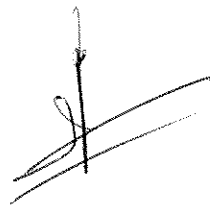


AWARD LIST
SCREENING TEST (WRITTEN)
FOR THE POST OF TRAINED GRADUATE TEACHERS (TGT) (COTNRACT)
UNIVERSITY MODEL SCHOOL, UNIVERSITY OF PESHAWAR

Dated.20.01.2023

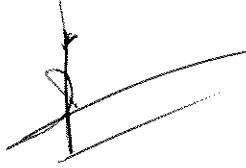
S#	Name of applicant with parentage	Subject	Marks	
1.	Durr-e-Shahwar Zafar D/O Mr. Zafar Mumtaz	Chemistry	30	6
2.	Farah Jamshed D/O Qazi Jamshedadam Ali	Chemistry	—	
3.	Halima Bibi D/O Sher Bahadar Khan	Chemistry	29	5-8
4.	Huma Iqbal D/O Mr. Muhammad Iqbal	Chemistry	15	3
5.	Laila Gulfam D/O Mr. Gulfam	Chemistry	17	3-4
6.	Maheen Rahim D/O Mr. Fazal e Rahim	Chemistry	24	4-8
7.	Saima Momin D/O Mr. Momin Khan	Chemistry	23	4-6
8.	Sana Nabi D/O Mr. Muhammad Nabi	Chemistry	33	6-6
9.	Shaista Zeb D/O Mr. Abdul Saboor Khan	Chemistry	21	4-2
10.	Shumaila Javed D/O Mr. Javed Iqbal	Chemistry	—	
11.	Sumera Rehman D/O Mr. Sher Rehman	Chemistry	20	4
12.	Wagma D/O Mr. Momin Khan	Chemistry	23	4-6
13.	Rozina D/O Mr. Sher Daraz Khan	Chemistry	29	5-8



AWARD LIST
SCREENING TEST (WRITTEN)
FOR THE POST OF TRAINED GRADUATE TEACHERS (TGT) (COTNRCT)
UNIVERSITY PUBLIC SCHOOL, UNIVERSITY OF PESHAWAR

Dated.20.01.2023

S#	Name of applicant with parentage	Subject	Marks	
1.	Bakhtawara D/O Malik Abdul baser Khan	Chemistry	—	
2.	Huma Iqbal D/O Mr. Muhammad Iqbal	Chemistry	—	(15) 3
3.	Muhammad Naveed S/O Mr. Jehangir Khan	Chemistry	18	3.6
4.	Muhammad Saqib S/O Mr. Muhammad Shahab	Chemistry	—	
5.	Qaisar Khan S/O Mr. Ayub Khan	Chemistry	35	7
6.	Rozina D/O Mr. Sher Daraz Khan	Chemistry	—	(29) 5.8
7.	Saif Ullah Khan S/O Haji Lal Khan	Chemistry	27	5.4
8.	Sana Nabi D/O Mr. Muhammad Nabi	Chemistry	—	(33) 6.5



DURR-E-SHEHWAR ZAFAR
D/O ZAFAR MUMTAZ
17301-8670554-0

**Screening test for the appointment of
TGT (Contract)**

Subject: **Chemistry**

Note: Choose the correct answer and all questions are compulsory.

Q-1. The process of identifying the component present in a sample is called

- A. Quantitative analysis
- B. Qualitative analysis
- C. Volumetric analysis
- D. Gravimetric analysis

Q-2. Conductometry is based on

- A. Electric current
- B. Electrical potential
- C. Dielectric constant
- D. Electrical conductance

Q-3. Which of the following technique is based on the emission of light radiation?

- A. Flame photometry
- B. Atomic absorption spectrophotometry
- C. Raman spectroscopy
- D. Conductometry

Q-4. Which of the following method is based on the solubility difference between the analyte and the unwanted components

- A. Distillation
- B. Complex formation
- C. Electrodeposition
- D. Precipitation

Q-5. Which of the following technique is based on the rate of reaction?

- A. Isotopic dilution analysis
- B. Flow injection analysis
- C. Mass spectrometry
- D. None

Q-6. The term accuracy refers to how near the observed value is to

- A. Mean value
- B. Significant value
- C. Actual value
- D. None

Q-7. When HCl is titrated against NaOH the pH at equivalence point will be

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-8. When CH₃COOH is titrated against NaOH the pH at the end point is

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-9. Which of the following is best indicator for titration of NH₄OH with HCl?

- A. Methyl red
- B. Methyl orange
- C. Phenolphthaleine
- D. None

Q-10. Soap is a salt of compound known as

- A. Acetic acid
- B. Formic acid
- C. Fatty acid
- D. Amino acid

Q-11. The colour of water in a lake is due to

- A. Excessive growth of sea weeds
- B. Algae
- C. Grass
- D. Other pollution

Q-12. Cement is a mixture of

- A. Clay and clinker
- B. Clay, limestone and gypsum
- C. Limestone and gypsum
- D. Limestone and clay

Q-13. The percentage of nitrogen in urea is

- A. 36%
- B. 46%
- C. 56%
- D. 66%

Q-14. The percentage of nitrogen in ammonia is

- A. 32%
- B. 42%
- C. 72%
- D. 82%

30
50

Q-15. Copper occur in nature as

- A. Native
- B. Combined
- C. Both
- D. None

Q-16. The formula of Cryolite is

- A. Na_3AlF_3
- B. Na_3AlF_4
- C. Na_3AlF_6
- D. None

Q-17. Cells with nuclear envelop belongs to

- A. Prokaryotes
- B. Eukaryotes
- C. Both
- D. None

Q-18. The diameter of a typical plant or animal cell is

- A. 1 to 5 μm
- B. 5 to 10 μm
- C. 10 to 50 μm
- D. 5 to 100 μm

Q-19. Acids are substances whose aqueous solutions turned blue litmus red and tasted sour stated by

- A. Davy
- B. Liebig
- C. Boyle
- D. Rouelle

Q-20. Which of the following statement is not true regarding buffers?

- A. They are made up of weak acid and its salts
- B. They are made up of weak base and its salts
- C. they tend to resist a change in pH value
- D. they are made up of strong acid and weak base

Q-21. Relative order of acidity of HF, HCl, HBr and HI acids is

- A. $\text{HCl} > \text{HBr} > \text{HI} > \text{HF}$
- B. $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$
- C. $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$
- D. $\text{HF} > \text{HI} > \text{HCl} > \text{HBr}$

Q-22. The pH of 0.1 M HCl solution is

- A. 0.01
- B. 0.1
- C. 0.2
- D. 1

Q-23. Which of the following amino acid have two carboxylic groups?

- A. Aspartic acid
- B. Histidine
- C. Glutamine
- D. none

Q-24. How many isomeric aldoses are possible for the molecular formula $\text{C}_6\text{H}_{12}\text{O}_6$

- A. 2
- B. 4
- C. 6
- D. 16

Q-25. Epimers are compounds that differ in

- A. functional group
- B. configuration at alpha carbon
- C. configuration at any carbon
- D. none

Q-26. Select a basic amino acid

- A. Glycine
- B. Cystine
- C. Alanine
- D. Lysine

Q-27. Apoenzyme is

- A. Hydrolytic enzyme
- B. Oxidative enzyme
- C. Coenzyme
- D. Protein part of enzyme after removal of coenzyme

Q-28. A sugar present in DNA is

- A. D-ribose
- B. D-glucose
- C. 2-Deoxy-D-Ribose
- D. None

Q-29. Which vitamin is responsible for vision?

- A. Retinol
- B. Vit D
- C. Tocopherols
- D. Vit. K

Q-30. Which of the following is periodic property?

- A. Atomic volume
- B. Metallic character
- C. Ionization energy
- D. All

- Q-31. Which of the following has largest size?
 A. Na^+ B. Cl^- C. F^- D. Fe^{2+} ✓
- Q-32. Which group contains elements that exist as monoatomic molecules?
 A. 1 B. 2 C. 14 D. 18 ✓
- Q-33. Which of the following element is more metallic?
 A. P B. As C. Sb D. Bi ✓
- Q-34. Which of the following factor effect ionization energy?
 A. Atomic radius B. Nuclear charge C. Shielding effect D. All ✓
- Q-35. Which of the following element is metalloid?
 A. Pb B. carbon C. As D. Mg ✓
- Q-36. Which of the following compound does not following octet rule?
 A. CS_2 B. PBr_3 C. IBr D. BrF_5 ✓
- Q-37. Which of the following halides have the lowest melting point?
 A. NaCl B. NaF C. NaBr D. NaI ✓
- Q-38. Which of the following halides has zero dipole moment?
 A. NH_3 B. Cl_2 C. NF_3 D. CHCl_3 ✗
- Q-39. The state of hybridization of carbon in CO_2 is?
 A. sp B. sp^2 C. sp^3 D. dsp^2 ✓
- Q-40. Which one of the following is non-polar?
 A. CH_2Cl B. CCl_4 C. CHCl_3 D. CHCl_2 ✓
- Q-41. Silvite is an ore of...?
 A. Ca B. Mg C. Ba D. K ✗
- Q-42. Which elements are non metals?
 A. N & P B. As & Sb C. Sb & Bi D. Ba & Bi ✗
- Q-43. Among oxides of nitrogen all are gases except
 A. N_2O_5 B. N_2O C. NO D. N_2O_3 ✗
- Q-44. All halogens form oxyacide except
 A. Flourine B. Chlorine C. Bromine D. Iodine ✗
- Q-45. Compunds HCN and HNC are
 A. Tautomers B. Metamers C. functional isomers D. Conformers ✗
- Q-46. Cetane is
 A. n-hexane B. n-pentadecane C. n-octane D. n-hexadecane ✓
- Q-47. Which among the following is not nucleophile?
 A. CH_3NH_3 B. CH_2CH_2 C. CH_3^+ D. OH^- ✓
- Q-48. Which of the following is strong acid?
 A. Benzoic acid B. m-nitrobenzoic acid C. o-nitrobenzoic acid D. p-nitrobenzoic acid ✓
- Q-49. Which of the following orbital does not make sense?
 A. 6f B. 4f C. 7s D. 5g ✓
- Q-50. The maxium value of order of reaction may be?
 A. 1 B. 2 C. 3 D. 4 ✗
- *****

Name → Laila Gulfam

F. Name → Gulfam

17
50

Screening test for the appointment of TGT (Contract)

Subject: Chemistry

Note: Choose the correct answer and all questions are compulsory.

Q-1. The process of identifying the component present in a sample is called

- A. Quantitative analysis
- B. Qualitative analysis
- C. Volumetric analysis
- D. Gravimetric analysis

Q-2. Conductometry is based on

- A. Electric current
- B. Electrical potential
- C. Dielectric constant
- D. Electrical conductance

Q-3. Which of the following technique is based on the emission of light radiation?

- A. Flame photometry
- B. Atomic absorption spectrophotometry
- C. Raman spectroscopy
- D. Conductometry

Q-4. Which of the following method is based on the solubility difference between the analyte and the unwanted components

- A. Distillation
- B. Complex formation
- C. Electrodeposition
- D. Precipitation

Q-5. Which of the following technique is based on the rate of reaction?

- A. Isotopic dilution analysis
- B. Flow injection analysis
- C. Mass spectrometry
- D. None

Q-6. The term accuracy refers to how near the observed value is to

- A. Mean value
- B. Significant value
- C. Actual value
- D. None

Q-7. When HCl is titrated against NaOH the pH at equivalence point will be

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-8. When CH₃COOH is titrated against NaOH the pH at the end point is

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-9. Which of the following is best indicator for titration of NH₄OH with HCl?

- A. Methyl red
- B. Methyl orange
- C. Phenolphthaleine
- D. None

Q-10. Soap is a salt of compound known as

- A. Acetic acid
- B. Formic acid
- C. Fatty acid
- D. Amino acid

Q-11. The colour of water in a lake is due to

- A. Excessive growth of sea weeds
- B. Algae
- C. Grass
- D. Other pollution

Q-12. Cement is a mixture of

- A. Clay and clinker
- B. Clay, limestone and gypsum
- C. Limestone and gypsum
- D. Limestone and clay

Q-13. The percentage of nitrogen in urea is

- A. 36%
- B. 46%
- C. 56%
- D. 66%

Q-14. The percentage of nitrogen in ammonia is

- A. 32%
- B. 42%
- C. 72%
- D. 82%

Q-15. Copper occur in nature as

- A. Native
- B. Combined
- C. Both
- D. None

Q-16. The formula of Cryolite is

- A. Na_3AlF_3
- B. Na_3AlF_4
- C. Na_3AlF_5
- D. None

Q-17. Cells with nuclear envelop belongs to

- A. Prokaryotes
- B. Eukaryotes
- C. Both
- D. None

Q-18. The diameter of a typical plant or animal cell is

- A. 1 to 5 μm
- B. 5 to 10 μm
- C. 10 to 50 μm
- D. 5 to 100 μm

Q-19. Acids are substances whose aqueous solutions turned blue litmus red and tasted sour stated by

- A. Davy
- B. Liebig
- C. Boyle
- D. Rouelle

Q-20. Which of the following statement is not true regarding buffers?

