

Portions for EXAM

A level

PURE MATH

1. Algebra
2. Logarithmic and exponential functions
3. Trigonometry
4. Differentiation
5. Integration
6. Further Algebra
7. Further Calculus
8. Vectors
9. Numerical Solutions
10. Complex Numbers
11. Differential Equations

STATISTICS

1. Hypothesis Testing
2. Poission Distribution
3. Linear Combination of Random Variables
4. Continous Random Variables
5. Sampling
6. Estimation

CHEMISTRY

1. Lattice energy
2. Electrochemistry
3. Further aspects of equilibria
4. Entropy and Gibb's free energy
5. Reaction kinetics
6. Transition elements
7. Benzene and its compounds
8. Carboxylic acid and it's derivatives
9. Organic nitrogen compounds
10. Polymerisation
11. Organic Synthesis
12. Analytical chemistry

COMPUTER SCIENCE (Practical Paper)

Paper 3:

Chapter 13: Data Representation

Chapter 14: Communication and internet technologies

Chapter 15: Hardware and Virtual Machines

Chapter 16: System Software

Chapter 17: Security

Chapter 18: AI

Paper 4:

19 Computational thinking and problem-solving

19.1 Algorithms(linear search, binary search, insertion sort, bubble sort, Stacks and Queues,
Linked list(add , search, delete, display) binary tree (add, search, display)

20 Further Programming

20.1 Programming Paradigms

-Object-Oriented Programming (OOP)

PHYSICS

1. Circular Motion
2. Gravitational Fields
3. Oscillations
4. Thermal Physics
5. Ideal Gases
6. Uniform Electric Fields
7. Coulombs law
8. Capacitance
9. Magnetic Fields and Electromagnetism
10. Motion of Charged particles
11. Electromagnetic Induction
12. Alternating currents
13. Quantum physics
14. Nuclear physics
15. Astronomy
16. Medical Physics

