**Single Correct Choice**

|  |  |
| --- | --- |
| Subject | Physics |
| Question English | Which is not deflected by magnetic field - |
| Question\_hindi |  |
| Question image |  |
| Question Type | single\_choice |
| Option1 English | Neutron |
| Option1 hindi |  |
| Option2 English | Positron |
| Option 2 Hindi |  |
| Option3 English | Proton |
| Option 3 Hindi |  |
| Option4 English | Electron |
| Option4 Hindi |  |
| Solution English | Neutron is charge less entity |
| Solution Hindi |  |
| Correct Marks | 3 |
| Incorrect Marks | 1 |
| Correct Answer | A |

**Multiple Correct Choice**

|  |  |
| --- | --- |
| Subject | Physics |
| Question English | Number of \[\alpha \]-particles scattered by an angle \[\theta \] in Rutherford's experiment are - |
| Question\_hindi |  |
| Question image |  |
| Question Type | multiple\_choice |
| Option1 English | Directly proportional to \[K.{E^2}\] |
| Option1 hindi |  |
| Option2 English | Directly proportional to \[{z^4}\] |
| Option 2 Hindi |  |
| Option3 English | Inversely proportional to \[{e^4}\] |
| Option 3 Hindi |  |
| Option4 English | Inversely proportional to \[K.{E^2}\] |
| Option4 Hindi |  |
| Solution English | \[N\left( \theta \right) \propto \frac{1}{{K.{E^2}}}\]Inversely proportional to \[K.{E^2}\] |
| Solution Hindi |  |
| Correct Marks | 3 |
| Incorrect Marks | 1 |
| Correct Answer | A, B, C |

**Integer Choice**

|  |  |
| --- | --- |
| Subject | Physics |
| Question English | The frequency of one of the lines in Paschen series of a hydrogen atom  is \[2.34{\text{ }} \times {\text{ }}{10^{14}}Hz\]. The higher orbit,  \[{n\_2}\], which produces this transitions is - |
| Question\_hindi |  |
| Question image |  |
| Question Type | integer |
| Solution English |  |
| Solution Hindi |  |
| Correct Marks | 3 |
| Incorrect Marks | 1 |
| Correct Answer | 10 |

**Numerical Choice**

|  |  |
| --- | --- |
| Subject | Physics |
| Question English | In two H atoms X and Y the electrons move around the nucleus in  circular orbits of radius r and 4r respectively. The ratio of the times taken  by them to complete one revolution is - |
| Question\_hindi |  |
| Question image |  |
| Question Type | integer |
| Solution English |  |
| Solution Hindi |  |
| Correct Marks | 3 |
| Incorrect Marks | 1 |
| Correct Answer | \[\frac{1}{8}\] |

**Ture & False**

|  |  |
| --- | --- |
| Subject | Physics |
| Question English | The charge to mass ratio of the particles in cathode rays is greater than  that of the particles in anode rays. |
| Question\_hindi |  |
| Question image |  |
| Question Type | boolean |
| Solution English | e/m ratio of \[{e^-}\]> e/m ratio of P |
| Solution Hindi |  |
| Correct Marks | 3 |
| Incorrect Marks | 1 |
| Correct Answer | true |

**Assertion and Reason**

|  |  |
| --- | --- |
| Question English | Choose any one of the following four responses. |
| Question\_hindi |  |
| Question image |  |
| Question Type | single\_choice |
| Question patter | Easy |
| Assertion English | The charge to mass ratio of the particles in anode rays depends on  nature of the gas taken in the discharge tube. |
| Assertion Hindi |  |
| Reason English | The particles in anode rays carry positive charge. |
| Reason Hindi |  |
| Option1 English | If both Assertion and Reason are true and the Reason is correct  explanation of the Assertion. |
| Option1 hindi |  |
| Option2 English | If both Assertion and Reason are true but the Reason is not a correct explanation of the Assertion. |
| Option 2 Hindi |  |
| Option3 English | If Assertion is true but the Reason is false. |
| Option 3 Hindi |  |
| Option4 English | If Assertion is false but Reason is true. |
| Option4 Hindi |  |
| Solution English | anode rays deflect to –ve terminals. |
| Solution Hindi |  |
| Correct Marks | 3 |
| Incorrect Marks | 1 |
| Correct Answer | B |