- A. They are made up of weak acid and its salts
- B. They are made up of weak base and its salts
- C. they tend to resist a change in pH value
- D. they are made up of strong acid and weak base

Q-21. Relative order of acidity of HF, HCl, HBr and HI acids is

- A. $\text{HCl} > \text{HBr} > \text{HI} > \text{HF}$
- B. $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$
- C. $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$
- D. $\text{HF} > \text{HI} > \text{HCl} > \text{HBr}$

Q-22. The pH of 0.1 M HCl solution is

- A. 0.01
- B. 0.1
- C. 0.2
- D. 1

Q-23. Which of the following amino acid have two carboxylic groups?

- A. Aspartic acid
- B. Histidine
- C. Gluatmine
- D. none

Q-24. How many isomeric aldoses are possible for the molecular formula $\text{C}_6\text{H}_{12}\text{O}_6$

- A. 2
- B. 4
- C. 6
- D. 16

Q-25. Epimers are compounds that differ in

- A. functional group
- B. configuration at alpha carbon
- C. configuration at any carbon
- D. none

Q-26. Select a basic amino acid

- A. Glycine
- B. Cystine
- C. Alanine
- D. Lysine

Q-27. Apoenzyme is

- A. Hydrolytic enzyme
- B. Oxidative enzyme
- C. Coenzyme
- D. Protein part of enzyme after removal of coenzyme

Q-28. A sugar present in DNA is

- A. D-ribose
- B. D-glucose
- C. 2-Deoxy-D-Ribose
- D. None

Q-29. Which vitamin is responsible for vision?

- A. Retinol
- B. Vit D
- C. Tocopherols
- D. Vit. K

Q-30. Which of the following is periodic property?

- A. Atomic volume
- B. Metallic character
- C. Ionization energy
- D. All

Q-31. Which of the following has largest size ?
A. Na^+ B. Cl^- C. F^- D. Fe^{2+}

Q-32. Which group contains elements that exist as monoatomic molecules?
A. 1 B. 2 C. 14 D. 18

Q-33. Which of the following element is more metallic?
A. P B. As C. Sb D. Bi

Q-34. Which of the following factor effect ionization energy?
A. Atomic radius B. Nuclear charge
C. Shielding effect D. All

Q-35. Which of the following element is metalloid?
A. Pb B. carbon C. As D. Mg

Q-36. Which of the following compound does not following octet rule?
A. CS_2 B. PBr_3 C. IBr D. BrF_5

Q-37. Which of the following halides have the lowest melting point?
A. NaCl B. NaF C. NaBr D. NaI

Q-38. Which of the following halides has zero dipole moment?
A. NH_3 B. Cl_2 C. NF_3 D. CHCl_3

Q-39. The state of hybridization of carbon in CO_2 is?
A. sp B. sp^2 C. sp^3 D. dsp²

Q-40. Which one of the following is non-polar?
A. CH_2Cl B. CCl_4 C. CHCl_3 D. CHCl_2

Q-41. Silvite is an ore of...?
A. Ca B. Mg C. Ba D. K

Q-42. Which elements are non metals?
A. N & P B. As & Sb C. Sb & Bi D. Ba & Bi

Q-43. Among oxides of nitrogen all are gases except
A. N_2O_5 B. N_2O C. NO D. N_2O_3

Q-44. All halogens form oxyacide except
A. Flourine B. Chlorine C. Bromine D. Iodine

Q-45. Compunds HCN and HNC are
A. Tautomers B. Metamers
C. functional isomers D. Conformers

Q-46. Cetane is
A. n-hexane B. n-pentadecane
C. n-octane D. n-hexadecane

Q-47. Which among the following is not nucleophile ?
A. CH_3NH_3 B. CH_2CH_2
C. CH_3^+ D. OH^-

Q-48. Which of the following is strong acid?
A. Benzoic acid B. m-nitrobenzoic acid
C. o-nitrobenzoic acid D. p-nitrobenzoic acid

Q-49. Which of the following orbital does not make sense?
A. 6f B. 4f C. 7s D. 5g

Q-50. The maxium value of order of reaction may be?
A. 1 B. 2 C. 3 D. 4

Name Sana Nabi
Father Name: Muhammad Nabi
TGT UPS & UMS : S.No # 8

33
50

Screening test for the appointment of TGT (Contract)

Subject: Chemistry

Note: Choose the correct answer and all questions are compulsory.

Q-1. The process of identifying the component present in a sample is called

- A. Quantitative analysis
- B. Qualitative analysis
- C. Volumetric analysis
- D. Gravimetric analysis

Q-2. Conductometry is based on

- A. Electric current
- B. Electrical potential
- C. Dielectric constant
- D. Electrical conductance

Q-3. Which of the following technique is based on the emission of light radiation?

- A. Flame photometry
- B. Atomic absorption spectrophotometry
- C. Raman spectroscopy
- D. Conductometry

Q-4. Which of the following method is based on the solubility difference between the analyte and the unwanted components

- A. Distillation
- B. Complex formation
- C. Electrodeposition
- D. Precipitation

Q-5. Which of the following technique is based on the rate of reaction?

- A. Isotopic dilution analysis
- B. Flow injection analysis
- C. Mass spectrometry
- D. None

Q-6. The term accuracy refers to how near the observed value is to

- A. Mean value
- B. Significant value
- C. Actual value
- D. None

Q-7. When HCl is titrated against NaOH the pH at equivalence point will be

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-8. When CH₃COOH is titrated against NaOH the pH at the end point is

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-9. Which of the following is best indicator for titration of NH₄OH with HCl?

- A. Methyl red
- B. Methyl orange
- C. Phenolphthaleine
- D. None

Q-10. Soap is a salt of compound known as

- A. Acetic acid
- B. Formic acid
- C. Fatty acid
- D. Amino acid

Q-11. The colour of water in a lake is due to

- A. Excessive growth of sea weeds
- B. Algae
- C. Grass
- D. Other pollution

Q-12. Cement is a mixture of

- A. Clay and clinker
- B. Clay, limestone and gypsum
- C. Limestone and gypsum
- D. Limestone and clay

Q-13. The percentage of nitrogen in urea is

- A. 36%
- B. 46%
- C. 56%
- D. 66%

Q-14. The percentage of nitrogen in ammonia is

- A. 32%
- B. 42%
- C. 72%
- D. 82%

Q-15. Copper occur in nature as

- A. Native
- B. Combined
- C. Both
- D. None

Q-16. The formula of Cryolite is

- A. Na_3AlF_3
- B. Na_3AlF_4
- C. Na_3AlF_5
- D. None

Q-17. Cells with nuclear envelop belongs to

- A. Prokaryotes
- B. Eukaryotes
- C. Both
- D. None

Q-18. The diameter of a typical plant or animal cell is

- A. 1 to 5 μm
- B. 5 to 10 μm
- C. 10 to 50 μm
- D. 5 to 100 μm

Q-19. Acids are substances whose aqueous solutions turned blue litmus red and tasted sour stated by

- A. Davy
- B. Liebig
- C. Boyle
- D. Rouelle

Q-20. Which of the following statement is not true regarding buffers?

- A. They are made up of weak acid and its salts
- B. They are made up of weak base and its salts
- C. they tend to resist a change in pH value
- D. they are made up of strong acid and weak base

Q-21. Relative order of acidity of HF, HCl, HBr and HI acids is

- A. $\text{HCl} > \text{HBr} > \text{HI} > \text{HF}$
- B. $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$
- C. $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$
- D. $\text{HF} > \text{HI} > \text{HCl} > \text{HBr}$

Q-22. The pH of 0.1 M HCl solution is

- A. 0.01
- B. 0.1
- C. 0.2
- D. 1.

Q-23. Which of the following amino acid have two carboxylic groups?

- A. Aspartic acid
- B. Histidine
- C. Gluatmine
- D. none

Q-24. How many isomeric aldoses are possible for the molecular formula $\text{C}_6\text{H}_{12}\text{O}_6$

- A. 2
- B. 4
- C. 6
- D. 16

Q-25. Epimers are compounds that differ in

- A. functional group
- B. configuration at alpha carbon
- C. configuration at any carbon
- D. none

Q-26. Select a basic amino acid

- A. Glycine
- B. Cystine
- C. Alanine
- D. Lysine

Q-27. Apoenzyme is

- A. Hydrolytic enzyme
- B. Oxidative enzyme
- C. Coenzyme
- D. Protein part of enzyme after removal of coenzyme

Q-28. A sugar present in DNA is

- A. D-ribose
- B. D-glucose
- C. 2-Deoxy-D-Ribose
- D. None

Q-29. Which vitamin is responsible for vision?

- A. Retinol
- B. Vit D
- C. Tocopherols
- D. Vit. K

Q-30. Which of the following is periodic property?

- A. Atomic volume
- B. Metallic character
- C. Ionization energy
- D. All

Q-31. Which of the following has largest size ?
A. Na^+ B. Cl^- C. F^- D. Fe^{2+}

Q-32. Which group contains elements that exist as monoatomic molecules?
A. 1 B. 2 C. 14 D. 18

Q-33. Which of the following element is more metallic?
A. P B. As C. Sb D. Bi

Q-34. Which of the following factor effect ionization energy?
A. Atomic radius B. Nuclear charge
C. Shielding effect D. All

Q-35. Which of the following element is metalloid?
A. Pb B. carbon C. As D. Mg

Q-36. Which of the following compound does not following octet rule?
A. CS_2 B. PBr_3 C. IBr D. BrF_5

Q-37. Which of the following halides have the lowest melting point?
A. NaCl B. NaF C. NaBr D. NaI

Q-38. Which of the following halides has zero dipole moment?
A. NH_3 B. Cl_2 C. NF_3 D. CHCl_3

Q-39. The state of hybridization of carbon in CO_2 is?
 A. sp B. sp^2 C. sp^3 D. dsp²

Q-40. Which one of the following is non-polar?
A. CH_2Cl B. CCl_4 C. CHCl_3 D. CHCl_2

Q-41. Silvite is an ore of...?
A. Ca B. Mg C. Ba D. K

Q-42. Which elements are non metals?
 A. N & P B. As & Sb C. Sb & Bi D. Ba & Bi

Q-43. Among oxides of nitrogen all are gases except
 A. N_2O_5 B. N_2O C. NO D. N_2O_3

Q-44. All halogens form oxyacide except
A. Flourine B. Chlorine C. Bromine D. Iodine

Q-45. Compounds HCN and HNC are
A. Tautomers B. Metamers
 C. functional isomers D. Conformers

Q-46. Cetane is
A. n-hexane B. n-pentadecane
C. n-octane D. n-hexadecane

Q-47. Which among the following is not nucleophile ?
A. CH_3NH_3 B. CH_2CH_2
 C. CH_3^+ D. OH^-

Q-48. Which of the following is strong acid?
A. Benzoic acid B. m-nitrobenzoic acid
C. o-nitrobenzoic acid D. p-nitrobenzoic acid

Q-49. Which of the following orbital does not make sense?
A. 6f B. 4f C. 7s D. 5g

Q-50. The maxium value of order of reaction may be?
A. 1 B. 2 C. 3 D. 4

Name = Shaista Zeb D/10 Abdul Saboor Khan

Screening test for the appointment of TGT (Contract)

Subject: Chemistry

Note: Choose the correct answer and all questions are compulsory.

Q-1. The process of identifying the component present in a sample is called

- A. Quantitative analysis
- B. Qualitative analysis
- C. Volumetric analysis
- D. Gravimetric analysis

Q-2. Conductometry is based on

- A. Electric current
- B. Electrical potential
- C. Dielectric constant
- D. Electrical conductance

Q-3. Which of the following technique is based on the emission of light radiation?

- A. Flame photometry
- B. Atomic absorption spectrophotometry
- C. Raman spectroscopy
- D. Conductometry

Q-4. Which of the following method is based on the solubility difference between the analyte and the unwanted components

- A. Distillation
- B. Complex formation
- C. Electrodeposition
- D. Precipitation

Q-5. Which of the following technique is based on the rate of reaction?

- A. Isotopic dilution analysis
- B. Flow injection analysis
- C. Mass spectrometry
- D. None

Q-6. The term accuracy refers to how near the observed value is to

- A. Mean value
- B. Significant value
- C. Actual value
- D. None

Q-7. When HCl is titrated against NaOH the pH at equivalence point will be

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-8. When CH₃COOH is titrated against NaOH the pH at the end point is

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-9. Which of the following is best indicator for titration of NH₄OH with HCl?

