AIEEE-All India Entrance Test for admission into various engineering courses in different engineering colleges and institutes in the country has hit the imagination of school going students more than any other entrance test conducted at this level. Every year, lakhs and Lakhs of students toil hard to succeed in this exam.

Without argument, you need to be very well versed with the pattern as well as the level of the questions asked in the exam.

A CHAPTERWISE analysis of previous year's questions is called for here. With this objective in mind, we are giving below the chapter wise analysis (break-up) of questions asked in last 7 years (2002-08) of AIEEE in each of the subjects of Physics, Chemistry

|                                      | Years   |  |  |   |   |   |   |  |
|--------------------------------------|---|--|--|---|---|---|---|--|
| Chapters                             | 02  | 03   | 04   | 05  | 06  | 07  |   |  |
|                                      |   |  |  |   |   |   | -   |  |
|                                      | <u>-</u>  |  |  | 1   | 2   |   |   |  |
| Kinematics                           | 3   | 3  | 4  | 5   | 1   | 2   |   |  |
| Laws Of Motion                       | 7   | 8  | 4  | 4   | 3   | 1   |   |  |
| Work Power and Energy                | 2   | 3  | 5  | 5   | 3   | 1   |   |  |
| Centre of Mass, Impulse and Momentum | 1   | 0  |  | 3   | 3   | 1   |   |  |
| Rotation                             | 4   | 3  | 3  | 2   | 2   | 3   |   |  |
| Gravitation                          | 4   | 3  | 4  | 3   |   |   |   |  |
| Simple Harmonic Motion               | 4   | 5  | 5  | 4   | 3   | 3   |   |  |
| Solids and Fluids                    | 1   | 0  | 2  | 2   | 1   |   |   |  |
| Waves                                | 3   | 2  | 1  | 2   | 2   | 2   |   |  |
| Heat and Thermodynamics              | 10  | 5  | 6  | 5   | 3   | 4   |   |  |
| Optics                               | 4   | 4  | 4  | 6   | 1   | 2   |   |  |
| Current Electricity                  | 7   | 8  | 8  | 7   | 7   | 1   |   |  |
| Electrostatics                       | 5   | 5  | 4  | 5   | 2   | 5   |   |  |
| Magnetics                            | 5   | 5  | 6  | 6   | 2   | 4   |   |  |
| Electromagnetic Induction            | 5   | 5  | 6  | 5   | 5   | 2   |   |  |
| Modern Physics                       | 9   | 13   | 11   | 10  | 15  | 9   |   |  |
| Total No of Questions                | 75  | 75   | 75   | 75  | 55  | 40  |   |  |
| Maximum Marks                        |   |  |  |   | 180   | 120   |   |  |
|                                      | Chapters  Units, Dimensions and Vectors  Kinematics Laws Of Motion  Work Power and Energy Centre of Mass, Impulse and Momentum Rotation Gravitation Simple Harmonic Motion Solids and Fluids Waves Heat and Thermodynamics Optics Current Electricity Electrostatics Magnetics Electromagnetic Induction Modern Physics | Chapters02Units, Dimensions and Vectors1Kinematics3Laws Of Motion7Work Power and Energy2Centre of Mass, Impulse and Momentum1Rotation4Gravitation4Simple Harmonic Motion4Solids and Fluids1Waves3Heat and Thermodynamics10Optics4Current Electricity7Electrostatics5Magnetics5Electromagnetic Induction5Modern Physics9Total No of Questions75 | Chapters         02         03           Units, Dimensions and Vectors         1         3           Kinematics         3         3           Laws Of Motion         7         8           Work Power and Energy         2         3           Centre of Mass, Impulse and Momentum         1         0           Rotation         4         3           Gravitation         4         3           Simple Harmonic Motion         4         5           Solids and Fluids         1         0           Waves         3         2           Heat and Thermodynamics         10         5           Optics         4         4           Current Electricity         7         8           Electrostatics         5         5           Magnetics         5         5           Electromagnetic Induction         5         5           Modern Physics         9         13           Total No of Questions         75         75 | Chapters         02         03         04           Units, Dimensions and Vectors         1         3         2           Kinematics         3         3         4           Laws Of Motion         7         8         4           Work Power and Energy         2         3         5           Centre of Mass, Impulse and Momentum         1         0           Rotation         4         3         3           Gravitation         4         3         4           Simple Harmonic Motion         4         5         5           Solids and Fluids         1         0         2           Waves         3         2         1           Heat and Thermodynamics         10         5         6           Optics         4         4         4           Current Electricity         7         8         8           Electrostatics         5         5         4           Magnetics         5         5         6           Electromagnetic Induction         5         5         6           Modern Physics         9         13         11           Total No of Questions         75 | Chapters         02         03         04         05           Units, Dimensions and Vectors         1         3         2         1           Kinematics         3         3         