

#### TEST BOOKLET CODE T8

## **Part I: Physics**

| NCERT          |   |                  | Number wit<br>Typology | th Skills |              |         |           |
|----------------|---|------------------|------------------------|-----------|--------------|---------|-----------|
| Chapter<br>No. | Chapter Name                              | Concept/<br>Fact | Appli-<br>cation       | Analysis  | Total<br>Qns | Correct | Incorrect |
|                |   | Class: XI        |                        |           |              |         |           |
| 1              | Units and Measurements                    | 10, 23           |                        |           |              |         |           |
| 2              | Motion in a Straight Line                 |                  | 11                     |           |              |         |           |
| 3              | Motion in a Plane                         |                  | 12                     | 16, 17    |              |         |           |
| 4              | Laws of Motion                            |                  | 50                     | 18        |              |         |           |
| 5              | Work, Energy and Power                    | 20               | 1                      |           |              |         |           |
| 6              | System of Particles and Rotational Motion | 40               | 4                      |           | TM           |         |           |
| 7              | Gravitation                               |                  | 2                      | 7, 21     |              |         |           |
| 8              | Mechanical Properties of Solids           |                  | 22, 28                 |           |              |         |           |
| 9              | Mechanical Properties of Fluids           | 41               |                        | 37        |              |         |           |
| 10             | Thermal Properties of Matter              | tion             | Inc                    | 38        |              |         |           |
| 11             | Thermodynamics                            | lion             |                        | 29, 30    |              |         |           |
| 12             | Kinetic Theory                            |                  |                        | 32        |              |         |           |
| 13             | Oscillations                              |                  |                        | 33        |              |         |           |
| 14             | Waves                                     |                  |                        | 8, 47     |              |         |           |
| 15             | Practical Skills in Physics               |                  |                        | 48        |              |         |           |

| NCERT          |   | Question Number with Skills<br>Typology |                  |          |              |                  |
|----------------|---|---|------------------|----------|--------------|------------------|
| Chapter<br>No. | Chapter Name  | Concept/<br>Fact                        | Appli-<br>cation | Analysis | Total<br>Qns | Correct Incorrec |
|                |   | Class: XII                              |                  |          |              |                  |
| 1              | Electric Charges and Fields   |   | 5                |          |              |                  |
| 2              | Electrostatic Potential and<br>Capacitance                            | 6                                       |                  |          |              |                  |
| 3              | Current Electricity   | 46                                      |                  |          |              |                  |
| 4              | Moving Charges and Magnetism  |   | 9, 13            | 15       |              |                  |
| 5              | Magnetism and Matter  |   |                  | 25       |              |                  |
| 6              | Electromagnetic Induction   |   |                  | 24       |              |                  |
| 7              | Alternating Current   | 26                                      |                  | 14       |              |                  |
| 8              | Electromagnetic Waves   |   | 31               | 27       |              |                  |
| 9              | Ray Optics and Optical Instruments                                    | 34                                      | 35               | 3, 39    |              |                  |
| 10             | Wave Optics   |   | 42               |          |              |                  |
| 11             | Dual Nature of Radiation and Matter                                   |   | 36, 43           |          | ТМ           |                  |
| 12             | Atoms   |   |                  | 44       | I IVI        |                  |
| 13             | Nuclei  |   |                  | 45       |              |                  |
| 14             | Semiconductor Electronics :<br>Materials, Devices and Simple Circuits |   |                  | 49       |              |                  |
| 15             | Practical Skills in Physics   | 19                                      | INC              |          |              |                  |



