

MISSION IIT & NEET

ENTRANCE COURSE

FOR CLASS XI-XII & REPEATER BATCH

FULL SYLLABUS AND PHASE STRUCTURE

MISSION IIT & NEET

BIOLOGY ENTRANCE COURSE

CLASS XI

1. THE LIVING WORLD
2. BIOLOGICAL CLASSIFICATION
3. PLANT KINGDOM
4. ANIMAL KINGDOM
5. MORPHOLOGY OF FLOWERING PLANTS
6. ANATOMY OF FLOWERING PLANTS
7. STRUCTURAL ORGANISATION IN ANIMALS
8. THE UNIT OF LIFE
9. BIO-MOLECULES
10. CELL CYCLE AND CELL DIVISION
11. TRANSPORT IN PLANTS
12. MINERAL NUTRITION
13. PHOTOSYNTHESIS IN HIGHER PLANTS
14. RESPIRATION IN PLANTS
15. PLANT GROWTH AND DEVELOPMENT
16. DIGESTION AND ABSORPTION
17. BREATHING AND EXCHANGE OF GASES
18. BODY FLUIDS AND CIRCULATION
19. EXCRETORY PRODUCTS AND THEIR ELIMINATION
20. LOCOMOTION AND MOVEMENT
21. NEURAL CONTROL AND COORDINATION
22. CHEMICAL COORDINATION AND INTEGRATION

CLASS XII

1. REPRODUCTION IN ORGANISMS
2. SEXUAL REPRODUCTION IN FLOWERING PLANTS
3. HUMAN REPRODUCTION
4. REPRODUCTIVE HEALTH
5. PRINCIPLES OF INHERITANCE AND VARIATION
6. MOLECULAR BASIS OF INHERITANCE
7. EVOLUTION
8. HUMAN HEALTH AND DISEASE
9. STRATEGIES FOR ENHANCEMENT IN FOOD PRODUCTION
10. MICROBES IN HUMAN WELFARE
11. BIOTECHNOLOGY PRINCIPLES AND PROCESSES
12. BIOTECHNOLOGY AND IT'S APPLICATION
13. ORGANISMS AND POPULATIONS
14. ECOSYSTEM
15. BIODIVERSITY, CONSERVATION AND ENVIRONMENTAL ISSUES

MISSION IIT & NEET

BIOLOGY ENTRANCE PHASE STRUCTURE

CLASS XI

| PHASE ONE | PHASE TWO | PHASE THREE | PHASE FOUR |
|------------------------|----------------------------|--------------------------|---------------------------------|
| CHAPTER 1, 2, 3, 4 & 5 | CHAPTER 6, 7, 8, 9,10 & 11 | CHAPTER 12,13,14,15 & 16 | CHAPTER 17, 18, 19, 20, 21 & 22 |

CLASS XII

| PHASE ONE | PHASE TWO | PHASE THREE | PHASE FOUR |
|---------------------|---------------------|-----------------------|-------------------------|
| CHAPTER 1, 2, 3 & 4 | CHAPTER 5, 6, 7 & 8 | CHAPTER 9, 10 11 & 12 | CHAPTER 13, 14, 15 & 16 |

MISSION IIT & NEET

CHEMISTRY ENTRANCE COURSE

CLASS XI

1. SOME BASIC CONCEPTS OF CHEMISTRY
2. STRUCTURE OF ATOM
3. CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES
4. CHEMICAL BONDING AND MOLECULAR STRUCTURE
5. STATES OF MATTER : GASES AND LIQUIDS
6. THERMODYNAMICS
7. EQUILIBRIUM
8. REDOX REACTIONS
9. HYDROGEN
10. s- BLOCK ELEMENTS
11. p- BLOCK ELEMENTS
12. ORGANIC CHEMISTRY- SOME BASIC PRINCIPLES AND TECHNIQUES
13. HYDROCARBONS
14. ENVIRONMENTAL CHEMISTRY

CLASS XII

1. SOLID STATE
2. SOLUTIONS
3. ELECTROCHEMISTRY
4. CHEMICAL KINETICS

5. SURFACE CHEMISTRY
6. GENERAL PRINCIPLES AND PROCESS OF ISOLATION OF ELEMENTS
7. p- BLOCK ELEMENTS
8. 'd 'AND 'f' BLOCK ELEMENTS
9. COORDINATION COMPOUNDS
10. HALOALKANES AND HALOARENES
11. ALCOHOLS, PHENOLS AND ETHERS
12. ALDEHYDES, KETONES AND CARBOXYLIC ACIDS
13. ORGANIC COMPOUNDS CONTAINING NITROGEN
14. BIOMOLECULES
15. POLYMERS
16. CHEMISTRY IN EVERYDAY LIFE

MISSION IIT & NEET

CHEMISTRY ENTRANCE PHASE STRUCTURE

CLASS XI

| PHASE ONE | PHASE TWO | PHASE THREE | PHASE FOUR |
|---------------------|------------------|-------------------|-------------------------|
| CHAPTER 1, 2, 3 & 4 | CHAPTER 5, 6 & 7 | CHAPTER 8, 9 & 10 | CHAPTER 11, 12, 13 & 14 |

CLASS XII

| PHASE ONE | PHASE TWO | PHASE THREE | PHASE FOUR |
|--------------------|---------------------|------------------------|-------------------------|
| CHAPTER 1,2 ,3 & 4 | CHAPTER 5, 6, 7 & 8 | CHAPTER 9, 10, 11 & 12 | CHAPTER 13, 14, 15 & 16 |