4         5           Laws Of Motion         7         8         4         4           Work Power and Energy         2         3         5         5           Centre of Mass, Impulse and Momentum         1         0         3           Rotation         4         3         3         2           Gravitation         4         3         4         3           Simple Harmonic Motion         4         5         5         4           Solids and Fluids         1         0         2         2           Waves         3         2         1         2           Heat and Thermodynamics         10         5         6         5           Optics         4         4         4         6           Current Electricity         7         8         8         7           Electrostatics         5         5         6         6           Magnetics         5         6         5         6 <td>Chapters         02         03         04         05         06           Units, Dimensions and Vectors         1         3         2         1         2           Kinematics         3         3         4         5         1           Laws Of Motion         7         8         4         4         3           Work Power and Energy         2         3         5         5         3           Centre of Mass, Impulse and Momentum         1         0         3         3         3           Rotation         4         3         3         2         2         3         3         2         2         2         3         3         3         2         2         2         3         3         3         3         3         3         2         2         2         3         3         3         2         2         2         3         3         3         3         2         2         2         4         3         3         3         2         2         1         3         3         2         2         1         2         2         1         2         2         1         2         <td< td=""><td>Chapters         02         03         04         05         06         07           Units, Dimensions and Vectors         1         3         2         1         2           Kinematics         3         3         4         5         1         2           Laws Of Motion         7         8         4         4         3         1           Work Power and Energy         2         3         5         5         3         1           Centre of Mass, Impulse and Momentum         1         0         3         3         1           Rotation         4         3         3         2         2         3           Gravitation         4         3         4         3         2         2         3           Simple Harmonic Motion         4         5         5         4         3</td></td<></td> | Chapters         02         03         04         05         06           Units, Dimensions and Vectors         1         3         2         1         2           Kinematics         3         3         4         5         1           Laws Of Motion         7         8         4         4         3           Work Power and Energy         2         3         5         5         3           Centre of Mass, Impulse and Momentum         1         0         3         3         3           Rotation         4         3         3         2         2         3         3         2         2         2         3         3         3         2         2         2         3         3         3         3         3         3         2         2         2         3         3         3         2         2         2         3         3         3         3         2         2         2         4         3         3         3         2         2         1         3         3         2         2         1         2         2         1         2         2         1         2 <td< td=""><td>Chapters         02         03         04         05         06         07           Units, Dimensions and Vectors         1         3         2         1         2           Kinematics         3         3         4         5         1         2           Laws Of Motion         7         8         4         4         3         1           Work Power and Energy         2         3         5         5         3         1           Centre of Mass, Impulse and Momentum         1         0         3         3         1           Rotation         4         3         3         2         2         3           Gravitation         4         3         4         3         2         2         3           Simple Harmonic Motion         4         5         5         4         3</td></td<> | Chapters         02         03         04         05         06         07           Units, Dimensions and Vectors         1         3         2         1         2           Kinematics         3         3         4         5         1         2           Laws Of Motion         7         8         4         4         3         1           Work Power and Energy         2         3         5         5         3         1           Centre of Mass, Impulse and Momentum         1         0         3         3         1           Rotation         4         3         3         2         2         3           Gravitation         4         3         4         3         2         2         3           Simple Harmonic Motion         4         5         5         4         3 |  |