## Part II: Chemistry

| NCERT          | Chamber Nerre  |                         | Number wit<br>Typology | th Skills |              |         |           |
|----------------|--|-------------------------|------------------------|-----------|--------------|---------|-----------|
| Chapter<br>No. | Chapter Name   | Concept/<br>Fact        | Appli-<br>cation       | Analysis  | Total<br>Qns | Correct | Incorrect |
|                |  | Class: XI               |                        |           |              |         |           |
| 1              | Some Basic Concepts of Chemistry                           |                         | 60, 73                 |           | 2            |         |           |
| 2              | Structure of Atom  | 77                      | 54                     |           | 2            |         |           |
| 3              | Classification of Elements and Periodicity in Properties   | 69                      |                        |           | 1            |         |           |
| 4              | Chemical Bonding and Molecular<br>Structure                | <mark>68, 71,</mark> 83 |                        |           | 3            |         |           |
| 5              | Thermodynamics   |                         | 63                     | 92        | 2            |         |           |
| 6              | Equilibrium  | 75                      | 79, 94                 |           | 3            |         |           |
| 7              | Redox Reactions  |                         | 85                     |           | 1            |         |           |
| 8              | The p-Block Elements (Group 13 & 14)                       | 56                      |                        |           | 1            |         |           |
| 9              | Organic Chemistry- Some Basic<br>Principles and Techniques | 95                      | 66                     |           | 2            |         |           |
| 10             | Hydrocarbons   | 90                      | 62                     |           | 2            |         |           |
|                |  | Class: XII              |                        |           |              |         |           |
| 1              | Solutions  |                         | 53                     | 96        | 2            |         |           |
| 2              | Electrochemistry   | 99                      | 64, 86                 |           | 3            |         |           |
| 3              | Chemical Kinetics  | 67, 82                  | 87                     |           | 3            |         |           |
| 4              | The p-Block Elements (Gp 15, 16, 17, 18)                   | 76                      |                        |           | 1            |         |           |
| 5              | The d- and f-Block Elements                                | 70, 84                  |                        |           | 2            |         |           |
| 6              | Coordination Compounds                                     |                         | 57, 78, 93             |           | 3            |         |           |
| 7              | Haloalkanes and Haloarenes                                 | 51                      |                        | 98        | 2            |         |           |
| 8              | Alcohols, Phenols and Ethers                               | 52, 81                  | 72                     |           | 3            |         |           |
| 9              | Aldehydes, Ketones and Carboxylic<br>Acids                 | 55, 61, 74,<br>88, 100  |                        |           | 5            |         |           |
| 10             | Amines   | 59, 80                  |                        | 97        | 3            |         |           |
| 11             | Biomolecules   | 65                      |                        |           | 1            |         |           |
| 12             | Principles Related to Practical Chemistry                  | 58, 89, 91              |                        |           | 3            |         |           |



## **Part III: Botany**

|  |  |  | -   |  |   |   |
|--|--|--|---|--|---|---|
|  |  |  | vith Skills   |  |   |   |
| Chapter Name                               | Concept/<br>Fact   | Appli-<br>cation   | Analysis  | Total<br>Qns   | Correct   | Incorrect   |
|  | Class: XI  |  |   |  |   |   |
| The Living World                           | 116  |  |   | 1  |   |   |
| Biological Classification                  | 103  |  |   | 1  |   |   |
| Plant Kingdom                              | 124, 130   |  | 139   | 3  |   |   |
| Morphology of Flowering Plants             | 110  |  | 120, 146  | 3  |   |   |
| Anatomy of Flowering Plants                | 106  |  | 112, 138  | 3  |   |   |
| Cell: The Unit of Life                     | 101, 117   |  | 142   | 3  |   |   |
| Cell Cycle and Cell Division               | 108, 114,<br>133, 145  |  | 125, 143  | 6  |   |   |
| Photosynthesis in Higher Plants            | 104, 109,<br>131, 136, 141   | 119  |   | 6  |   |   |
| Respiration in Plants                      | 102, 122   | Inc  | <b>N</b>  | 2  |   |   |
| Plant Growth and Development               | 126, 129,<br>134   |  | 7   | 3  |   |   |
|  | Class: XII   | -  |   | -  |   |   |
| Sexual Reproduction in Flowering<br>Plants | 113, 132,<br>150   |  |   | 3  |   |   |
| Principles of Inheritance and Variation    | 128, 144   |  | 140   | 3  |   |   |
| Molecular Basis of Inheritance             | 111, 115, 121,<br>127, 135,<br>148   |  |   | 6  |   |   |
| Microbes in Human Welfare                  | 107  |  |   | 1  |   |   |
| Organisms and Populations                  | 105  |  |   | 1  |   |   |
| Ecosystem                                  | 118, 123,<br>147   |  |   | 3  |   |   |
| Biodiversity and Conservation              | 137  |  | 149   | 2  |   |   |
|  | Biological Classification<br>Plant Kingdom<br>Morphology of Flowering Plants<br>Anatomy of Flowering Plants<br>Cell: The Unit of Life<br>Cell Cycle and Cell Division<br>Photosynthesis in Higher Plants<br>Photosynthesis in Higher Plants<br>Plant Growth and Development<br>Plant Growth and Development<br>Sexual Reproduction in Flowering<br>Plants<br>Principles of Inheritance and Variation<br>Molecular Basis of Inheritance<br>Microbes in Human Welfare<br>Organisms and Populations | Chapter NameConcept/<br>FactConcept/<br>FactThe Living World116Biological Classification103Plant Kingdom124, 130Morphology of Flowering Plants110Anatomy of Flowering Plants106Cell: The Unit of Life101, 117Cell Cycle and Cell Division108, 114, 133, 145Photosynthesis in Higher Plants102, 122Plant Growth and Development126, 129, 134Sexual Reproduction in Flowering Plants126, 129, 134Pinciples of Inheritance and Variation128, 144Molecular Basis of Inheritance107Organisms and Populations105Ecosystem118, 123, 147 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# Part IV: Zoology

