

INDIAN SCHOOL MUSCAT
ANNUAL EXAMINATION
FEBRUARY 2020

SET A

CLASS IX

Marking Scheme – SCIENCE [THEORY]/ CHEMISTRY

SECTION - A

| Q.NO. | ANSWER | MARKS |
|--------------------|--|-------|
| 1 | Definition | 1 |
| 4 | CHE | |
| 4(a) | (c) Smoke + fog | 1 |
| 4(b) | (a) Carbonic acid | 1 |
| 4(c) | (a) Biosphere | 1 |
| 4(d) | (b) Dry ice | 1 |
| 12 | (a) Increase in temperature of water. OR (a) Temperature and pressure | 1 |
| | <p>For question numbers 13 and 14, two statements are given- one labeled <i>Assertion</i> (A) and the other labeled <i>Reason</i> (R). Select the correct answer to these questions from the codes (i), (ii).(iii) and (iv) as given below</p> <p style="padding-left: 40px;">i) Both A and R are true and R is correct explanation of the assertion.</p> <p style="padding-left: 40px;">ii) Both A and R are true but R is not the correct explanation of the assertion.</p> <p style="padding-left: 40px;">iii) A is true but R is false.</p> <p style="padding-left: 40px;">iv) A is false but R is true</p> | |
| 13 | (a) | 1 |
| SECTION - B | | |
| 15 | a) Chromatography b) Sublimation c) Centrifugation d) Evaporation | 3 |

| | | |
|-------------------|--|-------------|
| | Separating funnel – Heavier liq: forms lower layer Lighter liq: forms upper layer | |
| 16 | a)CuCl ₂ b) CaSO ₄ c) Na ₃ PO ₄ OR a)Definition Relation b)XO | 1 1 1 |
| 17 | Three conclusions | 3 |
| SECTION- C | | |
| 25 | a) 8 b) 16 c) Isotopes d) Oxygen e) O ²⁻ OR a) At: no:20 , Mass no: 40 b) Calcium Diagram | 5 |
| 26 | a) Law b) Mol:mass= 100 Formula $n=m/M$ No : of molecules = $n * N_0$ Ans: $3.011 * 10^{23}$ c) Definition –Triatomic –ozone O ₃ | 5 |
| | | |

SET B
SECTION – A

| Q.NO. | ANSWER | MARKS |
|----------------|---|-------|
| 1 | Definition | 1 |
| 4 | CHE | |
| 4(iv) | Dry ice | 1 |
| 4(iii) | Smoke +fog | 1 |
| 4(i) | Carbonic acid | 1 |
| 4(i) | Biosphere | 1 |
| 12(c) (iii) | Evaporation , Diffusion , Expansion of gases OR Steam | 1 |

| | | |
|--------------------|--|-------|
| | <p>For question numbers 13 and 14, two statements are given- one labeled <i>Assertion</i> (A) and the other labeled <i>Reason</i> (R). Select the correct answer to these questions from the codes (i), (ii).(iii) and (iv) as given below</p> <p style="text-align: center;"> i. Both A and R are true and R is correct explanation of the assertion. ii. Both A and R are true but R is not the correct explanation of the assertion. iii. A is true but R is false. iv. A is false but R is true </p> | |
| 13 | (iii) | 1 |
| SECTION – B | | |
| 15 | a) One difference b) Fractional distillation c) Definition | 3 |
| 16 | a) $(\text{NH}_4)_2 \text{SO}_4$ b) KOH c) $\text{Mg}(\text{NO}_3)_2$ OR a) 3 b) XCl_3 , $\text{X}_2(\text{SO}_4)_3$ | 3 |
| 17 | Three observations | 3 |
| SECTION- C | | |
| 25 | (a) 6 (b) A and B (c) A/B/D (d) C (e) G OR i. 9electrons ii. Valency-1 iii. Fluorine iv. Diagram | 5 |
| 26 | (a) Any 4 postulates (b) Definition-any one example (c) Formula unit mass= 58.5u Mass= 50g No of moles = m/M = 50/58.5 =0.854moles | 5 |
| | | |
| SET C | | |
| SECTION - A | | |
| Q.NO. | ANSWER | MARKS |
| 1 | Definition | 1 |

| | | |
|-------------------|--|---|
| 4 | CHE | |
| 4(a) | (c) Smoke + fog | 1 |
| 4(b) | (a) Carbonic acid | 1 |
| 4(c) | (a) Biosphere | 1 |
| 4(d) | (b)Dry ice | 1 |
| 12 | Increase in temperature/Increase in surface area OR (c) Steam | 1 |
| | <p>For question numbers 13 and 14, two statements are given- one labeled <i>Assertion</i> (A) and the other labeled <i>Reason</i> (R). Select the correct answer to these questions from the codes (i), (ii).(iii) and (iv) as given below</p> <p>i) Both A and R are true and R is correct explanation of the assertion.</p> <p>ii) Both A and R are true but R is not the correct explanation of the assertion.</p> <p>iii) A is true but R is false.</p> <p>iv) A is false but R is true</p> | |
| 13 | (i) | 1 |
| | | |
| 15 | a) Chromatography b) Sublimation c) Centrifugation d) Evaporation (b) Separating funnel – Heavier liq: forms lower layer Lighter liq: forms upper layer | 3 |
| 16 | a) Fe ₂ O ₃ b) BaSO ₄ c) NaHCO ₃ OR Definition Any 2 differences. | 3 |
| 17 | Three features of Rutherford's model | 3 |
| SECTION- C | | |
| 25 | a) 8 b) 16 c) Isotopes d) Oxygen e) O ²⁻ OR a) i) 9 ii)1 iii)Fluorine b) Diagram | 5 |

| | | |
|----|--|---|
| 26 | a) Law b) Mol: mass= 100 Mass= 25g No : of moles = m/M $= 25/100=1/4 =0.25$ No: of molecules = $n* N$ $0.25* 6.022*10^{23}$ $=1.505 *10^{23}$ molecules c) Definition Example <div>-----</div> | 5 |
| | | |