $\rightarrow$ (iii)
(4) (A) $\rightarrow$ (i); (B) $\rightarrow$ (ii); (C) $\rightarrow$ (iv); (D) $\rightarrow$ (iii)

35. Match column I with column II and select the correct option the given with their respective:

Column- I	Column- II
(Functional group)	(Test for detection)
(A) Carboxyl group	(i) Lucas test
(B) Alcoholic group	(ii) Neutral $FeCl_3$ test
(C) Phenolic group	(iii) Carbylamine test
(D) Amino group	(iv) Sodium bicarbonate test

(1) (A) $\rightarrow$ (iv); (B) $\rightarrow$ (i); (C) $\rightarrow$ (ii); (D) $\rightarrow$ (iii)
(2) (A) $\rightarrow$ (i); (B) $\rightarrow$ (iv); (C) $\rightarrow$ (ii); (D) $\rightarrow$ (iii)
(3) (A) $\rightarrow$ (iv); (B) $\rightarrow$ (ii); (C) $\rightarrow$ (i); (D) $\rightarrow$ (iii)
(4) (A) $\rightarrow$ (i); (B) $\rightarrow$ (ii); (C) $\rightarrow$ (iv); (D) $\rightarrow$ (iii)

36. Ag^{+}, Hg_2^{2+} and Pb^{2+} are grouped together in first group because they form insoluble:
(1) Sulphates
(2) Chlorides
(3) Hydroxides
(4) Carbonates

37. When H_2S is passed through a mixture containing $Cu^{+2}, Ni^{+2}, Zn^{+2}$ in acidic solution then ion will precipitate:
(1) Cu^{+2}, Ni^{+2}
(2) Ni^{+2}
(3) Cu^{+2}, Zn^{+2}
(4) Cu^{+2}

38. A substance on treatment with dil, H_2SO_4 liberates a colourless gas which produces:
(i) Turbidity with baryta water and
(ii) turns acidified dichromate solution green.
(1) $C_2O_3^{2-}$
(2) S^{2-}
(3) SO_3^{2-}
(4) NO_3^-

39. Which compound will not give positive chromyl chloride test
(1) $CuCl_2$
(2) $HgCl_2$
(3) $ZnCl_2$
(4) $C_6H_5NH_3^+Cl^-$

40. Salt $+AgNO_2 \rightarrow$ Yellow ppt.
(A)
A is almost insoluble in concentrated ammopnia solution. Identify the anion in the salt:
(1) Cl^-
(2) S^{-2}
(3) 1
(4) CH_3COO^-

41. A positive colloid will be formed when:
(1) NH_4OH is added dropwise in dilute solution of $FeCl_2$
(2) H_2 S is passed in dilute $AsCl_2$ solution
(3) Dilute $AgNO_3$ solution is added to saturated Agl solution
(4) Gelatin is dissolved in water

42. Which of the following is positively charged colloidal particle?
(1) As_2 S_3
(2) $Al_2O_3 \cdot xH_2O$
(3) Au
(4) Pt

43. Lyophobic colloids are:
(1) Reversible colloids
(2) Irreversible colloids
(3) Protective colloids
(4) Gum, proteins

44. An organic compound contains C, H, N, S and Cl. For the detection of chlorine, the sodium extract of the compound is first heated with a few drops of concentrated HNO_3 and then $AgNO_3$ is added to get a white precipitate of $AgCl$. The digestion with HNO_3

before the addition of $AgNO_3$ is to:

(1) Prevent the formation of NO_2

(2) Create a common ion effect

(3) Convert CN^- and S^{2-} to volatile HCN and H_2S, or else they will interfere with the test forming precipitate of $AgCN^{or}Ag_2S$

(4) Prevent the hydrolysis of $NaCN$ and Na_2S.