- A. Methyl red
- B. Methyl orange
- C. Phenolphthaleine
- D. None

Q-10. Soap is a salt of compound known as

- A. Acetic acid
- B. Formic acid
- C. Fatty acid
- D. Amino acid

Q-11. The colour of water in a lake is due to

- A. Excessive growth of sea weeds
- B. Algae
- C. Grass
- D. Other pollution

Q-12. Cement is a mixture of

- A. Clay and clinker
- B. Clay, limestone and gypsum
- C. Limestone and gypsum
- D. Limestone and clay

Q-13. The percentage of nitrogen in urea is

- A. 36%
- B. 46%
- C. 56%
- D. 66%

Q-14. The percentage of nitrogen in ammonia is

- A. 32%
- B. 42%
- C. 72%
- D. 82%

Q-15. Copper occur in nature as

- A. Native
- B. Combined
- C. Both
- D. None

Q-16. The formula of Cryolite is

- A. Na_3AlF_6
- B. Na_3AlF_4
- C. Na_3AlF_5
- D. None

Q-17. Cells with nuclear envelop belongs to

- A. Prokaryotes
- B. Eukaryotes
- C. Both
- D. None

Q-18. The diameter of a typical plant or animal cell is

- A. 1 to 5 μm
- B. 5 to 10 μm
- C. 10 to 50 μm
- D. 5 to 100 μm

Q-19. Acids are substances whose aqueous solutions turned blue litmus red and tasted sour stated by

- A. Davy
- B. Liebig
- C. Boyle
- D. Rouelle

Q-20. Which of the following statement is not true regarding buffers?

- A. They are made up of weak acid and its salts
- B. They are made up of weak base and its salts
- C. they tend to resist a change in pH value
- D. they are made up of strong acid and weak base

Q-21. Relative order of acidity of HF, HCl, HBr and HI acids is

- A. $\text{HCl} > \text{HBr} > \text{HI} > \text{HF}$
- B. $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$
- C. $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$
- D. $\text{HF} > \text{HI} > \text{HCl} > \text{HBr}$

Q-22. The pH of 0.1 M HCl solution is

- A. 0.01
- B. 0.1
- C. 0.2
- D. 1

Q-23. Which of the following amino acid have two carboxylic groups?

- A. Aspartic acid
- B. Histidine
- C. Glutamine
- D. none

Q-24. How many isomeric aldoses are possible for the molecular formula $\text{C}_6\text{H}_{12}\text{O}_6$

- A. 2
- B. 4
- C. 6
- D. 16

Q-25. Epimers are compounds that differ in

- A. functional group
- B. configuration at alpha carbon
- C. configuration at any carbon
- D. none

Q-26. Select a basic amino acid

- A. Glycine
- B. Cystine
- C. Alanine
- D. Lysine

Q-27. Apoenzyme is

- A. Hydrolytic enzyme
- B. Oxidative enzyme
- C. Coenzyme
- D. Protein part of enzyme after removal of coenzyme

Q-28. A sugar present in DNA is

- A. D-ribose
- B. D-glucose
- C. 2-Deoxy-D-Ribose
- D. None

Q-29. Which vitamin is responsible for vision?

- A. Retinol
- B. Vit D
- C. Tocopherols
- D. Vit. K

Q-30. Which of the following is periodic property?

- A. Atomic volume
- B. Metallic character
- C. Ionization energy
- D. All

- Q-31. Which of the following has largest size ?
 A. Na⁺ B. Cl⁻ C. F⁻ D. Fe²⁺ X
- Q-32. Which group contains elements that exist as monoatomic molecules?
 A. 1 B. 2 C. 14 D. 18 ✓
- Q-33. Which of the following element is more metallic?
 A. P B. As C. Sb D. Bi X
- Q-34. Which of the following factor effect ionization energy?
 A. Atomic radius B. Nuclear charge C. Shielding effect D. All ✓
- Q-35. Which of the following element is metalloid?
 A. Pb B. carbon C. As D. Mg X
- Q-36. Which of the following compound does not following octet rule?
 A. CS₂ B. PBr₃ C. IBr D. BrF₅ ✓
- Q-37. Which of the following halides have the lowest melting point?
 A. NaCl B. NaF C. NaBr D. NaI ✓
- Q-38. Which of the following halides has zero dipole moment?
 A. NH₃ B. Cl₂ C. NF₃ D. CHCl₃ X
- Q-39. The state of hybridization of carbon in CO₂ is?
 A. sp B. sp² C. sp³ D. dsp² X
- Q-40. Which one of the following is non-polar?
 A. CH₂Cl B. CCl₄ C. CHCl₃ D. CHCl₃ X
- Q-41. Silvite is an ore of..?
 A. Ca B. Mg C. Ba D. K ✓
- Q-42. Which elements are non metals?
 A. N & P B. As & Sb C. Sb & Bi D. Ba & Bi X
- Q-43. Among oxides of nitrogen all are gases except
 A. N₂O₅ B. N₂O C. NO D. N₂O₃ X
- Q-44. All halogens form oxyacide except
 A. Flourine B. Chlorine C. Bromine D. Iodine X
- Q-45. Compunds HCN and HNC are
 A. Tautomers B. Metamers C. functional isomers D. Conformers X
- Q-46. Cetane is
 A. n-hexane B. n-pentadecane C. n-octane D. n-hexadecane X
- Q-47. Which among the following is not nucleophile ?
 A. CH₃NH₃ B. CH₂CH₂ C. CH₃⁺ D. OH ✓
N/A accepted
- Q-48. Which of the following is strong acid?
 A. Benzoic acid B. m-nitrobenzoic acid C. o-nitrobenzoic acid D. p-nitrobenzoic acid X
- Q-49. Which of the following orbital does not make sense?
 A. 6f B. 4f C. 7s D. 5g ✓
- Q-50. The maxium value of order of reaction may be?
 A. 1 B. 2 C. 3 D. 4 ✓
- *****

Huma Iqbal
D/o Mohammad Iqbal

Screening test for the appointment of TGT (Contract)

Subject: **Chemistry**

Note: Choose the correct answer and all questions are compulsory.

Q-1. The process of identifying the component present in a sample is called

- A. Quantitative analysis
- B. Qualitative analysis
- C. Volumetric analysis
- D. Gravimetric analysis

Q-2. Conductometry is based on

- A. Electric current
- B. Electrical potential
- C. Dielectric constant
- D. Electrical conductance

Q-3. Which of the following technique is based on the emission of light radiation?

- A. Flame photometry
- B. Atomic absorption spectrophotometry
- C. Raman spectroscopy
- D. Conductometry

Q-4. Which of the following method is based on the solubility difference between the analyte and the unwanted components

- A. Distillation
- B. Complex formation
- C. Electrodeposition
- D. Precipitation

Q-5. Which of the following technique is based on the rate of reaction?

- A. Isotopic dilution analysis
- B. Flow injection analysis
- C. Mass spectrometry
- D. None

Q-6. The term accuracy refers to how near the observed value is to

- A. Mean value
- B. Significant value
- C. Actual value
- D. None

Q-7. When HCl is titrated against NaOH the pH at equivalence point will be

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-8. When CH_3COOH is titrated against NaOH the pH at the end point is

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-9. Which of the following is best indicator for titration of NH_4OH with HCl?

- A. Methyl red
- B. Methyl orange
- C. Phenolphthaleine
- D. None

Q-10. Soap is a salt of compound known as

- A. Acetic acid
- B. Formic acid
- C. Fatty acid
- D. Amino acid

Q-11. The colour of water in a lake is due to

- A. Excessive growth of sea weeds
- B. Algae
- C. Grass
- D. Other pollution

Q-12. Cement is a mixture of

- A. Clay and clinker
- B. Clay, limestone and gypsum
- C. Limestone and gypsum
- D. Limestone and clay

Q-13. The percentage of nitrogen in urea is

- A. 36%
- B. 46%
- C. 56%
- D. 66%

Q-14. The percentage of nitrogen in ammonia is

- A. 32%
- B. 42%
- C. 72%
- D. 82%

Q-15. Copper occur in nature as

- A. Native
- B. Combined
- C. Both
- D. None

Q-16. The formula of Cryolite is

- A. Na_3AlF_3
- B. Na_3AlF_4
- C. Na_3AlF_5
- D. None

Q-17. Cells with nuclear envelop belongs to

- A. Prokaryotes
- B. Eukaryotes
- C. Both
- D. None

Q-18. The diameter of a typical plant or animal cell is

- A. 1 to 5 μm
- B. 5 to 10 μm
- C. 10 to 50 μm
- D. 5 to 100 μm

Q-19. Acids are substances whose aqueous solutions turned blue litmus red and tasted sour stated by

- A. Davy
- B. Liebig
- C. Boyle
- D. Rouelle

Q-20. Which of the following statement is not true regarding buffers?

- A. They are made up of weak acid and its salts
- B. They are made up of weak base and its salts
- C. they tend to resist a change in pH value
- D. they are made up of strong acid and weak base

Q-21. Relative order of acidity of HF, HCl, HBr and HI acids is

- A. $\text{HCl} > \text{HBr} > \text{HI} > \text{HF}$
- B. $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$
- C. $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$
- D. $\text{HF} > \text{HI} > \text{HCl} > \text{HBr}$

Q-22. The pH of 0.1 M HCl solution is

- A. 0.01
- B. 0.1
- C. 0.2
- D. 1

Q-23. Which of the following amino acid have two carboxylic groups?

- A. Aspartic acid
- B. Histidine
- C. Glutamine
- D. none

Q-24. How many isomeric aldoses are possible for the molecular formula $\text{C}_6\text{H}_{12}\text{O}_6$

- A. 2
- B. 4
- C. 6
- D. 16

Q-25. Epimers are compounds that differ in

- A. functional group
- B. configuration at alpha carbon
- C. configuration at any carbon
- D. none

Q-26. Select a basic amino acid

- A. Glycine
- B. Cystine
- C. Alanine
- D. Lysine

Q-27. Apoenzyme is

- A. Hydrolytic enzyme
- B. Oxidative enzyme
- C. Coenzyme
- D. Protein part of enzyme after removal of coenzyme

Q-28. A sugar present in DNA is

- A. D-ribose
- B. D-glucose
- C. 2-Deoxy-D-Ribose
- D. None

Q-29. Which vitamin is responsible for vision?

- A. Retinol
- B. Vit D
- C. Tocopherols
- D. Vit. K

Q-30. Which of the following is periodic property?

- A. Atomic volume
- B. Metallic character
- C. Ionization energy
- D. All

Q-31. Which of the following has largest size ?
A. Na^+ B. Cl^- C. F^- D. Fe^{2+}

Q-32. Which group contains elements that exist as monoatomic molecules?
A. 1 B. 2 C. 14 D. 18

Q-33. Which of the following element is more metallic?
A. P B. As C. Sb D. Bi

Q-34. Which of the following factor effect ionization energy?
A. Atomic radius B. Nuclear charge
C. Shielding effect D. All

Q-35. Which of the following element is metalloid?
A. Pb B. carbon C. As D. Mg

Q-36. Which of the following compound does not following octet rule?
A. CS_2 B. PBr_3 C. IBr D. BrF_5

Q-37. Which of the following halides have the lowest melting point?
A. NaCl B. NaF C. NaBr D. NaI

Q-38. Which of the following halides has zero dipole moment?
A. NH_3 B. Cl_2 C. NF_3 D. CHCl_3

Q-39. The state of hybridization of carbon in CO_2 is?
A. sp B. sp^2 C. sp^3 D. dsp^2

Q-40. Which one of the following is non-polar?
A. CH_2Cl B. CCl_4 C. CHCl_3 D. CHCl_3

Q-41. Silvite is an ore of...?
A. Ca B. Mg C. Ba D. K

Q-42. Which elements are non metals?
A. N & P B. As & Sb C. Sb & Bi D. Ba & Bi

Q-43. Among oxides of nitrogen all are gases except
A. N_2O_5 B. N_2O C. NO D. N_2O_3

Q-44. All halogens form oxyacide except
A. Flourine B. Chlorine C. Bromine D. Iodine

Q-45. Compounds HCN and HNC are
A. Tautomers B. Metamers
C. functional isomers D. Conformers

Q-46. Cetane is
A. n-hexane B. n-pentadecane
C. n-octane D. n-hexadecane

Q-47. Which among the following is not nucleophile ?
A. CH_3NH_3 B. CH_2CH_2
C. CH_3^+ D. OH^-

Q-48. Which of the following is strong acid?
A. Benzoic acid B. m-nitrobenzoic acid
C. o-nitrobenzoic acid D. p-nitrobenzoic acid

Q-49. Which of the following orbital does not make sense?
A. 6f B. 4f C. 7s D. 5g

Q-50. The maxium value of order of reaction may be?
A. 1 B. 2 C. 3 D. 4

**Screening test for the appointment of
TGT (Contract)**

Subject: **Chemistry**

Note: Choose the correct answer and all questions are compulsory.

Q-1. The process of identifying the component present in a sample is called

- A. Quantitative analysis
- B. Qualitative analysis
- C. Volumetric analysis
- D. Gravimetric analysis

Q-2. Conductometry is based on

- A. Electric current
- B. Electrical potential
- C. Dielectric constant
- D. Electrical conductance

Q-3. Which of the following technique is based on the emission of light radiation?

- A. Flame photometry
- B. Atomic absorption spectrophotometry
- C. Raman spectroscopy
- D. Conductometry

Q-4. Which of the following method is based on the solubility difference between the analyte and the unwanted components

- A. Distillation
- B. Complex formation
- C. Electrodeposition
- D. Precipitation

Q-5. Which of the following technique is based on the rate of reaction?

