



Smart Guess & Test Papers

Student Name _____ Father Name _____ Roll Number _____

Class: 1st /year - Chemistry Marks : 42 Exam Format : Chapter Wise MCQs

Time : notespk.com_Nauman Sadaf | Date _____ Examiner Sig _____ Chapter#: 1

| | | | | | | | |
|-------|--|-----|--|-----|--|-------|--|
| MCQ's | | S/Q | | L/Q | | Total | |
|-------|--|-----|--|-----|--|-------|--|

Objective Type

1. Encircle the Correct Option. (1 x 32 = 32)

1. درست جواب کے گرد دائرہ لگائیں۔

1) Isotopes differ in

| | | | |
|--|---|------------------------|--|
| ✓a) Properties Which depends upon mass | b) Arrangement of electrons in orbitals | c) Chemical properties | d) The extent to which they may be effected in electromagnetic field |
|--|---|------------------------|--|

2) 27 g of Al will react completely with how much mass of O₂ to produce Al₂O₃.

| | | | |
|------------------|-------------------|-------------------|--------------------|
| a) 8 g of oxygen | b) 16 g of oxygen | c) 32 g of oxygen | ✓d) 24 g of oxygen |
|------------------|-------------------|-------------------|--------------------|

3) A limiting reactant is the one which

| | | | |
|---|--|---|--|
| a) Is taken in lesser quantity in grams as compared to other reactants. | b) Is taken in lesser quantity in volume as compared to the other reactants. | c) Gives the maximum amount of the product which is required. | ✓d) Gives the minimum amount of the product under consideration. |
|---|--|---|--|

4) Isotopes differ in

| | | | |
|---------------------------------------|---|------------------------|--|
| ✓a) Properties which depend upon mass | b) Arrangement of electrons in orbitals | c) Chemical properties | d) The extent to which they may be affected in electromagnetic field |
|---------------------------------------|---|------------------------|--|

5) The number of Isotopes of Gold (Au) is

| | | | |
|-------|------|------|-------|
| ✓a) 1 | b) 3 | c) 7 | d) 11 |
|-------|------|------|-------|

6) The number of natural Isotopes is

| | | | |
|---------|--------|--------|--------|
| ✓a) 280 | b) 150 | c) 300 | d) 400 |
|---------|--------|--------|--------|

7) Isotopes differ in

| | | | |
|--------------------|-------------------|-----------------------|-----------------------|
| a) Number of atoms | b) Number of Pton | c) Number of electron | ✓d) Number of neutron |
|--------------------|-------------------|-----------------------|-----------------------|

8) Which of the following statement is not true.

| | | | |
|--|--|--|---|
| a) Isotopes with even atomic masses are comparatively abundaat | ✓b) Isotopes with odd atomic masses are comparatively abundant | c) Isotopes with even atomic masses and even atomic numbers are comparatively abundant | d) Isotopes with even atomic masses and oss atomic numbers are comparatively abundant |
|--|--|--|---|

9) The number of isotopes of calcium is

| | | | |
|---------|----------|---------|---------|
| ✓a) Six | b) Seven | c) Five | d) Nine |
|---------|----------|---------|---------|

10) Silver has _____ natural isotopes.

| | | | |
|---------|---------|-----------|------------|
| a) Nine | ✓b) Two | c) Eleven | d) Sixteen |
|---------|---------|-----------|------------|

11) Silver has _____ isotopes.

| | | | |
|---------|--------|-----------|-------------|
| a) Nine | b) Ten | c) Eleven | ✓d) Sixteen |
|---------|--------|-----------|-------------|

12) What is the maximum mass of chromium that can be extracted from 76g of Cr₂O₃ ?

| | | | |
|--------|---------|---------|---------|
| a) 48g | ✓b) 52g | c) 104g | d) 152g |
|--------|---------|---------|---------|

13) Which of the following has highest mass at S.T.P ?

| | | | |
|---|-------------------------------|-----------------------------------|---|
| a) 6.02×10^{22} molecules of CO ₂ | b) 2 moles of CH ₄ | c) 0.1 g mole of N ₂ O | ✓d) 22.4 dm ³ of CO ₂ at . S.T.P. |
|---|-------------------------------|-----------------------------------|---|

14) The number of atoms present in 0.5 moles of Na is

| | | | |
|-------------------------|--------------------------|--------------------------|---------------------------|
| a) 1.0×10^{23} | b) 6.02×10^{23} | c) 2.04×10^{23} | ✓d) 3.01×10^{23} |
|-------------------------|--------------------------|--------------------------|---------------------------|

15) The volume occupied by 16g of CH₄ at S.T.P.

| | | | |
|---------------------------|---------------------------|--------------------------|-------------------------|
| a) 224.14 dm ³ | b) 22.414 dm ³ | ✓c) 1.12 dm ³ | d) 2.24 dm ³ |
|---------------------------|---------------------------|--------------------------|-------------------------|

16) The volume occupied by 1.6 g of O₂ at S.T.P.

| | | | |
|-------------------------|-------------------------|--------------------------|------------------------|
| a) 24.4 dm ³ | b) 2.24 dm ³ | ✓c) 1.12 dm ³ | d) 112 dm ³ |
|-------------------------|-------------------------|--------------------------|------------------------|

17) The volume occupied by 1.4g of N₂ at S.T.P is

| | | | |
|-------------------------|-------------------------|--------------------------|------------------------|
| a) 24.4 dm ³ | b) 22.4 dm ³ | ✓c) 1.12 dm ³ | d) 112 dm ³ |
|-------------------------|-------------------------|--------------------------|------------------------|

