

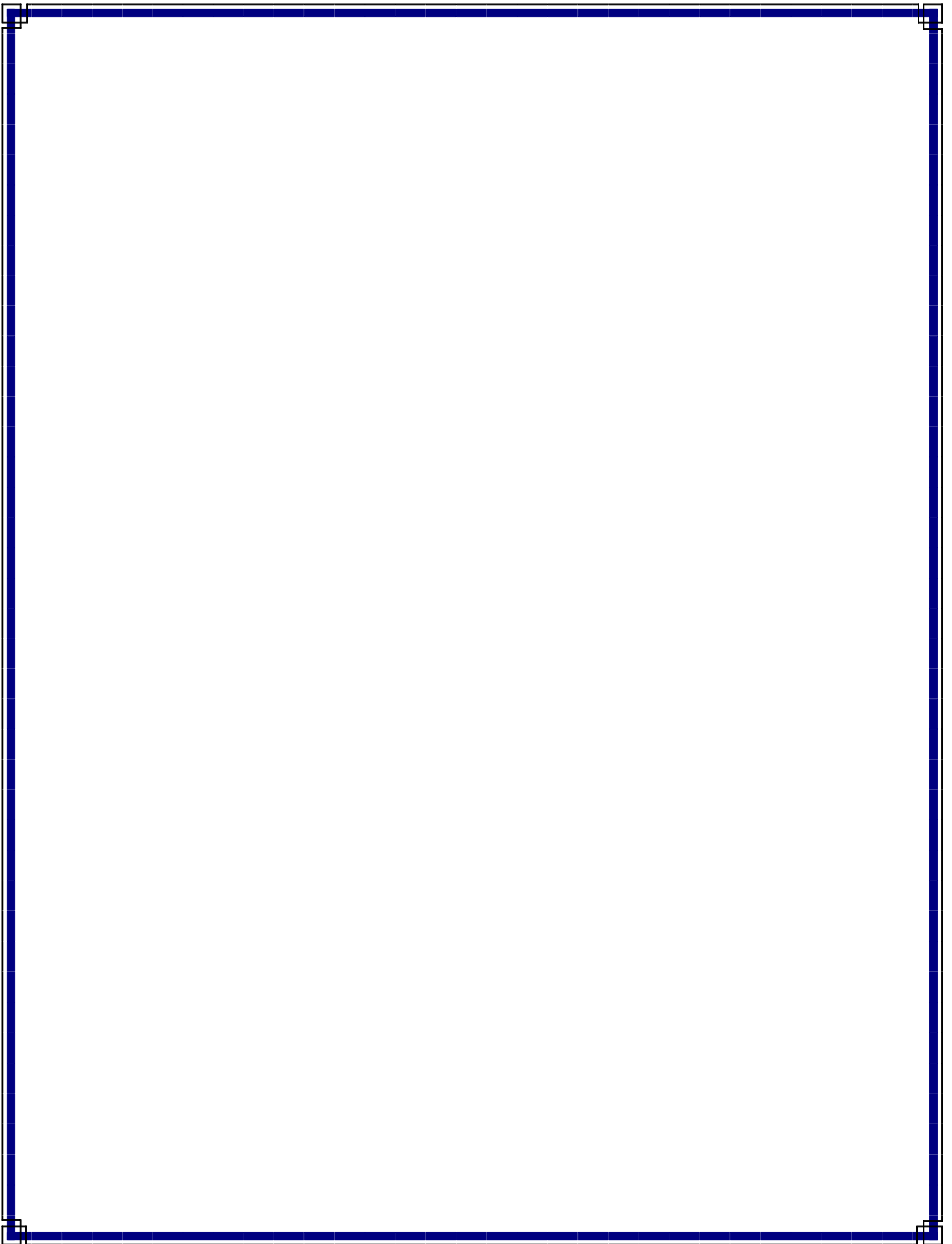
English

(HSSC-I)

1. The Reward + Pronoun
2. Overcoat + Verb (Types, Gerund, Participle, Infinitive)
3. Rubaiyat + Adverb
4. O Where are you going + Conjunction
5. Ozymandias + (Phrases, Clauses, Sentences)
6. Broken Images + Application/Letter Writing.