- A. Isotopic dilution analysis
- B. Flow injection analysis
- C. Mass spectrometry
- D. None

Q-6. The term accuracy refers to how near the observed value is to

- A. Mean value
- B. Significant value
- C. Actual value
- D. None

Q-7. When HCl is titrated against NaOH the pH at equivalence point will be

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-8. When CH₃COOH is titrated against NaOH the pH at the end point is

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-9. Which of the following is best indicator for titration of NH₄OH with HCl?

- A. Methyl red
- B. Methyl orange
- C. Phenolphthaleine
- D. None

Q-10. Soap is a salt of compound known as

- A. Acetic acid
- B. Formic acid
- C. Fatty acid
- D. Amino acid

Q-11. The colour of water in a lake is due to

- A. Excessive growth of sea weeds
- B. Algae
- C. Grass
- D. Other pollution

Q-12. Cement is a mixture of

- A. Clay and clinker
- B. Clay, limestone and gypsum
- C. Limestone and gypsum
- D. Limestone and clay

Q-13. The percentage of nitrogen in urea is

- A. 36%
- B. 46%
- C. 56%
- D. 66%

Q-14. The percentage of nitrogen in ammonia is

- A. 32%
- B. 42%
- C. 72%
- D. 82%

29
50

Halima

Q-15. Copper occur in nature as

- A. Native
- B. Combined
- C. Both
- D. None

Q-16. The formula of Cryolite is

- A. Na_3AlF_3
- B. Na_3AlF_4
- C. Na_3AlF_5
- D. None

Q-17. Cells with nuclear envelop belongs to

- A. Prokaryotes
- B. Eukaryotes
- C. Both
- D. None

Q-18. The diameter of a typical plant or animal cell is

- A. 1 to 5 μm
- B. 5 to 10 μm
- C. 10 to 50 μm
- D. 5 to 100 μm

Q-19. Acids are substances whose aqueous solutions turned blue litmus red and tasted sour stated by

- A. Davy
- B. Liebig
- C. Boyle
- D. Rouelle

Q-20. Which of the following statement is not true regarding buffers?

- A. They are made up of weak acid and its salts
- B. They are made up of weak base and its salts
- C. they tend to resist a change in pH value
- D. they are made up of strong acid and weak base

Q-21. Relative order of acidity of HF, HCl, HBr and HI acids is

- A. $\text{HCl} > \text{HBr} > \text{HI} > \text{HF}$
- B. $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$
- C. $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$
- D. $\text{HF} > \text{HI} > \text{HCl} > \text{HBr}$

Q-22. The pH of 0.1 M HCl solution is

- A. 0.01
- B. 0.1
- C. 0.2
- D. 1

Q-23. Which of the following amino acid have two carboxylic groups?

- A. Aspartic acid
- B. Histidine
- C. Glutamine
- D. none

Q-24. How many isomeric aldoses are possible for the molecular formula $\text{C}_6\text{H}_{12}\text{O}_6$

- A. 2
- B. 4
- C. 6
- D. 16

Q-25. Epimers are compounds that differ in

- A. functional group
- B. configuration at alpha carbon
- C. configuration at any carbon
- D. none

Q-26. Select a basic amino acid

- A. Glycine
- B. Cystine
- C. Alanine
- D. Lysine

Q-27. Apoenzyme is

- A. Hydrolytic enzyme
- B. Oxidative enzyme
- C. Coenzyme
- D. Protein part of enzyme after removal of coenzyme

Q-28. A sugar present in DNA is

- A. D-ribose
- B. D-glucose
- C. 2-Deoxy-D-Ribose
- D. None

Q-29. Which vitamin is responsible for vision?

- A. Retinol
- B. Vit D
- C. Tocopherols
- D. Vit. K

Q-30. Which of the following is periodic property?

- A. Atomic volume
- B. Metallic character
- C. Ionization energy
- D. All

Halima

Q-31. Which of the following has largest size ?

- A. Na⁺ B. Cl⁻ C. F⁻ D. Fe²⁺

Q-32. Which group contains elements that exist as monoatomic molecules?

- A. 1 B. 2 C. 14 D. 18

Q-33. Which of the following element is more metallic?

- A. P B. As C. Sb D. Bi

Q-34. Which of the following factor effect ionization energy?

- A. Atomic radius B. Nuclear charge
C. Shielding effect D. All

Q-35. Which of the following element is metalloid?

- A. Pb B. carbon C. As D. Mg

Q-36. Which of the following compound does not following octet rule?

- A. CS₂ B. PBr₃ C. IBr D. BrF₅

Q-37. Which of the following halides have the lowest melting point?

- A. NaCl B. NaF C. NaBr D. NaI

Q-38. Which of the following halides has zero dipole moment?

- A. NH₃ B. Cl₂ C. NF₃ D. CHCl₃

Q-39. The state of hybridization of carbon in CO₂ is?

- A. sp B. sp² C. sp³ D. dsp²

Q-40. Which one of the following is non-polar?

- A. CH₂Cl B. CCl₄ C. CHCl₃ D. CHCl₃

Q-41. Silvite is an ore of..?

- A. Ca B. Mg C. Ba D. K

Q-42. Which elements are non metals?

- A. N & P B. As & Sb C. Sb & Bi D. Ba & Bi

Q-43. Among oxides of nitrogen all are gases except

- A. N₂O₅ B. N₂O C. NO D. N₂O₃

Q-44. All halogens form oxyacide except

- A. Flourine B. Chlorine C. Bromine D. Iodine

Q-45. Compounds HCN and HNC are

- A. Tautomers B. Metamers
 C. functional isomers D. Conformers

Q-46. Cetane is

- A. n-hexane B. n-pentadecane
C. n-octane D. n-hexadecane

Q-47. Which among the following is not nucleophile ?

- A. CH₃NH₂ B. CH₂CH₂
 C. CH₃⁺ D. OH⁻

Q-48. Which of the following is strong acid?

- A. Benzoic acid B. m-nitrobenzoic acid
C. o-nitrobenzoic acid D. p-nitrobenzoic acid

Q-49. Which of the following orbital does not make sense?

- A. 6f B. 4f C. 7s D. 5g

Q-50. The maximum value of order of reaction may be?

- A. 1 B. 2 C. 3 D. 4

Halima

NAME = SAIF Ullah Khan
S/O = HAJI LAL KHAN

Screening test for the appointment of TGT (Contract)

Subject: Chemistry

Note: Choose the correct answer and all questions are compulsory.

Q-1. The process of identifying the component present in a sample is called

- A. Quantitative analysis
- B. Qualitative analysis
- C. Volumetric analysis
- D. Gravimetric analysis

Q-2. Conductometry is based on

- A. Electric current
- B. Electrical potential
- C. Dielectric constant
- D. Electrical conductance

Q-3. Which of the following technique is based on the emission of light radiation?

- A. Flame photometry
- B. Atomic absorption spectrophotometry
- C. Raman spectroscopy
- D. Conductometry

Q-4. Which of the following method is based on the solubility difference between the analyte and the unwanted components

- A. Distillation
- B. Complex formation
- C. Electrodeposition
- D. Precipitation

Q-5. Which of the following technique is based on the rate of reaction?

- A. Isotopic dilution analysis
- B. Flow injection analysis
- C. Mass spectrometry
- D. None

Q-6. The term accuracy refers to how near the observed value is to

- A. Mean value
- B. Significant value
- C. Actual value
- D. None

Q-7. When HCl is titrated against NaOH the pH at equivalence point will be

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-8. When CH_3COOH is titrated against NaOH the pH at the end point is

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-9. Which of the following is best indicator for titration of NH_4OH with HCl?

- A. Methyl red
- B. Methyl orange
- C. Phenolphthaleine
- D. None

Q-10. Soap is a salt of compound known as

- A. Acetic acid
- B. Formic acid
- C. Fatty acid
- D. Amino acid

Q-11. The colour of water in a lake is due to

- A. Excessive growth of sea weeds
- B. Algae
- C. Grass
- D. Other pollution

Q-12. Cement is a mixture of

- A. Clay and clinker
- B. Clay, limestone and gypsum
- C. Limestone and gypsum
- D. Limestone and clay

Q-13. The percentage of nitrogen in urea is

- A. 36%
- B. 46%
- C. 56%
- D. 66%

Q-14. The percentage of nitrogen in ammonia is

- A. 32%
- B. 42%
- C. 72%
- D. 82%

NH_3
 $\text{N} \times \frac{14}{17}$

Sai F Ullah Khan
S/o Haji LAL Khan

Q-15. Copper occur in nature as

- A. Native
- B. Combined
- C. Both
- D. None

Q-16. The formula of Cryolite is

- A. Na_3AlF_3
- B. Na_3AlF_4
- C. Na_3AlF_5
- D. None

Q-17. Cells with nuclear envelop belongs to

- A. Prokaryotes
- B. Eukaryotes
- C. Both
- D. None

Q-18. The diameter of a typical plant or animal cell is

- A. 1 to 5 μm
- B. 5 to 10 μm
- C. 10 to 50 μm
- D. 5 to 100 μm

Q-19. Acids are substances whose aqueous solutions turned blue litmus red and tasted sour stated by

- A. Davy
- B. Liebig
- C. Boyle
- D. Rouelle

Q-20. Which of the following statement is not true regarding buffers?

- A. They are made up of weak acid and its salts
- B. They are made up of weak base and its salts
- C. they tend to resist a change in pH value
- D. they are made up of strong acid and weak base

Q-21. Relative order of acidity of HF, HCl, HBr and HI acids is

- A. $\text{HCl} > \text{HBr} > \text{HI} > \text{HF}$
- B. $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$
- C. $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$
- D. $\text{HF} > \text{HI} > \text{HCl} > \text{HBr}$

Q-22. The pH of 0.1 M HCl solution is

- A. 0.01
- B. 0.1
- C. 0.2
- D. 1

Q-23. Which of the following amino acid have two carboxylic groups?

- A. Aspartic acid
- B. Histidine
- C. Glutamine
- D. none

Q-24. How many isomeric aldoses are possible for the molecular formula $\text{C}_6\text{H}_{12}\text{O}_6$

- A. 2
- B. 4
- C. 6
- D. 16

Q-25. Epimers are compounds that differ in

- A. functional group
- B. configuration at alpha carbon
- C. configuration at any carbon
- D. none

Q-26. Select a basic amino acid

- A. Glycine
- B. Cystine
- C. Alanine
- D. Lysine

Q-27. Apoenzyme is

- A. Hydrolytic enzyme
- B. Oxidative enzyme
- C. Coenzyme
- D. Protein part of enzyme after removal of coenzyme

Q-28. A sugar present in DNA is

- A. D-ribose
- B. D-glucose
- C. 2-Deoxy-D-Ribose
- D. None

Q-29. Which vitamin is responsible for vision?

- A. Retinol
- B. Vit D
- C. Tocopherols
- D. Vit. K

Q-30. Which of the following is periodic property?

- A. Atomic volume
- B. Metallic character
- C. Ionization energy
- D. All

10
-1 PK

SAIF Ullah Khan

Q-31. Which of the following has largest size?
 A. Na^+ B. Cl^- C. F^- **D. Fe^{2+}**

Q-32. Which group contains elements that exist as monoatomic molecules?
A. 1 B. 2 C. 14 D. 18

Q-33. Which of the following element is more metallic?
 A. P B. As **C. Sb** D. Bi

Q-34. Which of the following factor effect ionization energy?
 A. Atomic radius B. Nuclear charge
 C. Shielding effect **D. All**

Q-35. Which of the following element is metalloid?
 A. Pb B. carbon **C. As** D. Mg

Q-36. Which of the following compound does not following octet rule?
 A. CS_2 B. PBr_3 C. IBr **D. BrF_5**

Q-37. Which of the following halides have the lowest melting point?
 A. NaCl B. NaF C. NaBr **D. NaI**

Q-38. Which of the following halides has zero dipole moment?
 A. NH_3 **B. Cl_2** C. NF_3 D. CHCl_3

Q-39. The state of hybridization of carbon in CO_2 is?
 A. sp **B. sp^2** C. sp^3 D. dsp^2

Q-40. Which one of the following is non-polar?
 A. CH_2Cl **B. CCl_4** C. CHCl_3 D. CHCl_3

Q-41. Silvite is an ore of...?
A. Ca B. Mg C. Ba D. K

Q-42. Which elements are non metals?
A. N & P B. As & Sb C. Sb & Bi D. Ba & Bi

Q-43. Among oxides of nitrogen all are gases except
 A. N_2O_5 B. N_2O C. NO **D. N_2O_3**

Q-44. All halogens form oxyacide except
 A. Flourine B. Chlorine C. Bromine **D. Iodine**

Q-45. Compunds HCN and HNC are
 A. Tautomers B. Metamers
C. functional isomers D. Conformers

Q-46. Cetane is
 A. n-hexane B. n-pentadecane
C. n-octane D. n-hexadecane

Q-47. Which among the following is not nucleophile?
 A. CH_3NH_3 B. CH_2CH_2
C. CH_3^+ D. OH^-

Q-48. Which of the following is strong acid?
A. Benzoic acid B. m-nitrobenzoic acid
 C. o-nitrobenzoic acid D. p-nitrobenzoic acid

Q-49. Which of the following orbital does not make sense?
 A. 6f B. 4f C. 7s **D. 5g**

Q-50. The maxium value of order of reaction may be?
 A. 1 B. 2 **C. 3** D. 4

$\text{O}=\text{C}=\text{O}$
 sp^2
 $\text{C}=\text{O}$
 sp^2
 $\text{C}=\text{O}$
 sp^2

Screening test for the appointment of TGT (Contract)

Subject: **Chemistry**

Note: Choose the correct answer and all questions are compulsory.