| NCERT          |  |                       | Number wi<br>Typology | th Skills        |              |         |           |
|----------------|--|-----------------------|-----------------------|------------------|--------------|---------|-----------|
| Chapter<br>No. | Chapter Name                               | Concept/<br>Fact      | Appli-<br>cation      | Analysis         | Total<br>Qns | Correct | Incorrect |
|                |  | Class: XI             |                       |                  |              |         |           |
| 4              | Animal Kingdom                             | 154, 160,<br>175      |                       | 189, 197         | 5            |         |           |
| 7              | Structural Organisation in Animals         | 171                   |                       | 152, 164,<br>194 | 4            |         |           |
| 9              | Biomolecules                               | 172, 180              |                       | 167, 199         | 4            |         |           |
| 14             | Breathing and Exchange of Gases            |                       |                       | 162, 176,<br>195 | 3            |         |           |
| 15             | Body Fluids and Circulation                |                       |                       | 192              | 1            |         |           |
| 16             | Excretory Products and their Elimination   | 151, 166              |                       | 158, 187         | 4            |         |           |
| 17             | Locomotion and Movement                    |                       |                       | 179              | 1            |         |           |
| 18             | Neural Control and Coordination            | 183                   | Inc                   | 177              | 2            |         |           |
| 19             | Chemical Coordination and Integration      | 169                   |                       | 156              | 2            |         |           |
|                |  | Class: XII            |                       |                  |              | 1       |           |
| 2              | Human Reproduction                         | 163, 184              |                       | 173, 188         | 4            |         |           |
| 3              | Reproductive Health                        | 157, 168,<br>178, 185 |                       |                  | 4            |         |           |
| 6              | Evolution                                  | 165                   |                       | 170, 186         | 3            |         |           |
| 7              | Human Health and Disease                   | 190, 198              |                       | 153, 159,<br>174 | 5            |         |           |
| 9              | Biotechnology: Principles and<br>Processes | 191, 196,<br>200      |                       | 155, 182,<br>193 | 6            |         |           |
| 10             | Biotechnology and its Applications         | 181                   |                       | 161              | 2            |         |           |



## **Score Calculator**

| Part/ Subject      | Total<br>Questions | Maximum<br>Score | Attempted | Correct | Incorrect | Net Score | Qualifying<br>Marks |
|--------------------|--------------------|------------------|-----------|---------|-----------|-----------|---------------------|
| Part I : Physics   | 45                 | 180              |           |         |           |           | 125                 |
| Part II: Chemistry | 45                 | 180              |           |         |           |           | 125                 |
| Part III: Botany   | 45                 | 180              |           |         |           |           | 140                 |
| Part IV: Zoology   | 45                 | 180              |           |         |           |           | 140                 |

#### Success Gap = Net Score- Qualifying Score

Net Score = (Correct x4)- (Incorrect x 1)

| Question Typology | *Remedial Measures                           |
|-------------------|--|
| Conceptual        | Revise Theory of Complete Chapter            |
| Application       | Revise and Practice Formulae Based Questions |
| Analysis          | Practice Critical Thinking Questions         |

\*NCERT page locator has been provided against each question in the test paper which will help the student to find and revise the concept used in the asked question from NCERT book.