MISSION IIT & NEET

MATHEMATICS ENTRANCE COURSE

CLASS XI

1. SETS
2. RELATIONS AND FUNCTIONS
3. TRIGONOMETRIC FUNCTIONS
4. PRINCIPLE OF MATHEMATICAL INDUCTION
5. COMPLEX NUMBERS
6. QUADRATIC EQUATION
7. LINEAR INEQUALITIES
8. PERMUTATION AND COMBINATION
9. BINOMIAL THEOREM
10. SEQUENCES AND SERIES
11. STRAIGHT LINES
12. CONIC SECTIONS
13. INTRODUCTION TO 3-D GEOMETRY
14. LIMITS AND DERIVATIVES
15. MATHEMATICAL REASONING
16. STATISTICS
17. PROBABILITY

CLASS XII

1. RELATIONS AND FUNCTIONS
2. INVERSE TRIGONOMETRIC FUNCTIONS
3. MATRICES
4. DETERMINANTS
5. CONTINUITY AND DIFFERENTIABILITY
6. APPLICATION OF DERIVATIVES
7. INTEGRALS
8. APPLICATION OF INTEGRALS
9. DIFFERENTIAL EQUATIONS
10. VECTOR ALGEBRA
11. 3-D GEOMETRY
12. LINEAR PROGRAMMING
13. PROBABILITY

MISSION IIT & NEET

MATHEMATICS ENTRANCE PHASE STRUCTURE

CLASS XI

| PHASE ONE | PHASE TWO | PHASE THREE | PHASE FOUR |
|---------------------|------------------------|-------------------------|-------------------------|
| CHAPTER 1, 2, 3 & 4 | CHAPTER 5, 6, 7, 8 & 9 | CHAPTER 10, 11, 12 & 13 | CHAPTER 14, 15, 16 & 17 |

CLASS XII

| PHASE ONE | PHASE TWO | PHASE THREE | PHASE FOUR |
|------------------|------------------|------------------|-------------------------|
| CHAPTER 1, 2 & 3 | CHAPTER 4, 5 & 6 | CHAPTER 7, 8 & 9 | CHAPTER 10, 11, 12 & 13 |

MISSION IIT & NEET

PHYSICS ENTRANCE COURSE

CLASS XI

1. UNIT AND MEASUREMENT
2. VECTORS
3. RELATIVE VELOCITY
4. 1-D MOTION
5. 2-D MOTION
6. NEWTON'S LAWS OF MOTION
7. FRICTION
8. CIRCULAR MOTION
9. WORK, POWER, ENERGY
10. CENTRE OF MASS
11. COLLISION
12. ROTATIONAL MOTION
13. GRAVITATION

14. ELASTICITY
15. FLUID MECHANICS
16. OSCILLATION
17. WAVE MOTION
18. CALORIMETRY AND THERMAL EXPANSION
19. KINETIC THEORY OF GAS AND THERMODYNAMICS
20. HEAT TRANSFER

CLASS XII

1. ELECTROSTATICS
2. CAPACITORS
3. CURRENT ELECTRICITY
4. THERMAL AND CHEMICAL EFFECT OF CURRENT
5. MAGNETIC EFFECT OF ELECTRIC CURRENT
6. ELECTROMAGNETIC INDUCTION
7. ALTERNATING CURRENT
8. ELECTROMAGNETIC WAVES
9. WAVE OPTICS
10. RAY OPTICS
11. PHOTOELECTRIC EFFECT
12. NUCLEAR PHYSICS – I
13. NUCLEAR PHYSICS – II
14. SOLIDS AND SEMICONDUCTOR DEVICES
15. COMMUNICATION SYSTEMS

MISSION IIT & NEET

PHYSICS ENTRANCE PHASE STRUCTURE

CLASS XI

| PHASE ONE | PHASE TWO | PHASE THREE | PHASE FOUR |
|------------------------|-------------------------|-----------------------------|-----------------------------|
| CHAPTER 1, 2, 3, 4 & 5 | CHAPTER 6, 7, 8, 9 & 10 | CHAPTER 11, 12, 13, 14 & 15 | CHAPTER 16, 17, 18, 19 & 20 |

CLASS XII

| PHASE ONE | PHASE TWO | PHASE THREE | PHASE FOUR |
|---------------------|------------------|-----------------------|-------------------------|
| CHAPTER 1, 2, 3 & 4 | CHAPTER 5, 6 & 7 | CHAPTER 8, 9, 10 & 11 | CHAPTER 12, 13, 14 & 15 |

MISSION IIT & NEET

TOTAL ENTRANCE PHASE STRUCTURE

CLASS XI

| | | PHYSICS | CHEMISTRY | MATHEMATICS | BIOLOGY |
|--|---------|----------------|-------------|-------------|-------------------|
| | PHASE 1 | 1, 2,3,4,5 | 1,2,3,4 | 1,2,3,4 | 1,2,3,4,5 |
| | PHASE 2 | 6,7,8,9,10 | 5,6,7 | 5,6,7,8,9 | 6,7,8,9,10,11 |
| | PHASE 3 | 11,12,13,14,15 | 8,9,10 | 10,11,12,13 | 12,13,14,15,16,17 |
| | PHASE 4 | 16,17,18,19,20 | 11,12,13,14 | 14,15,16,17 | 18,19,20,21,22 |

CLASS XII

| | | PHYSICS | CHEMISTRY | MATHEMATICS | BIOLOGY |
|--|---------|-------------|-------------|-------------|-------------|
| | PHASE 1 | 1,2,3,4 | 1,2,3,4 | 1,2,3 | 1,2,3,4 |
| | PHASE 2 | 5,6,7 | 5,6,7,8 | 4,5,6 | 5,6,7,8 |
| | PHASE 3 | 8,9,10,11 | 9,10,11,12 | 7,8,9 | 9,10,11,12 |
| | PHASE 4 | 12,13,14,15 | 13,14,15,16 | 10,11,12,13 | 13,14,15,16 |