Q-1. The process of identifying the component present in a sample is called

- A. Quantitative analysis
- B. Qualitative analysis
- C. Volumetric analysis
- D. Gravimetric analysis

Q-2. Conductometry is based on

- A. Electric current
- B. Electrical potential
- C. Dielectric constant
- D. Electrical conductance

Q-3. Which of the following technique is based on the emission of light radiation?

- A. Flame photometry
- B. Atomic absorption spectrophotometry
- C. Raman spectroscopy
- D. Conductometry

Q-4. Which of the following method is based on the solubility difference between the analyte and the unwanted components

- A. Distillation
- B. Complex formation
- C. Electrodeposition
- D. Precipitation

Q-5. Which of the following technique is based on the rate of reaction?

- A. Isotopic dilution analysis
- B. Flow injection analysis
- C. Mass spectrometry
- D. None

Q-6. The term accuracy refers to how near the observed value is to

- A. Mean value
- B. Significant value
- C. Actual value
- D. None

Q-7. When HCl is titrated against NaOH the pH at equivalence point will be

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-8. When CH₃COOH is titrated against NaOH the pH at the end point is

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-9. Which of the following is best indicator for titration of NH₄OH with HCl?

- A. Methyl red
- B. Methyl orange
- C. Phenolphthaleine
- D. None

Q-10. Soap is a salt of compound known as

- A. Acetic acid
- B. Formic acid
- C. Fatty acid
- D. Amino acid

Q-11. The colour of water in a lake is due to

- A. Excessive growth of sea weeds
- B. Algae
- C. Grass
- D. Other pollution

Q-12. Cement is a mixture of

- A. Clay and clinker
- B. Clay, limestone and gypsum
- C. Limestone and gypsum
- D. Limestone and clay

Q-13. The percentage of nitrogen in urea is

- A. 36%
- B. 46%
- C. 56%
- D. 66%

Q-14. The percentage of nitrogen in ammonia is

- A. 32%
- B. 42%
- C. 72%
- D. 82%

18
50

Q-15. Copper occur in nature as

- A. Native
- B. Combined
- C. Both
- D. None

Q-16. The formula of Cryolite is

- A. Na_3AlF_3
- B. Na_3AlF_4
- C. Na_3AlF_5
- D. None

Q-17. Cells with nuclear envelop belongs to

- A. Prokaryotes
- B. Eukaryotes
- C. Both
- D. None

Q-18. The diameter of a typical plant or animal cell is

- A. 1 to 5 μm
- B. 5 to 10 μm
- C. 10 to 50 μm
- D. 5 to 100 μm

Q-19. Acids are substances whose aqueous solutions turned blue litmus red and tasted sour stated by

- A. Davy
- B. Liebig
- C. Boyle
- D. Rouelle

Q-20. Which of the following statement is not true regarding buffers?

- A. They are made up of weak acid and its salts
- B. They are made up of weak base and its salts
- C. they tend to resist a change in pH value
- D. they are made up of strong acid and weak base

Q-21. Relative order of acidity of HF, HCl, HBr and HI acids is

- A. $\text{HCl} > \text{HBr} > \text{HI} > \text{HF}$
- B. $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$
- C. $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$
- D. $\text{HF} > \text{HI} > \text{HCl} > \text{HBr}$

Q-22. The pH of 0.1 M HCl solution is

- A. 0.01
- B. 0.1
- C. 0.2
- D. 1

Q-23. Which of the following amino acid have two carboxylic groups?

- A. Aspartic acid
- B. Histidine
- C. Glutamine
- D. none

Q-24. How many isomeric aldoses are possible for the molecular formula $\text{C}_6\text{H}_{12}\text{O}_6$

- A. 2
- B. 4
- C. 6
- D. 16

Q-25. Epimers are compounds that differ in

- A. functional group
- B. configuration at alpha carbon
- C. configuration at any carbon
- D. none

Q-26. Select a basic amino acid

- A. Glycine
- B. Cystine
- C. Alanine
- D. Lysine

Q-27. Apoenzyme is

- A. Hydrolytic enzyme
- B. Oxidative enzyme
- C. Coenzyme
- D. Protein part of enzyme after removal of coenzyme

Q-28. A sugar present in DNA is

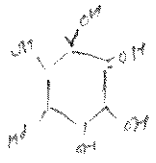
- A. D-ribose
- B. D-glucose
- C. 2-Deoxy-D-Ribose
- D. None

Q-29. Which vitamin is responsible for vision?

- A. Retinol
- B. Vit D
- C. Tocopherols
- D. Vit. K

Q-30. Which of the following is periodic property?

- A. Atomic volume
- B. Metallic character
- C. Ionization energy
- D. All



Q-31. Which of the following has largest size ?

- A. Na^+ B. Cl^- C. F^- D. Fe^{2+}

Q-32. Which group contains elements that exist as monoatomic molecules?

- A. 1 B. 2 C. 14 D. 18

Q-33. Which of the following element is more metallic?

- A. P B. As C. Sb D. Bi

Q-34. Which of the following factor effect ionization energy?

- A. Atomic radius B. Nuclear charge
C. Shielding effect D. All

Q-35. Which of the following element is metalloid?

- A. Pb B. carbon C. As D. Mg

Q-36. Which of the following compound does not following octet rule?

- A. CS_2 B. PBr_3 C. IBr D. BrF_5

Q-37. Which of the following halides have the lowest melting point?

- A. NaCl B. NaF C. NaBr D. NaI

Q-38. Which of the following halides has zero dipole moment?

- A. NH_3 B. Cl_2 C. NF_3 D. CHCl_3

Q-39. The state of hybridization of carbon in CO_2 is?

- A. sp B. sp^2 C. sp^3 D. dsp^2

Q-40. Which one of the following is non-polar?

- A. CH_2Cl B. CCl_4 C. CHCl_3 D. CHCl_3

Q-41. Silvite is an ore of..?

- A. Ca B. Mg C. Ba D. K

Q-42. Which elements are non metals?

- A. N & P B. As & Sb C. Sb & Bi D. Ba & Bi

Q-43. Among oxides of nitrogen all are gases except

- A. N_2O_5 B. N_2O C. NO D. N_2O_3

Q-44. All halogens form oxyacide except

- A. Flourine B. Chlorine C. Bromine D. Iodine

Q-45. Compounds HCN and HNC are

- A. Tautomers B. Metamers
C. functional isomers D. Conformers

Q-46. Cetane is

- A. n-hexane B. n-pentadecane
C. n-octane D. n-hexadecane

Q-47. Which among the following is not nucleophile ?

- A. CH_3NH_3 B. CH_2CH_2
C. CH_3^+ D. OH^-

Q-48. Which of the following is strong acid?

- A. Benzoic acid B. m-nitrobenzoic acid
C. o-nitrobenzoic acid D. p-nitrobenzoic acid

Q-49. Which of the following orbital does not make sense?

- A. 6f B. 4f C. 7s D. 5g

Q-50. The maxium value of order of reaction may be?

- A. 1 B. 2 C. 3 D. 4



HCl + NaOH

Name: Rozina

F/name: Sheer Daraz Khan

Screening test for the appointment of TGT (Contract)

Subject: Chemistry

Note: Choose the correct answer and all questions are compulsory.

Q-1. The process of identifying the component present in a sample is called

- A. Quantitative analysis
- B. Qualitative analysis
- C. Volumetric analysis
- D. Gravimetric analysis

Q-2. Conductometry is based on

- A. Electric current
- B. Electrical potential
- C. Dielectric constant
- D. Electrical conductance

Q-3. Which of the following technique is based on the emission of light radiation?

- A. Flame photometry
- B. Atomic absorption spectrophotometry
- C. Raman spectroscopy
- D. Conductometry

Q-4. Which of the following method is based on the solubility difference between the analyte and the unwanted components

- A. Distillation
- B. Complex formation
- C. Electrodeposition
- D. Precipitation

Q-5. Which of the following technique is based on the rate of reaction?

- A. Isotopic dilution analysis
- B. Flow injection analysis
- C. Mass spectrometry
- D. None

Q-6. The term accuracy refers to how near the observed value is to

- A. Mean value
- B. Significant value
- C. Actual value
- D. None

Q-7. When HCl is titrated against NaOH the pH at equivalence point will be

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-8. When CH_3COOH is titrated against NaOH the pH at the end point is

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-9. Which of the following is best indicator for titration of NH_4OH with HCl?

- A. Methyl red
- B. Methyl orange
- C. Phenolphthaleine
- D. None

Q-10. Soap is a salt of compound known as

- A. Acetic acid
- B. Formic acid
- C. Fatty acid
- D. Amino acid

Q-11. The colour of water in a lake is due to

- A. Excessive growth of sea weeds
- B. Algae
- C. Grass
- D. Other pollution

Q-12. Cement is a mixture of

- A. Clay and clinker
- B. Clay, limestone and gypsum
- C. Limestone and gypsum
- D. Limestone and clay

Q-13. The percentage of nitrogen in urea is

- A. 36%
- B. 46%
- C. 56%
- D. 66%

Q-14. The percentage of nitrogen in ammonia is

- A. 32%
- B. 42%
- C. 72%
- D. 82%

Q-15. Copper occur in nature as

- A. Native
- B. Combined
- C. Both
- D. None

Q-16. The formula of Cryolite is

- A. Na_3AlF_3
- B. Na_3AlF_4
- C. Na_3AlF_5
- D. None

Q-17. Cells with nuclear envelop belongs to

- A. Prokaryotes
- B. Eukaryotes
- C. Both
- D. None

Q-18. The diameter of a typical plant or animal cell is

- A. 1 to 5 μm
- B. 5 to 10 μm
- C. 10 to 50 μm
- D. 5 to 100 μm

Q-19. Acids are substances whose aqueous solutions turned blue litmus red and tasted sour stated by

- A. Davy
- B. Liebig
- C. Boyle
- D. Rouelle

Q-20. Which of the following statement is not true regarding buffers?

- A. They are made up of weak acid and its salts
- B. They are made up of weak base and its salts
- C. they tend to resist a change in pH value
- D. they are made up of strong acid and weak base

Q-21. Relative order of acidity of HF, HCl, HBr and HI acids is

- A. $\text{HCl} > \text{HBr} > \text{HI} > \text{HF}$
- B. $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$
- C. $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$
- D. $\text{HF} > \text{HI} > \text{HCl} > \text{HBr}$

Q-22. The pH of 0.1 M HCl solution is

- A. 0.01
- B. 0.1
- C. 0.2
- D. 1

$$\text{pH} = -\log [10^{-1}]$$
$$= -\log [1 \times 10^{-1}]$$
$$= 1$$

Q-23. Which of the following amino acid have two carboxylic groups?

- A. Aspartic acid
- B. Histidine
- C. Glutamine
- D. none

Q-24. How many isomeric aldoses are possible for the molecular formula $\text{C}_6\text{H}_{12}\text{O}_6$

- A. 2
- B. 4
- C. 6
- D. 16

Q-25. Epimers are compounds that differ in

- A. functional group
- B. configuration at alpha carbon
- C. configuration at any carbon
- D. none

Q-26. Select a basic amino acid

- A. Glycine
- B. Cystine
- C. Alanine
- D. Lysine

Q-27. Apoenzyme is

- A. Hydrolytic enzyme
- B. Oxidative enzyme
- C. Coenzyme
- D. Protein part of enzyme after removal of coenzyme

Q-28. A sugar present in DNA is

- A. D-ribose
- B. D-glucose
- C. 2-Deoxy-D-Ribose
- D. None

Q-29. Which vitamin is responsible for vision?

- A. Retinol
- B. Vit D
- C. Tocopherols
- D. Vit. K

Q-30. Which of the following is periodic property?