45. From amongst the following alcohols, the one that would react fastest with concentrated hydrochloric acid and anhydrous $ZnCl_2$, is:

(1) 2-butanol

(2) 2-methylpropan-2-ol

(3) 2-methylpropanol

(4) 1-butanol

46. Which gives blood red colour with potassium thiocyanate?

(1) Fe^{3+}

(2) Cu^{2+}

(3) Cd^{2+}

(4) Sn^{2+}

47. When H_2S gas is passed through aqueous HCl solution containing $CuCl_2, PbCl_2, BiCl_3, ZnCl_2$, then we do not get a precipitate of:

(1) CuS

(2) PbS

(3) Bi_2S_3

(4) ZnS

48. Three samples of the same salt are taken separately. Excess of NH_4OH gives white precipitate with first sample. Second sample gives white prec ipitate with $NaCl$. Third sample gives black precipitate when H_2S gas is passed through the solution. Possible salt is:

(1) $AgNO_3$

(2) $Pb(NO_3)_2$

(3) $Ca(NO_3)_2$

(4) $ZnSO_4$

49. Which of the following best describes the nature of $FeSO_4 \cdot (NH_4)_2SO_4 \cdot 6H_2O$

(1) Coordination compound

(2) Double salt

(3) Simple ionic compound

(4) Simple covalent compound

50. The reaction of acidified KI solution with hydrogen peroxide is:

(1) a redox reaction

(2) a reduction reaction
(3) a disproportion reaction
(4) hydrolysis reaction

CHEMISTYR TEST PAPER - 2

CHEMISTRY : Principles Related to Practical Chemistry

1. In oxalic acid versus $KMnO_4$ titration, acidified oxalic acid solution is:
   (1) taken at $0^{\circ}C$
   (2) taken at $25^{\circ}C$
   (3) taken at very hot condition
   (4) taken at sub zero temperature
2. Which of the following is not a primary standard used in titrimetry?
   (1) Potassium dichromate
   (2) Potassium bromate
   (3) Sodium oxalate
   (4) $Na_2CO_3 \cdot 10H_2O$
3. Which of the following is a lyophilic sol?
   (1) Egg albumin sol
   (2) Gum sol
   (3) Starch sol
   (4) All of these
4. Which of the following statements is not correct?
   (1) Lyophilic sols are more stable as compared to lyophobic sols.
   (2) Two factors responsible for the stability of sols are charge and the solvation of the colloidal particles by the solvent.
   (3) Stability of lyophilic sols is primarily due to the solvation of colloidal particles by the solvent.
   (4) Lyophobic sols are stabilised due to the solvation of colloidal particles by the solvent.
5. Regarding the study of effects of variation in concentration of iodide ions on the rate of reaction of iodide ions with H_2O_2 at room temperature, the incorrect statement is:
   (1) The reaction between iodide ions and hydrogen peroxide occurs in the acidic medium as
   $2I^{-}(aq) + H_2O_2(l) + 2H^{+}(aq) \rightarrow I_2(g) + 2H_2O(l)$
   (2) The liberated iodine reacts with thiosulphate ions as fast as it is formed and is reduced back to iodide ions till all the thiosulphate ions are oxidised to tetrathionate ions.
   $I(g) + 2\ S_2O_3^{2-}(aq) \rightarrow S_4O_6^{2-}(aq) + 2I^{-}(aq)$
   (3) After the complete consumption of thiosulphate ions, iodine forms intense blue complex with starch.
   (4) None of the above

6. Which of the following statements regarding precautions in determining the enthalpy of dissolution of copper sulphate experiment is TRUE?
(1) In the determination of calorimeter constant, record the temperature of hot water just after mixing.
(2) We use very large amounts of copper sulphate
(3) We stir the solution vigorously to dissolve the solid and record the temperature
(4) In the determination of calorimeter constant, record the temperature of hot water just before mixing.