and Mathematics

## **PHYSICS**

## **CHEMISTRY**

|       |          | Years |    |    |    |    |  |
|-------|----------|-------|----|----|----|----|--|
| Sr No | Chapters | 02    | 03 | 04 | 05 | 06 |  |
|       |          |       |    |    |    |    |  |

| 1.  | Mole Concept                                   | 1  |    | 2  | 1  | 1 1 |
|-----|--|----|----|----|----|-----|
| 2.  | Acid-Base Titrations                           | 1  | 1  | 1  | 1  |     |
| 3.  | Redox Reactions                                | 5  |    | 3  | 2  | 1   |
| 4.  | Gaseous State                                  | 2  | 2  | 3  | 1  | 1   |
| 5.  | Thermochemistry                                |    | 2  | 2  | 1  | 2   |
| 6.  | Thermodynamics                                 | 3  | 3  |    | 2  | 1   |
| 7.  | Atomic Structure                               | 2  | 3  | 3  | 2  | 3   |
| 8.  | Chemical Bonding                               | 7  | 3  | 3  | 5  | 6   |
| 9.  | Chemical Equilibrium                           | 2  | 4  | 4  | 3  | 2   |
| 10. | Ionic Equilibrium                              | 4  | 4  | 1  | 2  |     |
| 11. | Electrochemistry                               | 4  | 5  | 5  | 3  | 3   |
| 12. | Chemical Kinetics                              | 6  | 3  | 1  | 3  | 3   |
| 13. | Collogative Properties                         | 2  | 4  | 3  | 4  | 2   |
|     | Solid State                                    | 1  |    | 1  | 2  | 1   |
| 15. | Surface Chemistry                              |    | 1  |    | 2  | 1   |
| 16. | General Organic Chemistry                      | 5  | 3  | 4  | 4  | 3   |
| 17. | Steriochemistry                                | 3  |    | 3  | 1  |     |
| 18. | Hydrocarbons                                   | 2  | 2  | 3  | 3  | 4   |
| 19. | Alkyl Halides                                  |    |    | 2  | 3  | 1   |
| 20. | Alcohols and Ethers                            |    | 1  | 2  | 1  | 1   |
| 21. | Aldehydes and Ketones                          | 1  |    |    | 1  |     |
| 22. | Carboxylic Acids and their Derivatives         | 2  | 2  | 4  | 1  | 2   |
| 23. | Amines   | 2  | 2  | 1  | 1  |     |
| 24. | Carbohydrates, Amino Acids and Polymers        | 3  | 4  | 3  | 4  | 2   |
| 25. | Aromatic Compounds                             | 2  | 2  | 1  | 2  | 4   |
| 26. | Qualitative Analysis                           | 1  | 1  |    | 1  |     |
| 27. | Transition Elements and Coordination Chemistry | 3  | 5  | 8  | 4  | 4   |
| 28. | Periodic Table and Representative Elements     | 6  | 17 | 8  | 9  | 6   |
| 29. | Metallurgy                                     | 3  |    | 2  | 3  |     |
|     | Nuclear Chemistry                              | 2  | 1  | 2  | 3  | 1   |
| 31. | Environmental Chemistry                        |    |    |    |    |     |
|     | Total No Of Questions                          | 75 | 75 | 75 | 75 | 55  |
|     | Maximum Marks                                  |    |    |    |    | 180 |

## **MATHEMATICS**

|          | Years                                   |    |    |    |    |    |  |
|----------|---|----|----|----|----|----|--|
| Sr<br>No | Chapters                                | 02 | 03 | 04 | 05 | 06 |  |
| 1.       | Sets, Relation and Functions            | 4  | 3  | 3  | 3  | 2  |  |
| 2.       | Complex Numbers and Quadratic Equations | 3  | 6  | 7  | 8  | 3  |  |
| 3.       | Permutations and Combinations           | 3  | 4  | 2  | 2  | 1  |  |
| 4.       | Mathematical Induction                  |    |    | 1  | 1  |    |  |
| 5.       | Binomial Theorem and its Simple         | 2  | 2  | 2  | 3  | 2  |  |

| Application                      |                 |    |    |    |     |  |
|----------------------------------|-----------------|----|----|----|-----|--|
| 6. Sequence and Series           | 1               | 1  | 3  | 1  | 2   |  |
| 7. Exponential and Logarithn     | nic Series 2    | 1  | 1  | 1  |     |  |
| 8. Matrices                      | 3               | 3  | 3  | 5  | 2   |  |
| 9. Statistics and Probability    | 7               | 5  | 5  | 5  | 2   |  |
| 10. Trigonometry                 | 12              | 5  | 5  | 3  | 3   |  |
| 11. Mathematical Reasoning       |                 |    |    |    |     |  |
| 12. Coordinate Geometry          | 10              | 9  | 11 | 10 | 7   |  |
| 13. Limits, Continuity and Diffe | erentiability 9 | 8  | 8  | 9  | 6   |  |
| 14. Intergral Calculus           | 7               | 7  | 7  | 7  | 4   |  |
| 15. Differential Equation        | 4               | 2  | 2  | 2  | 1   |  |
| 16. Three Dimensional Geome      | etry 3          | 6  | 4  | 5  | 1   |  |
| 17. Vector Algebra               | 5               | 7  | 5  | 4  | 2   |  |
| 18. Statics                      |                 | 3  | 3  | 3  | 1   |  |
| 19. Dynamics                     |                 | 3  | 3  | 3  | 1   |  |
| Total No of Questions            | 75              | 75 | 75 | 75 | 40  |  |
| Maximum Marks                    |                 |    |    |    | 180 |  |