- A. Atomic volume
- B. Metallic character
- C. Ionization energy
- D. All

- Q-31. Which of the following has largest size ?
 A. Na^+ B. Cl^- C. F^- D. Fe^{2+} X
- Q-32. Which group contains elements that exist as monoatomic molecules?
 A. 1 B. 2 C. 14 D. 18 ✓
- Q-33. Which of the following element is more metallic?
 A. P B. As C. Sb D. Bi ✓
- Q-34. Which of the following factor effect ionization energy?
 A. Atomic radius B. Nuclear charge
 C. Shielding effect D. All ✓
- Q-35. Which of the following element is metalloid?
 A. Pb B. carbon C. As D. Mg ✓
- Q-36. Which of the following compound does not following octet rule?
 A. CS_2 B. PBr_3 C. IBr D. BrF_5 ✓
- Q-37. Which of the following halides have the lowest melting point?
 A. NaCl B. NaF C. NaBr D. NaI ✓
- Q-38. Which of the following halides has zero dipole moment?
 A. NH_3 B. Cl_2 C. NF_3 D. CHCl_3 X
- Q-39. The state of hybridization of carbon in CO_2 is?
 A. sp B. sp^2 C. sp^3 D. dsp 2 X
- Q-40. Which one of the following is non-polar?
 A. CH_2Cl B. CCl_4 C. CHCl_3 D. CHCl_2 ✓
- Q-41. Silvite is an ore of..?
 A. Ca B. Mg C. Ba D. K X
- Q-42. Which elements are non metals?
 A. N & P B. As & Sb C. Sb & Bi D. Ba & Bi X
- Q-43. Among oxides of nitrogen all are gases except
 A. N_2O_5 B. N_2O C. NO D. N_2O_3 X
- Q-44. All halogens form oxyacide except
 A. Flourine B. Chlorine C. Bromine D. Iodine X
- Q-45. Compounds HCN and HNC are
 A. Tautomers B. Metamers
 C. functional isomers D. Conformers X
- Q-46. Cetane is
 A. n-hexane B. n-pentadecane X
 C. n-octane D. n-hexadecane
- Q-47. Which among the following is not nucleophile ?
 A. CH_3NH_3 B. CH_2CH_2 X
 C. CH_3^+ D. OH^-
- Q-48. Which of the following is strong acid?
 A. Benzoic acid B. m-nitrobenzoic acid X
 C. o-nitrobenzoic acid D. p-nitrobenzoic acid
- Q-49. Which of the following orbital does not make sense?
 A. 6f B. 4f C. 7s D. 5g ✓
- Q-50. The maxium value of order of reaction may be?
 A. 1 B. 2 C. 3 D. 4 X
- *****

Name = Qaib Khan
F/Name = Ayub Khan

Screening test for the appointment of TGT (Contract)

Subject: Chemistry

Note: Choose the correct answer and all questions are compulsory.

Q-1. The process of identifying the component present in a sample is called

- A. Quantitative analysis
- B. Qualitative analysis
- C. Volumetric analysis
- D. Gravimetric analysis

Q-2. Conductometry is based on

- A. Electric current
- B. Electrical potential
- C. Dielectric constant
- D. Electrical conductance

Q-3. Which of the following technique is based on the emission of light radiation?

- A. Flame photometry
- B. Atomic absorption spectrophotometry
- C. Raman spectroscopy
- D. Conductometry

Q-4. Which of the following method is based on the solubility difference between the analyte and the unwanted components

- A. Distillation
- B. Complex formation
- C. Electrodeposition
- D. Precipitation

Q-5. Which of the following technique is based on the rate of reaction?

- A. Isotopic dilution analysis
- B. Flow injection analysis
- C. Mass spectrometry
- D. None

Q-6. The term accuracy refers to how near the observed value is to

- A. Mean value
- B. Significant value
- C. Actual value
- D. None

Q-7. When HCl is titrated against NaOH the pH at equivalence point will be

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-8. When CH₃COOH is titrated against NaOH the pH at the end point is

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-9. Which of the following is best indicator for titration of NH₄OH with HCl?

- A. Methyl red
- B. Methyl orange
- C. Phenolphthaleine
- D. None

Q-10. Soap is a salt of compound known as

- A. Acetic acid
- B. Formic acid
- C. Fatty acid
- D. Amino acid

Q-11. The colour of water in a lake is due to

- A. Excessive growth of sea weeds
- B. Algae
- C. Grass
- D. Other pollution

Q-12. Cement is a mixture of

- A. Clay and clinker
- B. Clay, limestone and gypsum
- C. Limestone and gypsum
- D. Limestone and clay

Q-13. The percentage of nitrogen in urea is

- A. 36%
- B. 46%
- C. 56%
- D. 66%

Q-14. The percentage of nitrogen in ammonia is

- A. 32%
- B. 42%
- C. 72%
- D. 82%

35
50

$\frac{14}{17} \times 100$
 $\frac{14}{17} \times 100$
 $\frac{14}{17} \times 100$

Q-15. Copper occur in nature as

- A. Native
- B. Combined
- C. Both
- D. None

Q-16. The formula of Cryolite is

- A. Na_3AlF_3
- B. Na_3AlF_4
- C. Na_3AlF_5
- D. None

Q-17. Cells with nuclear envelop belongs to

- A. Prokaryotes
- B. Eukaryotes
- C. Both
- D. None

Q-18. The diameter of a typical plant or animal cell is

- A. 1 to 5 μm
- B. 5 to 10 μm
- C. 10 to 50 μm
- D. 5 to 100 μm

Q-19. Acids are substances whose aqueous solutions turned blue litmus red and tasted sour stated by

- A. Davy
- B. Liebig
- C. Boyle
- D. Rouelle

Q-20. Which of the following statement is not true regarding buffers?

- A. They are made up of weak acid and its salts
- B. They are made up of weak base and its salts
- C. they tend to resist a change in pH value
- D. they are made up of strong acid and weak base

Q-21. Relative order of acidity of HF, HCl, HBr and HI acids is

- A. $\text{HCl} > \text{HBr} > \text{HI} > \text{HF}$
- B. $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$
- C. $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$
- D. $\text{HF} > \text{HI} > \text{HCl} > \text{HBr}$

Q-22. The pH of 0.1 M HCl solution is

- A. 0.01
- B. 0.1
- C. 0.2
- D. 1

Q-23. Which of the following amino acid have two carboxylic groups?

- A. Aspartic acid
- B. Histidine
- C. Glutamine
- D. none

Q-24. How many isomeric aldoses are possible for the molecular formula $\text{C}_6\text{H}_{12}\text{O}_6$

- A. 2
- B. 4
- C. 6
- D. 16

Q-25. Epimers are compounds that differ in

- A. functional group
- B. configuration at alpha carbon
- C. configuration at any carbon
- D. none

Q-26. Select a basic amino acid

- A. Glycine
- B. Cystine
- C. Alanine
- D. Lysine

Q-27. Apoenzyme is

- A. Hydrolytic enzyme
- B. Oxidative enzyme
- C. Coenzyme
- D. Protein part of enzyme after removal of coenzyme

Q-28. A sugar present in DNA is

- A. D-ribose
- B. D-glucose
- C. 2-Deoxy-D-Ribose
- D. None

Q-29. Which vitamin is responsible for vision?

- A. Retinol
- B. Vit D
- C. Tocopherols
- D. Vit. K

Q-30. Which of the following is periodic property?

- A. Atomic volume
- B. Metallic character
- C. Ionization energy
- D. All

$\text{pH} = -\log_{10} [\text{H}^+]$



Q-31. Which of the following has largest size ?

- A. Na⁺ B. Cl⁻ C. F⁻ D. Fe²⁺

Q-32. Which group contains elements that exist as monoatomic molecules?

- A. 1 B. 2 C. 14 D. 18

Q-33. Which of the following element is more metallic?

- A. P B. As C. Sb D. Bi

Q-34. Which of the following factor effect ionization energy?

- A. Atomic radius B. Nuclear charge C. Shielding effect D. All

Q-35. Which of the following element is metalloid?

- A. Pb B. carbon C. As D. Mg

Q-36. Which of the following compound does not following octet rule?

- A. CS₂ B. PBr₃ C. IBr D. BrF₅

Q-37. Which of the following halides have the lowest melting point?

- A. NaCl B. NaF C. NaBr D. NaI

Q-38. Which of the following halides has zero dipole moment?

- A. NH₃ B. Cl₂ C. NF₃ D. CHCl₃

Q-39. The state of hybridization of carbon in CO₂ is?

- A. sp B. sp² C. sp³ D. dsp²

Q-40. Which one of the following is non-polar?

- A. CH₂Cl B. CCl₄ C. CHCl₃ D. CHCl₃

Q-41. Silvite is an ore of..?

- A. Ca B. Mg C. Ba D. K

Q-42. Which elements are non metals?

- A. N & P B. As & Sb C. Sb & Bi D. Ba & Bi

Q-43. Among oxides of nitrogen all are gases except

- A. N₂O₅ B. N₂O C. NO D. N₂O₃

Q-44. All halogens form oxyacide except

- A. Flourine B. Chlorine C. Bromine D. Iodine

Q-45. Compounds HCN and HNC are

- A. Tautomers B. Metamers C. functional isomers D. Conformers

Q-46. Cetane is

- A. n-hexane B. n-pentadecane C. n-octane D. n-hexadecane

Q-47. Which among the following is not nucleophile ?

- A. CH₃NH₃ B. CH₂CH₂ C. CH₃⁺ D. OH

Q-48. Which of the following is strong acid?

- A. Benzoic acid B. m-nitrobenzoic acid C. o-nitrobenzoic acid D. p-nitrobenzoic acid

Q-49. Which of the following orbital does not make sense?

- A. 6f B. 4f C. 7s D. 5g

Q-50. The maxium value of order of reaction may be?

- A. 1 B. 2 C. 3 D. 4

Handwritten notes on the right side of the page:

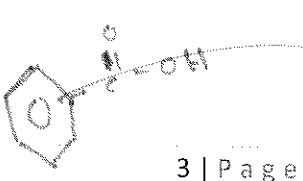
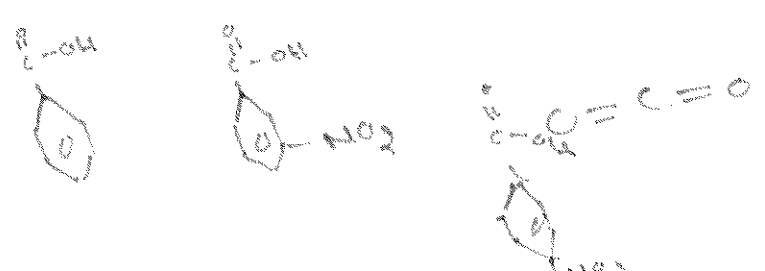
$K = 2$
 $L = 8$
 $M = 8$

$K = 2$
 $L = 8$
 $M = 18$

$1s^2, 2s^2, 2p^6, 3s^2, 3p^4$

$K = 2$
 $L = 8$
 $M = 8$

$K = 2$
 $L = 8$
 $M = 18$



Screening test for the appointment of TGT (Contract)

Subject: Chemistry

Note: Choose the correct answer and all questions are compulsory.

Q-1. The process of identifying the component present in a sample is called

- A. Quantitative analysis
- B. Qualitative analysis
- C. Volumetric analysis
- D. Gravimetric analysis

Q-2. Conductometry is based on

- A. Electric current
- B. Electrical potential
- C. Dielectric constant
- D. Electrical conductance

Q-3. Which of the following technique is based on the emission of light radiation?

- A. Flame photometry
- B. Atomic absorption spectrophotometry
- C. Raman spectroscopy
- D. Conductometry

Q-4. Which of the following method is based on the solubility difference between the analyte and the unwanted components

- A. Distillation
- B. Complex formation
- C. Electrodeposition
- D. Precipitation

Q-5. Which of the following technique is based on the rate of reaction?

- A. Isotopic dilution analysis
- B. Flow injection analysis
- C. Mass spectrometry
- D. None

Q-6. The term accuracy refers to how near the observed value is to

- A. Mean value
- B. Significant value
- C. Actual value
- D. None

Q-7. When HCl is titrated against NaOH the pH at equivalence point will be

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-8. When CH₃COOH is titrated against NaOH the pH at the end point is

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-9. Which of the following is best indicator for titration of NH₄OH with HCl?

- A. Methyl red
- B. Methyl orange
- C. Phenolphthaleine
- D. None

Q-10. Soap is a salt of compound known as

- A. Acetic acid
- B. Formic acid
- C. Fatty acid
- D. Amino acid

Q-11. The colour of water in a lake is due to

- A. Excessive growth of sea weeds
- B. Algae
- C. Grass
- D. Other pollution

Q-12. Cement is a mixture of

- A. Clay and clinker
- B. Clay, limestone and gypsum
- C. Limestone and gypsum
- D. Limestone and clay

Q-13. The percentage of nitrogen in urea is

- A. 36%
- B. 46%
- C. 56%
- D. 66%

Q-14. The percentage of nitrogen in ammonia is

- A. 32%
- B. 42%
- C. 72%
- D. 82%

21/50

Q-15. Copper occur in nature as

- A. Native
- B. Combined
- C. Both
- D. None

Q-16. The formula of Cryolite is

- A. Na_3AlF_3
- B. Na_3AlF_4
- C. Na_3AlF_5
- D. None



Q-17. Cells with nuclear envelop belongs to

- A. Prokaryotes
- B. Eukaryotes
- C. Both
- D. None

Q-18. The diameter of a typical plant or animal cell is

- A. 1 to 5 μm
- B. 5 to 10 μm
- C. 10 to 50 μm
- D. 5 to 100 μm

Q-19. Acids are substances whose aqueous solutions turned blue litmus red and tasted sour stated by

- A. Davy
- B. Liebig
- C. Boyle
- D. Rouelle

Q-20. Which of the following statement is not true regarding buffers?

- A. They are made up of weak acid and its salts
- B. They are made up of weak base and its salts
- C. they tend to resist a change in pH value
- D. they are made up of strong acid and weak base

Q-21. Relative order of acidity of HF, HCl, HBr and HI acids is

- A. $\text{HCl} > \text{HBr} > \text{HI} > \text{HF}$
- B. $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$
- C. $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$
- D. $\text{HF} > \text{HI} > \text{HCl} > \text{HBr}$

Q-22. The pH of 0.1 M HCl solution is

- A. 0.01
- B. 0.1
- C. 0.2
- D. 1

Q-23. Which of the following amino acid have two carboxylic groups?