7. What is the colour of the complex formed in kinetic study of the reaction of iodide ion with H_2O_2 ?
(1) Red
(2) White
(3) Blue
(4) Yellow

8. What is the formula of copper metaborate?
(1) $Cu(BO)_2$
(2) $Cu\left(BO_2\right)_2$
(3) CuO
(4) CuOB

9. The correct formula of Mohr salt is:
(1) $2KAl\left(SO_4\right)_2 \cdot 12H_2O$
(2) $K_2SO_4 \cdot Al_2\left(SO_4\right)_3 \cdot 24H_2O$
(3) $FeSO_4 \cdot \left(NH_4\right)_2 SO_4 \cdot 6H_2O$
(4) $FeSO_4Na_2SO_4 \cdot 12H_2O$

10. Select the incorrect statement about lyophilic sol.
(1) Egg albumin sol is a lyophilic sol.
(2) Stability of Iyophilic sols is primarily due to the solvation of colloidal particles by the solvent.
(3) The lyophilic sols cannot be directly formed by mixing and shaking the substance with a suitable liquid.
(4) Ferric hydroxide is not a lyophilic sol.

11. Which of the following will not be formed when $NaHCO_3$ solution is added to aq. $FeCl_3$ solution?
(1) CO_2
(2) $Fe(OH)_3$
(3) $Fe\left(HCO_3\right)_3$
(4) NaCl

12. Na_2CO_3 bead test of the salt (X) yield yellow beads. Therefore, (X) is:
(1) MnO

(2) Cr_2O_3
(3) CuO
(4) NiO

13. Soda extract is prepared by:
(1) Fusing soda and mixture and then extracting with water
(2) Dissolving $NaHCO_3$ and mixture in dil. HCl
(3) Boiling Na_2CO_3 and mixture in dil. HCl
(4) Boiling Na_2CO_3 and mixture in distilled water

14. $(P) + HCl \rightarrow Q(ppt) + HNO_3$
Q + KI $\rightarrow$ Yellow ppt.
Therefore, (P) is
(1) $Pb(NO_3)_2$
(2) $AgNO_3$
(3) $Hg_2(NO_3)_2$
(4) All of these

15. Ammonium dichromate on heating gives:
(1) NO
(2) N_2O
(3) NO_2
(4) N_2

16. When MnO_2 and H_2SO_4 are added to NaCl, the greenish yellow gas liberated is:
(1) Cl_2
(2) NH_3
(3) N_2
(4) H_2

17. When Cl_2 water is added to a salt solution containing chloroform, chloroform layer turns violet. The salt contains:
(1) Cl^-
(2) 1
(3) NO_3^-
(4) S^{2-}

18. Na_2CO_3 cannot be used to identify:
(1) CO_3^{2-}
(2) SO_3^{2-}

(3) S^{2-}
(4) SO_4^{2-}

19. A white crystalline substance dissolves in water. On passing H_2S in this solution, a black precipitate is obtained. The black precipitate dissolves completely in hot HNO_3. On adding a few drops of conc. H_2SO_4, a white precipitate is obtained. This precipitate is that of:
(1) $BaSO_4$
(2) $SrSO_4$
(3) $PbSO_4$
(4) $CuSO_4$

20. For the detection of ammonia in Nessler's reagent, the active species:
(1) Hg_2Cl_2
(2) Mg^{2+}
(3) Hg_2I_2
(4) HgI_4^{2-}

21. To prepare 1 normal solution of $KMnO_4$, how many grams of $KMnO_4$ are required if the solution is to be used in acidic medium for oxidation.
(1) 158 g
(2) 31.60 g
(3) 62.0 g
(4) 790 g

22. The reagent NH_4Cl and aqueous NH_3 will precipitate:
(1) Ca^{2+}
(2) Al^{3+}
(3) Mg^{2+}
(4) Zn^{2+}

23. Passing H_2S gas into a mixture of $Mn^{2+}, Ni^{2+}, Cu^{2+}$, and Hg^{2+} ions in an acidified aqueous solution precipitates:
(1) CuS and HgS
(2) MnS and CuS
(3) MnS and NiS
(4) NiS and HgS

