**NOTE:** Please select the required particular question type format which you needed from below given tables and please replace the complexity level as per needed in individual question type given below.

Complexity levels: very\_easy, easy, medium, difficult & very\_difficult

**Question Types :**

* MCQ
* multiple\_mcq
* assertion
* descriptive
* number
* tf
* Fill-blank

| Medium | |
| --- | --- |
| MCQ | |
| One of the following does not happen during a chemical reaction. That is | |
| 1 | Breaking of old chemical bonds and formation of new chemical bonds |
| 2 | Formation of new substances with entirely different properties |
| 3 | Atoms of one element change into those of another element to form new products. |
| 4 | A rearrangement of atoms takes place to form new products. |
| 3 | |
| Atoms do not change to form another element in a chemical reaction. They only react and form new compounds. | |

| Easy | |
| --- | --- |
| Assertion | |
| Assertion: The balancing of chemical equations is based on the law of conservation of mass.  Reason: Total mass of reactants is equal to total mass of products. | |
| 1 | If both Assertion and Reason are correct and Reason is the correct explanation of Assertion |
| 2 | If both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion. |
| 3 | If Assertion is correct but Reason is incorrect. |
| 4 | If Assertion is incorrect but Reason is correct. |
| 5 | If both Assertion and Reason are incorrect |
| 1 | |
|  | |

| Easy | |
| --- | --- |
| fill-blank | |
| In a reversible reaction both reactants and products are separated from each other by using <answer> sign. | |
| ⇋ | |
|  | |

| Medium | |
| --- | --- |
| Number | |
| The following equation is unbalanced, after balancing the equation what will be the value of x? | |
| 2 | |
| After balancing the equation will be | |

| TF | |
| --- | --- |
| Electrons are negatively charged subatomic particles located outside the atomic nucleus. | |
| true | |
| Explanation | |

| DESCRIPTIVE |
| --- |
| Explain the difference between speed and velocity. Provide examples to illustrate your answer. |
| answer |
| solution |