- A. Aspartic acid
- B. Histidine
- C. Glutamine
- D. none

Q-24. How many isomeric aldoses are possible for the molecular formula $\text{C}_6\text{H}_{12}\text{O}_6$

- A. 2
- B. 4
- C. 6
- D. 16

Q-25. Epimers are compounds that differ in

- A. functional group
- B. configuration at alpha carbon
- C. configuration at any carbon
- D. none

Q-26. Select a basic amino acid

- A. Glycine
- B. Cystine
- C. Alanine
- D. Lysine

Q-27. Apoenzyme is

- A. Hydrolytic enzyme
- B. Oxidative enzyme
- C. Coenzyme
- D. Protein part of enzyme after removal of coenzyme

Q-28. A sugar present in DNA is

- A. D-ribose
- B. D-glucose
- C. 2-Deoxy-D-Ribose
- D. None

Q-29. Which vitamin is responsible for vision?

- A. Retinol
- B. Vit D
- C. Tocopherols
- D. Vit. K

Vitamin A

Q-30. Which of the following is periodic property?

- A. Atomic volume
- B. Metallic character
- C. Ionization energy
- D. All

$\text{pH} = -\log_{10} [\text{H}^+]$

- Q-31. Which of the following has largest size?
 A. Na^+ B. Cl^- C. F^- D. Fe^{2+} X
- Q-32. Which group contains elements that exist as monoatomic molecules?
 A. 1 B. 2 C. 14 D. 18 X
- Q-33. Which of the following element is more metallic?
 A. P B. As C. Sb D. Bi ✓
- Q-34. Which of the following factor effect ionization energy?
 A. Atomic radius B. Nuclear charge
 C. Shielding effect D. All ✓
- Q-35. Which of the following element is metalloid?
 A. Pb B. carbon C. As D. Mg X
- Q-36. Which of the following compound does not following octet rule?
 A. CS_2 B. PBr_3 C. IBr D. BrF_5 X
- Q-37. Which of the following halides have the lowest melting point?
 A. NaCl B. NaF C. NaBr D. NaI ✓
- Q-38. Which of the following halides has zero dipole moment?
 A. NH_3 B. Cl_2 C. NF_3 D. CHCl_3 X
- Q-39. The state of hybridization of carbon in CO_2 is?
 A. sp B. sp^2 C. sp^3 D. dsp^2 X
- Q-40. Which one of the following is non-polar?
 A. CH_2Cl B. CCl_4 C. CHCl_3 D. CHCl_2 ✓
- Q-41. Silvite is an ore of...?
 A. Ca B. Mg C. Ba D. K ✓
- Q-42. Which elements are non metals?
 A. N & P B. As & Sb C. Sb & Bi D. Ba & Bi X
- Q-43. Among oxides of nitrogen all are gases except
 A. N_2O_5 B. N_2O C. NO D. N_2O_3 ✓
- Q-44. All halogens form oxyacide except
 A. Flourine B. Chlorine C. Bromine D. Iodine ✓
- Q-45. Compunds HCN and HNC are
 A. Tautomers B. Metamers
 C. functional isomers D. Conformers X
- Q-46. Cetane is
 A. n-hexane B. n-pentadecane X
 C. n-octane D. n-hexadecane
- Q-47. Which among the following is not nucleophile?
 A. CH_3NH_3 B. CH_2CH_2 ✓
 C. CH_3^+ D. OH^-
- Q-48. Which of the following is strong acid?
 A. Benzoic acid B. m-nitrobenzoic acid X
 C. o-nitrobenzoic acid D. p-nitrobenzoic acid
- Q-49. Which of the following orbital does not make sense?
 A. 6f B. 4f C. 7s D. 5g ✓
- Q-50. The maxium value of order of reaction may be?
 A. 1 B. 2 C. 3 D. 4 X
- *****
- $\text{C} = \text{C} = \text{O}$ 4 sp^2

Nagma Momim
F/N Momim Khan

Screening test for the appointment of TGT (Contract)

Subject: Chemistry

Note: Choose the correct answer and all questions are compulsory.

Q-1. The process of identifying the component present in a sample is called

- X A. Quantitative analysis
 B. Qualitative analysis
 C. Volumetric analysis
 D. Gravimetric analysis

Q-2. Conductometry is based on

- X A. Electric current
 B. Electrical potential
 C. Dielectric constant
 D. Electrical conductance

Q-3. Which of the following technique is based on the emission of light radiation?

- X A. Flame photometry
 B. Atomic absorption spectrophotometry
 C. Raman spectroscopy
 D. Conductometry

Q-4. Which of the following method is based on the solubility difference between the analyte and the unwanted components

- X A. Distillation
 B. Complex formation
 C. Electrodeposition
 D. Precipitation

Q-5. Which of the following technique is based on the rate of reaction?

- X A. Isotopic dilution analysis
 B. Flow injection analysis
 C. Mass spectrometry
 D. None

Q-6. The term accuracy refers to how near the observed value is to

- A. Mean value
 B. Significant value
 C. Actual value
 D. None

Q-7. When HCl is titrated against NaOH the pH at equivalence point will be

- A. None
 B. equal to 7
 C. less than 7
 D. greater than 7

Q-8. When CH₃COOH is titrated against NaOH the pH at the end point is

- A. None
 B. equal to 7
 C. less than 7
 D. greater than 7

Q-9. Which of the following is best indicator for titration of NH₄OH with HCl?

- X A. Methyl red
 B. Methyl orange
 C. Phenolphthaleine
 D. None

Q-10. Soap is a salt of compound known as

- A. Acetic acid
 B. Formic acid
 C. Fatty acid
 D. Amino acid

Q-11. The colour of water in a lake is due to

- X A. Excessive growth of sea weeds
 B. Algae
 C. Grass
 D. Other pollution

Q-12. Cement is a mixture of

- A. Clay and clinker
 B. Clay, limestone and gypsum
 C. Limestone and gypsum
 D. Limestone and clay

Q-13. The percentage of nitrogen in urea is

- X A. 36%
 B. 46%
 C. 56%
 D. 66%

Q-14. The percentage of nitrogen in ammonia is

- A. 32%
 B. 42%
 C. 72%
 D. 82%

Q-15. Copper occur in nature as

- A. Native
- B. Combined
- C. Both
- D. None

Q-16. The formula of Cryolite is

- A. Na_3AlF_3
- B. Na_3AlF_4
- C. Na_3AlF_5
- D. None

Q-17. Cells with nuclear envelop belongs to

- A. Prokaryotes
- B. Eukaryotes
- C. Both
- D. None

Q-18. The diameter of a typical plant or animal cell is

- A. 1 to 5 μm
- B. 5 to 10 μm
- C. 10 to 50 μm
- D. 5 to 100 μm

Q-19. Acids are substances whose aqueous solutions turned blue litmus red and tasted sour stated by

- A. Davy
- B. Liebig
- C. Boyle
- D. Rouelle

Q-20. Which of the following statement is not true regarding buffers?

- A. They are made up of weak acid and its salts
- B. They are made up of weak base and its salts
- C. they tend to resist a change in pH value
- D. they are made up of strong acid and weak base

Q-21. Relative order of acidity of HF, HCl, HBr and HI acids is

- A. $\text{HCl} > \text{HBr} > \text{HI} > \text{HF}$
- B. $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$
- C. $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$
- D. $\text{HF} > \text{HI} > \text{HCl} > \text{HBr}$

Q-22. The pH of 0.1 M HCl solution is

- A. 0.01
- B. 0.1
- C. 0.2
- D. 1

Q-23. Which of the following amino acid have two carboxylic groups?

- A. Aspartic acid
- B. Histidine
- C. Glutamine
- D. none

Q-24. How many isomeric aldoses are possible for the molecular formula $\text{C}_6\text{H}_{12}\text{O}_6$

- A. 2
- B. 4
- C. 6
- D. 16

Q-25. Epimers are compounds that differ in

- A. functional group
- B. configuration at alpha carbon
- C. configuration at any carbon
- D. none

Q-26. Select a basic amino acid

- A. Glycine
- B. Cystine
- C. Alanine
- D. Lysine

Q-27. Apoenzyme is

- A. Hydrolytic enzyme
- B. Oxidative enzyme
- C. Coenzyme
- D. Protein part of enzyme after removal of coenzyme

Q-28. A sugar present in DNA is

- A. D-ribose
- B. D-glucose
- C. 2-Deoxy-D-Ribose
- D. None

Q-29. Which vitamin is responsible for vision?

- A. Retinol
- B. Vit D
- C. Tocopherols
- D. Vit. K

Q-30. Which of the following is periodic property?

- A. Atomic volume
- B. Metallic character
- C. Ionization energy
- D. All

Q-31. Which of the following has largest size ?

- A. Na^+ B. Cl^- C. F^- D. Fe^{2+}

Q-32. Which group contains elements that exist as monoatomic molecules?

- A. 1 B. 2 C. 14 D. 18

Q-33. Which of the following element is more metallic?

- A. P B. As C. Sb D. Bi

Q-34. Which of the following factor effect ionization energy?

- A. Atomic radius B. Nuclear charge
C. Shielding effect D. All

Q-35. Which of the following element is metalloid?

- A. Pb B. carbon C. As D. Mg

Q-36. Which of the following compound does not following octet rule?

- A. CS_2 B. PBr_3 C. IBr D. BrF_5

Q-37. Which of the following halides have the lowest melting point?

- A. NaCl B. NaF C. NaBr D. NaI

Q-38. Which of the following halides has zero dipole moment?

- A. NH_3 B. Cl_2 C. NF_3 D. CHCl_3

Q-39. The state of hybridization of carbon in CO_2 is?

- A. sp B. sp^2 C. sp^3 D. dsp²

Q-40. Which one of the following is non-polar?

- A. CH_2Cl B. CCl_4 C. CHCl_3 D. CHCl_3

Q-41. Silvite is an ore of..?

- A. Ca B. Mg C. Ba D. K

Q-42. Which elements are non metals?

- A. N & P B. As & Sb C. Sb & Bi D. Ba & Bi

Q-43. Among oxides of nitrogen all are gases except

- A. N_2O_5 B. N_2O C. NO D. N_2O_3

Q-44. All halogens form oxyacide except

- A. Flourine B. Chlorine C. Bromine D. Iodine

Q-45. Compunds HCN and HNC are

- A. Tautomers B. Metamers
C. functional isomers D. Conformers

Q-46. Cetane is

- A. n-hexane B. n-pentadecane
C. n-octane D. n-hexadecane

Q-47. Which among the following is not nucleophile ?

- A. CH_3NH_3 B. CH_2CH_2
C. CH_3^+ D. OH^-

Q-48. Which of the following is strong acid?

- A. Benzoic acid B. m-nitrobenzoic acid
C. o-nitrobenzoic acid D. p-nitrobenzoic acid

Q-49. Which of the following orbital does not make sense?

- A. 6f B. 4f C. 7s D. 5g

Q-50. The maxium value of order of reaction may be?

- A. 1 B. 2 C. 3 D. 4

Name: Saima Momin.
 F/N: Momin Khan

Screening test for the appointment of TGT (Contract)

Subject: **Chemistry**

Note: Choose the correct answer and all questions are compulsory.

Q-1. The process of identifying the component present in a sample is called

- A. Quantitative analysis
- B. Qualitative analysis
- C. Volumetric analysis
- D. Gravimetric analysis

Q-2. Conductometry is based on

- A. Electric current
- B. Electrical potential
- C. Dielectric constant
- D. Electrical conductance

Q-3. Which of the following technique is based on the emission of light radiation?

- A. Flame photometry
- B. Atomic absorption spectrophotometry
- C. Raman spectroscopy
- D. Conductometry

Q-4. Which of the following method is based on the solubility difference between the analyte and the unwanted components

- A. Distillation
- B. Complex formation
- C. Electrodeposition
- D. Precipitation

Q-5. Which of the following technique is based on the rate of reaction?

- A. Isotopic dilution analysis
- B. Flow injection analysis
- C. Mass spectrometry
- D. None

Q-6. The term accuracy refers to how near the observed value is to

- A. Mean value
- B. Significant value
- C. Actual value
- D. None

$$\frac{28}{31} \times 100 = 90.32\%$$

$$\frac{28}{31} \times 100 = 90.32\%$$

$$\frac{28}{31} \times 100 = 90.32\%$$

$$\frac{32}{31} = 1.032$$

$$\frac{8}{256} = 0.031$$

Q-7. When HCl is titrated against NaOH the pH at equivalence point will be

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-8. When CH₃COOH is titrated against NaOH the pH at the end point is

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-9. Which of the following is best indicator for titration of NH₄OH with HCl?

