| SET | $\mathbf{A} / \mathbf{B} / \mathbf{C}$ |
| :--- | :--- |

INDIAN SCHOOL MUSCAT
FINAL EXAMINATION 2023
SCIENCE - CHEMISTRY
CLASS:
Max.Marks:

| MARKING SCHEME |  |  |  |
| :---: | :---: | :---: | :---: |
| SET | QN.NO | VALUE POINTS | MARKS SPLIT UP |
| $\begin{aligned} & \text { SET } \\ & \text { A } \end{aligned}$ | 8 | A | 1 |
|  | 9 | C | 1 |
|  | 10 | A | 1 |
|  | 11 | A | 1 |
|  | 18 | A | 1 |
|  | 19 | B | 1 |
|  | 21 | Sodium electron dot structure \& atomic number <br> OR $\begin{aligned} & \text { Mass no }=\mathrm{p}+\mathrm{n} \\ & 31 \quad=15+\mathrm{n} \\ & 31-15=\mathrm{n} \\ & 16=\mathrm{n} \end{aligned}$ | 1.5 mark\& 0.5 mark <br> 0.5 mark <br> 0.5 mark <br> 1 mark |
|  | 22 | two difference between homogeneous and heterogeneous ( each difference 1 mark) | 2 |
|  | 32 | Latent heat of fusion 1 Latent heat of vaporization 1 Sublimation 1 | 3 |
|  | 33 | a) Tyndall effect 1 <br> b) It is homogeneous, particle are not enough to scatter light 1 <br> c) Ink, paint etc | 3 |
|  | 34 | i) Sodium oxide : Na 2 O <br> ii) Aluminium Chloride : $\mathrm{AlCl}_{3}$ <br> iii) Sodium sulfide : Na 2 S | Total 5 |


|  |  | iv) Magnesium Hydroxide : $\mathrm{Mg}(\mathrm{OH})_{2}$ <br> ( each 0.5 mark) <br> Formula unit mass of $\mathrm{ZnO}=($ Atomic mass of Zn$)+($ Atomic mass of O) $=(65+16) u=81 u$ <br> Formula unit mass of $\mathrm{Na} 2 \mathrm{O}=(2 \times 23)+16$ $=62 \mathrm{u}$ <br> Formula unit mass of $\mathrm{K}_{2} \mathrm{CO}_{3}=(2 \times 39)+12+(3 \times 16)$ $=138 \mathrm{u}$ <br> Each 1 mark <br> OR <br> a)Aluminium sulfate <br> Calcium chloride. <br> Potassium sulfate. <br> Potassium nitrate. Each 0.5 mark <br> b) 3 <br> 5 <br> Each 1.5 mark |  |
| :---: | :---: | :---: | :---: |
|  | 38 | $\begin{array}{\|l} \hline \text { 1) } \mathrm{D} \\ \text { 2) } \mathrm{A} \\ \text { 3)B } \mathrm{B} \\ \text { 4)C } \end{array}$ |  |
| $\begin{array}{\|l} \hline \text { SET } \\ \mathrm{B} \end{array}$ | 22 | Write any two differences between mixture and compound (each difference 1 mark) | 2 |
|  | 32 | - Rate of evaporation increases with rise in temperature. <br> - Evaporation is less when exposed surface area decreases. <br> - Less evaporation if moisture content is high in the air. <br> Each 1 mark | 3 |
| $\begin{array}{\|l} \hline \text { SET } \\ \mathrm{C} \end{array}$ | 22 | Write any two differences between physical change and chemical change (Each difference 1 mark) | 2 |
|  | 32 | a) ' $P$ ' is fusion (melting), ' 0 ' is boiling, ' $R$ ' is condensation and ' $S$ ' is sublimation. (each 0.5 mark) <br> b) Directly converting gas in to solid 1 mark | 3 |
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