(HSSC-II)

1. Why boys fail in College + Pronoun
2. The Man Who was a Hospital + Verb (Types, Gerund, Participle, Infinitive, Direct & Indirect Object)
3. My Financial Career + (Phrases, Clauses, Sentences)
4. China's Way To Progress + Report Writing



Mathematics

(HSSC-I)

7. $\sqrt{2}$, $\sqrt{3}$ and $\sqrt{5}$ are Irrational Number, De Moivre's theorem.
8. Function, Binary Operation, Group structure.
9. Determinants, Echelon, Reduced Echelon Form, Rank, Solution of Simultaneous Equation.
10. Introduction of Quadratic Equation, Reducible to Quadratic Equation, Radical Equation, Cube Root of Unity.
11. Synthetic Division, Formation of Quadratic Equation, System of Equations.
12. Partial Fraction.
13. Probability and Combination.
14. Fundamental Law of Trigonometry, Laws of Sine, Laws of Cosine, Laws of Tangent.
15. Radii of Circum Circle, in Circle, e-circle.
16. Inverse of Trigonometric Function, Solution of Trigonometric Equation.

(HSSC-II)

5. Continuity.
6. Relative Extreme.
7. Integration by Parts, Differential Equation.
8. Translation and Rotation of Axes, Slope of Straight Line.
9. Introduction of Conics.
10. Scalar Triple Product with Examples.

Biology

(HSSC-I & HSSC-II)

1. Human Heart (Structure + Function)
2. DNA Transcription
3. DNA Replication
4. Kidney (Structure + Function)
5. Fungi – Reproductive Cycle
6. Nucleic Acid
7. Menstruation Cycle
8. HIV – Life Cycle
9. Life Cycle of Angiosperms
10. Synapse
11. Bioenergetics (Calvin Cycle)
12. Ultra Structure of Muscle

Physics

(HSSC-I)

17. Moment of Inertia
18. Young's double slit experiment
19. Optical Fiber
20. Projectile Motion
21. Resonance
22. Carnot Engine

(HSSC-II)

1. Ampere Law
2. Electromotive Force (EMF)
3. Transformer
4. Rectification
5. Laser
6. Fission

Chemistry

(HSSC-I)

23. Hybridization of Atomic Orbitals
24. Valence Bond Theory
25. VSEPR Theory
26. MOT (Molecular Orbital Theory)
27. Colligative Properties
28. Osmotic Pressure
29. Hydrogen Spectrum
30. Sodium Chloride Crystal
31. Van der Waal's Volume and Pressure Correction
32. Hess's Law and its Application
33. Determination of Rate Determining Step
34. Electrochemical Cell

(HSSC-II)

1. Spectroscopic Techniques (UV, IR, NMR)
2. Isomerism
3. Nucleophilic Substitution Reactions
4. Elimination Reactions
5. Nucleophilic Addition Reaction
6. Amines
7. Colours of Transition elements

Computer Science

(HSSC-I)

1. Introduction of Computer, Detail History, Types
2. System Development Life Cycle
3. OSI(Open System Interconnectivity) Model
4. Network & types Of Computer Network
5. Communication Media (Wire or Wireless)
6. Information Technology & Role of Microprocessor in IT
7. Computer Devices (Input/Output)
8. Uses of Computer (Medical, Education, Business)
9. Computer Buses & Register
10. Virus & Antivirus Program
11. Working of Computer(CPU,ALU,CU)
12. Internet, History, Browser, Downloading, Uploading
13. Microsoft Word Application
14. Microsoft Excel
15. Troubleshooting

(HSSC-II)

1. Programming Fundamentals Algorithm, Pseudo code & Flowchart
2. Computer Programming Languages(Introduction, History, Types)
3. Control Structure
4. Types of Operators
5. Variables, Naming Rules & Types of Variables (C Language)
6. Loops (Types, Working)
7. User Define Function
8. Database, Database Management System(DBMS)
9. Normalization
10. Database Constraints
11. Write a C program to store 10 values in a list array & then sort them into Ascending order by using Bubble Sort method
12. Write a C program to return the factorial of given number by using function
13. Write a C program to display the following output

```
*
***
*****
*****
*****
***
*
```

14. Write a C program to display the sum & average of the following series
 $1+1/3+1/5+1/7\dots\dots\dots,1/45$

15. Write a C program to display the following output

1	2	3
4	5	6
7	8	9