- A. Methyl red
- B. Methyl orange
- C. Phenolphthaleine
- D. None

Q-10. Soap is a salt of compound known as

- A. Acetic acid
- B. Formic acid
- C. Fatty acid
- D. Amino acid

Q-11. The colour of water in a lake is due to

- A. Excessive growth of sea weeds
- B. Algae
- C. Grass
- D. Other pollution

Q-12. Cement is a mixture of

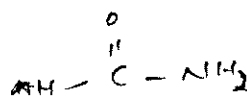
- A. Clay and clinker
- B. Clay, limestone and gypsum
- C. Limestone and gypsum
- D. Limestone and clay

Q-13. The percentage of nitrogen in urea is

- A. 36%
- B. 46%
- C. 56%
- D. 66%

Q-14. The percentage of nitrogen in ammonia is

- A. 32%
- B. 42%
- C. 72%
- D. 82%



Q-15. Copper occur in nature as

- A. Native
- B. Combined
- C. Both
- D. None

Q-16. The formula of Cryolite is

- A. Na_3AlF_6
- B. Na_3AlF_4
- C. Na_3AlF_5
- D. None

Q-17. Cells with nuclear envelop belongs to

- A. Prokaryotes
- B. Eukaryotes
- C. Both
- D. None

Q-18. The diameter of a typical plant or animal cell is

- A. 1 to 5 μm
- B. 5 to 10 μm
- C. 10 to 50 μm
- D. 5 to 100 μm

Q-19. Acids are substances whose aqueous solutions turned blue litmus red and tasted sour stated by

- A. Davy
- B. Liebig
- C. Boyle
- D. Rouelle

Q-20. Which of the following statement is not true regarding buffers?

- A. They are made up of weak acid and its salts
- B. They are made up of weak base and its salts
- C. they tend to resist a change in pH value
- D. they are made up of strong acid and weak base

Q-21. Relative order of acidity of HF , HCl , HBr and HI acids is

- A. $\text{HCl} > \text{HBr} > \text{HI} > \text{HF}$
- B. $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$
- C. $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$
- D. $\text{HF} > \text{HI} > \text{HCl} > \text{HBr}$

Q-22. The pH of 0.1 M HCl solution is

- A. 0.01
- B. 0.1
- C. 0.2
- D. 1

Q-23. Which of the following amino acid have two carboxylic groups?

- A. Aspartic acid
- B. Histidine
- C. Glutamine
- D. none

Q-24. How many isomeric aldoses are possible for the molecular formula $\text{C}_6\text{H}_{12}\text{O}_6$

- A. 2
- B. 4
- C. 6
- D. 16

Q-25. Epimers are compounds that differ in

- A. functional group
- B. configuration at alpha carbon
- C. configuration at any carbon
- D. none

Q-26. Select a basic amino acid

- A. Glycine
- B. Cystine
- C. Alanine
- D. Lysine

Q-27. Apoenzyme is

- A. Hydrolytic enzyme
- B. Oxidative enzyme
- C. Coenzyme
- D. Protein part of enzyme after removal of coenzyme

Q-28. A sugar present in DNA is

- A. D-ribose
- B. D-glucose
- C. 2-Deoxy-D-Ribose
- D. None

Q-29. Which vitamin is responsible for vision?

- A. Retinol
- B. Vit D
- C. Tocopherols
- D. Vit. K

Q-30. Which of the following is periodic property?

- A. Atomic volume
- B. Metallic character
- C. Ionization energy
- D. All

Q-31. Which of the following has largest size?

- A. Na^+ B. Cl^- C. F^- D. Fe^{2+}

Q-32. Which group contains elements that exist as monoatomic molecules?

- A. 1 B. 2 C. 14 D. 18

Q-33. Which of the following element is more metallic?

- A. P B. As C. Sb D. Bi

Q-34. Which of the following factor effect ionization energy?

- A. Atomic radius B. Nuclear charge
C. Shielding effect D. All

Q-35. Which of the following element is metalloid?

- A. Pb B. carbon C. As D. Mg

Q-36. Which of the following compound does not following octet rule?

- A. CS_2 B. PBr_3 C. IBr D. BrF_5

Q-37. Which of the following halides have the lowest melting point?

- A. NaCl B. NaF C. NaBr D. NaI

Q-38. Which of the following halides has zero dipole moment?

- A. NH_3 B. Cl_2 C. NF_3 D. CHCl_3

Q-39. The state of hybridization of carbon in CO_2 is?

- A. sp B. sp^2 C. sp^3 D. dsp²

Q-40. Which one of the following is non-polar?

- A. CH_2Cl B. CCl_4 C. CHCl_3 D. CHCl_2

Q-41. Silvite is an ore of..?

- A. Ca B. Mg C. Ba D. K

Q-42. Which elements are non metals?

- A. N & P B. As & Sb C. Sb & Bi D. Ba & Bi

Q-43. Among oxides of nitrogen all are gases except

- A. N_2O_5 B. N_2O C. NO D. N_2O_3

Q-44. All halogens form oxyacide except

- A. Flourine B. Chlorine C. Bromine D. Iodine

Q-45. Compunds HCN and HNC are

- A. Tautomers B. Metamers
C. functional isomers D. Conformers

Q-46. Cetane is

- A. n-hexane B. n-pentadecane
C. n-octane D. n-hexadecane

Q-47. Which among the following is not nucleophile?

- A. CH_3NH_3 B. CH_2CH_2
C. CH_3^+ D. OH

Q-48. Which of the following is strong acid?

- A. Benzoic acid B. m-nitrobenzoic acid
C. o-nitrobenzoic acid D. p-nitrobenzoic acid

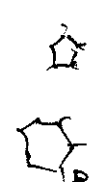
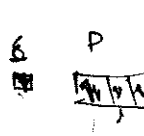
Q-49. Which of the following orbital does not make sense?

- A. 6f B. 4f C. 7s D. 3g

Q-50. The maxium value of order of reaction may be?

- A. 1 B. 2 C. 3 D. 4

2, 8, 8
10, 18,



Name :
Father name :

Sumera Rehman
Sher Rehman

Dr.

Screening test for the appointment of TGT (Contract)

Subject: Chemistry

Note: Choose the correct answer and all questions are compulsory.

Q-1. The process of identifying the component present in a sample is called

- A. Quantitative analysis
- B. Qualitative analysis
- C. Volumetric analysis
- D. Gravimetric analysis

Q-2. Conductometry is based on

- A. Electric current
- B. Electrical potential
- C. Dielectric constant
- D. Electrical conductance

Q-3. Which of the following technique is based on the emission of light radiation?

- A. Flame photometry
- B. Atomic absorption spectrophotometry
- C. Raman spectroscopy
- D. Conductometry

Q-4. Which of the following method is based on the solubility difference between the analyte and the unwanted components

- A. Distillation
- B. Complex formation
- C. Electrodeposition
- D. Precipitation

Q-5. Which of the following technique is based on the rate of reaction?

- A. Isotopic dilution analysis
- B. Flow injection analysis
- C. Mass spectrometry
- D. None

Q-6. The term accuracy refers to how near the observed value is to

- A. Mean value
- B. Significant value
- C. Actual value
- D. None

Q-7. When HCl is titrated against NaOH the pH at equivalence point will be

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-8. When CH₃COOH is titrated against NaOH the pH at the end point is

- A. None
- B. equal to 7
- C. less than 7
- D. greater than 7

Q-9. Which of the following is best indicator for titration of NH₄OH with HCl?

- A. Methyl red
- B. Methyl orange
- C. Phenolphthaleine
- D. None

Q-10. Soap is a salt of compound known as

- A. Acetic acid
- B. Formic acid
- C. Fatty acid
- D. Amino acid

Q-11. The colour of water in a lake is due to

- A. Excessive growth of sea weeds
- B. Algae
- C. Grass
- D. Other pollution

Q-12. Cement is a mixture of

- A. Clay and clinker
- B. Clay, limestone and gypsum
- C. Limestone and gypsum
- D. Limestone and clay

Q-13. The percentage of nitrogen in urea is

- A. 36%
- B. 46%
- C. 56%
- D. 66%

Q-14. The percentage of nitrogen in ammonia is

- A. 32%
- B. 42%
- C. 72%
- D. 82%

- Q-15.** Copper occur in nature as
 A. Native
 B. Combined
 C. Both
 D. None
- Q-16.** The formula of Cryolite is
 A. Na_3AlF_3
 B. Na_3AlF_4
 C. Na_3AlF_5
 D. None
- Q-17.** Cells with nuclear envelop belongs to
 A. Prokaryotes
 B. Eukaryotes
 C. Both
 D. None
- Q-18.** The diameter of a typical plant or animal cell is
 A. 1 to 5 μm
 B. 5 to 10 μm
 C. 10 to 50 μm
 D. 5 to 100 μm
- Q-19.** Acids are substances whose aqueous solutions turned blue litmus red and tasted sour stated by
 A. Davy
 B. Liebig
 C. Boyle
 D. Rouelle
- Q-20.** Which of the following statement is not true regarding buffers?
 A. They are made up of weak acid and its salts
 B. They are made up of weak base and its salts
 C. they tend to resist a change in pH value
 D. they are made up of strong acid and weak base
- Q-21.** Relative order of acidity of HF, HCl, HBr and HI acids is
 A. $\text{HCl} > \text{HBr} > \text{HI} > \text{HF}$
 B. $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$
 C. $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$
 D. $\text{HF} > \text{HI} > \text{HCl} > \text{HBr}$
- Q-22.** The pH of 0.1 M HCl solution is
 A. 0.01 B. 0.1 C. 0.2 D. 1

- Q-23.** Which of the following amino acid have two carboxylic groups?
 A. Aspartic acid
 B. Histidine
 C. Gluatmine
 D. none
- Q-24.** How many isomeric aldoses are possible for the molecular formula $\text{C}_6\text{H}_{12}\text{O}_6$?
 A. 2
 B. 4
 C. 6
 D. 16
- Q-25.** Epimers are compounds that differ in
 A. functional group
 B. configuration at alpha carbon
 C. configuration at any carbon
 D. none
- Q-26.** Select a basic amino acid
 A. Glycine
 B. Cystine
 C. Alanine
 D. Lysine
- Q-27.** Apoenzyme is
 A. Hydrolytic enzyme
 B. Oxidative enzyme
 C. Coenzyme
 D. Protein part of enzyme after removal of coenzyme
- Q-28.** A sugar present in DNA is
 A. D-ribose
 B. D-glucose
 C. 2-Deoxy-D-Ribose
 D. None
- Q-29.** Which vitamin is responsible for vision?
 A. Retinol
 B. Vit D
 C. Tocopherols
 D. Vit. K
- Q-30.** Which of the following is periodic property?
 A. Atomic volume
 B. Metallic character
 C. Ionization energy
 D. All

- Q-31.** Which of the following has largest size ?
 A. Na^+ B. Cl^- C. F^- **D. Fe^{2+}** ✓
- Q-32.** Which group contains elements that exist as monoatomic molecules?
 A. 1 B. 2 C. 14 **D. 18** ✓
- Q-33.** Which of the following element is more metallic?
 A. P B. As C. Sb **D. Bi** ✓
- Q-34.** Which of the following factor effect ionization energy?
 A. Atomic radius B. Nuclear charge
C. Shielding effect D. All X
- Q-35.** Which of the following element is metalloid?
 A. Pb **B. carbon** C. As D. Mg X
- Q-36.** Which of the following compound does not following octet rule?
A. CS_2 B. PBr_3 C. IBr D. BrF_5 X
- Q-37.** Which of the following halides have the lowest melting point?
 A. NaCl **B. NaF** C. NaBr D. NaI X
- Q-38.** Which of the following halides has zero dipole moment?
A. NH_3 B. Cl_2 C. NF_3 D. CHCl_3 X
- Q-39.** The state of hybridization of carbon in CO_2 is?
A. sp B. sp^2 C. sp^3 D. dsp^2 ✓
- Q-40.** Which one of the following is non-polar?
 A. CH_2Cl **B. CCl_4** C. CHCl_3 D. CHCl_3 ✓
- Q-41.** Silvite is an ore of..?
 A. Ca **B. Mg** C. Ba D. K ✓
- Q-42.** Which elements are non metals?
A. N & P B. As & Sb C. Sb & Bi D. Ba & Bi X
- Q-43.** Among oxides of nitrogen all are gases except
A. N_2O_5 B. N_2O C. NO D. N_2O_3 X
- Q-44.** All halogens form oxyacide except
A. Flourine B. Chlorine C. Bromine D. Iodine ✓
- Q-45.** Compunds HCN and HNC are
A. Tautomers B. Metamers
 C. functional isomers D. Conformers ✓
- Q-46.** Cetane is
 A. n-hexane B. n-pentadecane
 C. n-octane **D. n-hexadecane** ✓
- Q-47.** Which among the following is not nucleophile ?
 A. CH_3NH_3 B. CH_2CH_2
C. CH_3^+ D. OH^- ✓
- Q-48.** Which of the following is strong acid?
 A. Benzoic acid B. m-nitrobenzoic acid
C. o-nitrobenzoic acid **D. p-nitrobenzoic acid** ✓
- Q-49.** Which of the following orbital does not make sense?
 A. 6f B. 4f C. 7s **D. 5g** ✓
- Q-50.** The maxium value of order of reaction may be?
 A. 1 B. 2 **C. 3** D. 4 X
- *****