24. The compound which cannot reduce Fehling solution is:
(1) HCHO
(2) HCOOH
(3) CH_3CHO
(4) CH_3COOH

25. In alkaline medium dimethyl glyoxime is used for the test of:
    (1) Cobalt
    (2) Zinc
    (3) Manganese
    (4) Nickel

26. Which of the following sulphides is yellow?
    (1) ZnS
    (2) CdS
    (3) NiS
    (4) CoS

27. In borax bead test, which of the following compound is formed?
    (1) Meta borate
    (2) Tetra borate
    (3) Borazine
    (4) Ortho borate

28. The brown colour during the test of NO_3^- is due to the formation of complex ion with the formula:
    (1) $\left[Fe(H_2O)_6\right]^{2+}$
    (2) $\left[Fe(NO)(CN)_5\right]^{2+}$
    (3) $\left[Fe(H_2O)_5\,NO\right]^{2+}$
    (4) $\left[Fe(H_2O)(NO)_5\right]^{2+}$

29. Strontium sulphate is mixed with conc. HCl and flame test is performed. the colour of flame is.
    (1) Yellow
    (2) Violet
    (3) Green
    (4) Crimson Red

30. Which of the following is not a preliminary test used to detect ions?
    (1) Boarax bead test
    (2) Flame test
    (3) Brown ring test
    (4) Charcoal cavity test

31. The gas produced in the reaction given below at $25^{\circ}C$ is
    $Na_2C_2O_4 + H_2SO_4\,(conc.) \rightarrow$
    (1) SO_2 only
    (2) CO_2 only
    (3) CO_2 and CO both
    (4) Na_2SO_4

32. Which of the following white ppts are insoluble in NH_3 ?.
    (1) AgCl
    (2) Hg_2Cl_2
    (3) $PbCl_2$
    (4) All of these

33. Choose the correct pair regarding solubility:
    (1) CuS < MnS
    (2) CoS > ZnS
    (3) CdS > NiS
    (4) CuS > ZnS

34. Which of the following is correct statement:
    (1) Cu^+ can undergo disproportionation in aqueous solution
    (2) $Cu^{+2}(aq)$ is more stable than $Cu^+(aq)$
    (3) Hydration energy of Cu^{2+} is more negative than Cu^+
    (4) All of these

35. When SO_2 gas is bubbled into H_2S gas
    (1) Lyophilic sol of sulphur is formed
    (2) Lyophobic sol of sulphur is formed
    (3) Suspension of water and sulphur is formed
    (4) A true solution of sulphur is water is formed

36. When H_2S is passed through an ammoniacal salt solution (x), a white precipitate is obtained. The (x) can be a :
    (1) Cobalt salt
    (2) Nickel salt
    (3) Manganese salt
    (4) Zinc salt

37. Which of the following is insoluble in aqua regia?
    (1) HgS
    (2) NiS
    (3) CoS
    (4) Ag_2S

38. The reagent NH_4Cl and aqueous NH_3 precipitates:
    (1) Ca^{2+}
    (2) Al^{3+}
    (3) Mg^{2+}
    (4) Zn^{2+}

39. The white precipitates dissolves in ammonium acetate solution on boiling. A black precipitate appears on passing H_2S gas in its aqueous solution. The black precipitate dissolves in hot HNO_3. This white precipitate is of:

(1) $BaSO_4$

(2) $SrSO_4$

(3) $PbSO_4$

(4) $CdSO_4$

40. Which among the following acid will result in maximum evolution of heat on neutralization with KOH ?

(1) HCl

(2) HBr

(3) HI

(4) HF

41. Specific heat capacity of pure water is nearly:

(1) $4.18\ J\ g^{-1}\ K^{-1}$

(2) $2.08\ J\ g^{-1}\ K^{-1}$

(3) $1\ J\ g^{-1}\ K^{-1}$

(4) $8.36\ J\ g^{-1}\ K^{-1}$

42. Iodine solution is prepared by dissolving iodine in:

(1) NaOH

(2) Na_2CO_3

(3) HCl

(4) KI

43. Given below are two statements one is labelled as Assertion (A) and the other is labelled as Reason (R).
Assertion (A) : Starch is used as an indicator in iodometric and iodimetric titrations.
Reason (R) : Starch forms iodostarch complex with iodine, which is blue coloured.