18) What are the number of moles of hydrogen atom in 3.2g of CH₄ ? (Relative atomic mass C = 12)

| | | | |
|--------|--------|--------|---------|
| a) 0.2 | b) 0.4 | c) 0.6 | ✓d) 0.8 |
|--------|--------|--------|---------|

19) One mole of water contains .

| | | | |
|---------------|--------------------------------|--------------------------------|-------------------------------------|
| a) 81 g water | b) 6.02×10^{23} atoms | c) 6.02×10^{23} inons | ✓d) 6.02×10^{23} molecules |
|---------------|--------------------------------|--------------------------------|-------------------------------------|

20) What is the ratio of volume of 2g of H₂ to the volume of 16g CH₄ both volumes are at STP

| | | | |
|--------|--------|---------|--------|
| a) 1:8 | b) 1:2 | ✓c) 1:1 | d) 2:1 |
|--------|--------|---------|--------|

21) Number of moles in 100g of KClO₃ .

| | | | |
|---------|---------|----------|-----------|
| a) 0.76 | b) 0.56 | c) 0.014 | ✓d) 0.816 |
|---------|---------|----------|-----------|

22) Stoichiometry is a branch of _____

| | | | |
|------------|---------------|------------|------------|
| a) Physics | ✓b) Chemistry | c) Biology | d) English |
|------------|---------------|------------|------------|

23) Stoichiometry tells us the _____ relationship between reactants and products .

| | | | |
|----------------|------------------|---------------|------------------|
| a) Qualitative | ✓b) Quantitative | c) Both A & B | d) None of these |
|----------------|------------------|---------------|------------------|

24) In mass mole relationship if we are given with mass of substance the we can calculate _____ of other substance .

| | | | |
|---------|--------------------|-----------|------------------|
| a) Mass | b) No. of electron | ✓c) Moles | d) None of these |
|---------|--------------------|-----------|------------------|

25) In Mass-volume relationship if we are given with mass of one substance we can calculate _____ of other substance .

| | | | |
|---------|------------|---------------|------------------|
| a) Mole | ✓b) Volume | c) Both A & B | d) None of these |
|---------|------------|---------------|------------------|

26) In stoichiometric calculate all the reactants must converted into

| | | | |
|--------------|--------------|---------------|---------------|
| ✓a) Products | b) Reactants | c) Both A & B | d) Molar mass |
|--------------|--------------|---------------|---------------|

27) The reactant which consumes earlier and gives least quantity of product is called.

| | | | |
|-------------|-----------------------|-------------------|--------------------------|
| a) Reactant | ✓b) Limiting reactant | c) Stoichiometryd | d) Stoichiometric amount |
|-------------|-----------------------|-------------------|--------------------------|

28) A limiting reactant is the one which

| | | | |
|---|--|---|--|
| a) Is taken is lesser quantity to the amount in gram required | b) Is taken is lesser quantity in volume as per its required | c) Gives the maximum amount of the product required | ✓d) Gives the minimum amount of the required product |
|---|--|---|--|

29) The amount of products obtained in a chemical reaction is called _____ yield of that reaction .

| | | | |
|-------------|--------|---------|------------|
| a) Required | b) Low | c) High | ✓d) Actual |
|-------------|--------|---------|------------|

30) The amount of products calculated from balanced chemical equation represents .

| | | | |
|-----------------|-----------------------|---------------|------------------|
| a) Actual yield | ✓b) Theoretical yield | c) Both A & B | d) None of these |
|-----------------|-----------------------|---------------|------------------|

31) In most of the reactions the actual yield is _____ than theoretical yield .

| | | | |
|---------|----------|---------|-------------------|
| a) More | ✓b) Less | c) None | d) Expected yield |
|---------|----------|---------|-------------------|

32) Many elements have fractional atomic masses . This is because .

| | | | |
|--|--|---|---|
| a) The mass of the atom is itself fractional | b) Atomic masses are average masses of isobars | c) Atomic masses are average masses of isotopes | ✓d) Atomic masses are average masses of isotopes proportional to their relative abundance |
|--|--|---|---|

2. Write "T" for a true statement and "F" for a false statement (1 x 4 = 4)

2. درست جواب کے سامنے (✓) نشان لگائیں اور غلط کے سامنے (X) کا نشان لگائیں۔

33) Neon has three isotopes and the fourth one with atomic mass 20.18 amu.

☐ True ✓ ☒ False

34) The number of atoms in 1.79 g of gold and 0.023 g of sodium are equal.

☐ True ✓ ☒ False

35) The number of electrons in the molecules of CO and N₂ are 14 each, so 1 g of each gas will have same number of electrons.

✓ ☒ True ☐ False

36) Actual yield of a chemical reaction may be greater than the theoretical yield.

☐ True ✓ ☒ False

3. Fill in the blanks. (1 x 6 = 6)

3. خالی جگہ پُر کریں۔

37) The unit of relative atomic mass is _____.

✓amu

38) The exact masses of isotopes can be determined by _____ spectrograph.

✓Mass

39) The phenomenon of isotopy was first discovered by . _____

✓Soddy

40) A limiting reagent is that which controls the quantities of _____

✓Products

41) 4g of CH₄ at 0°C and 1 atm pressure has _____ molecules of CH₄

✓ 1.505×10^{23}

42) Stoichiometric calculations can be performed only when _____ is obeyed.

✓Conservation