(1) Both (A) and (R) are correct, and (R) is the correct explanation of (A)

(2) Both (A) and (R) are correct but (R) is not the correct explanation of (A)

(3) (A) is correct, but (R) is incorrect

(4) (A) is incorrect, but (R) is correct

44. The stabilization of the dispersed phase in a lyophobic sol is due to

(1) The viscosity of the medium

(2) The surface tension of the medium

(3) Affinity for the medium

(4) The formation of an electrical double layer between the two phases

45. When dilute aqueous solution of $AgNO_3$ (excess) is added to KI solution, positively charged sol particles of AgI are formed due to adsorption of ion:

(1) K^+

(2) Ag^+

(3) I^+
(4) NO_3^-

46. Carbylamine test for detection of primary amines leads to the formation of :
(1) RCN
(2) $RN \equiv C$
(3) RNHOH
(4) $RCONH_2$

47. Phenol is soluble in :
(1) Dil. HCl
(2) Both NaOH solution and dilute HCl
(3) $NaHCO_3$ solution
(4) NaOH solution

48. Which of the following radicals produce a reddish-brown gas on reaction with conc. H_2SO_4 :
(1) Br
(2) CO_3^{2-}
(3) NO_2^-
(4) 1

49. Lassaigne's test is used in qualitative analysis to detect :
(1) Nitrogen
(2) Sulphur
(3) Chlorine
(4) All of these

50. The anion which does not react with dil. H_2SO_4 is :
(1) CO_3^{2-}
(2) S_2^-
(3) NO_3^-
(4) NO_2^-

#ANSWER#

CHEMISTYR TEST PAPER - 1

CHEMISTRY : Principles Related to Practical Chemistry

1. (1)	6. (4)	11. (1)
2. (3)	7. (4)	12. (1)
3. (4)	8. (4)	13. (3)
4. (1)	9. (4)	14. (2)
5. (1)	10. (3)	15. (4)

16. (3)
17. (4)
18. (3)
19. (4)
20. (2)
21. (2)
22. (2)
23. (2)
24. (4)
25. (3)
26. (2)
27. (4)
28. (1)
29. (2)
30. (4)
31. (4)
32. (1)
33. (1)
34. (3)
35. (1)
36. (2)
37. (4)
38. (3)
39. (2)
40. (3)
41. (3)
42. (2)
43. (2)
44. (3)
45. (2)
46. (1)
47. (4)
48. (2)
49. (2)
50. (1)

CHEMISTYR TEST PAPER - 2

CHEMISTRY : Principles Related to Practical Chemistry

1. (2)
2. (4)
3. (4)
4. (4)
5. (4)
6. (4)
7. (3)
8. (2)
9. (3)
10. (3)
11. (3)
12. (2)
13. (4)
14. (1)
15. (4)
16. (1)
17. (2)
18. (1)
19. (3)
20. (4)
21. (2)
22. (2)
23. (1)
24. (4)
25. (4)
26. (2)
27. (1)
28. (3)
29. (4)
30. (3)
31. (3)
32. (3)
33. (1)
34. (4)
35. (2)
36. (4)
37. (4)
38. (2)
39. (3)
40. (4)
41. (1)
42. (4)
43. (1)
44. (4)
45. (2)
46. (2)
47. (4)
48. (1)
49. (4)
50. (3)