

# HSC 2nd Year Academic Program

## (Online/Combo Batch)



### Class & Exam Routine-01

#### 20 February 2026 (Friday) Orientation Class [Time: 3:00pm]

Date & Day	Live Class-01 1:30pm	Live Class-02 3:30pm	Live Exam Online: From 8:00am to 11:55pm
25 February 2026 (Wednesday)	Chemistry (C-01)	Physics (P-09)	Introductory Exams
26 February 2026 (Thursday)	Zoology (Z-01)	Physics (P-01)	Daily Live Exam C-01 MCQ (10×1=10); 10 min. Daily Live Exam P-09 MCQ (10×1=10); 10 min.
01 March 2026 (Sunday)	Botany (B-09)	H.Math (HM-23)	Daily Live Exam Z-01 MCQ (10×1=10); 10 min. Daily Live Exam P-01 MCQ (10×1=10); 10 min.
02 March 2026 (Monday)	Chemistry (C-02)	H.Math (HM-07)	Daily Live Exam B-09 MCQ (10×1=10); 10 min. Daily Live Exam HM-23 MCQ (10×1=10); 10 min.
04 March 2026 (Wednesday)	Chemistry (C-03)	Physics (P-10)	Daily Live Exam C-02 MCQ (10×1=10); 10 min. Daily Live Exam HM-07 MCQ (10×1=10); 10 min.
05 March 2026 (Thursday)	Botany (B-10)	Physics (P-02)	Daily Live Exam C-03 MCQ (10×1=10); 10 min. Daily Live Exam P-10 MCQ (10×1=10); 10 min.
08 March 2026 (Sunday)	Zoology (Z-02)	H.Math (HM-08)	Daily Live Exam B-10 MCQ (10×1=10); 10 min. Daily Live Exam P-02 MCQ (10×1=10); 10 min.
09 March 2026 (Monday)	Chemistry (C-04)	H.Math (HM-24)	Daily Live Exam Z-02 MCQ (10×1=10); 10 min. Daily Live Exam HM-08 MCQ (10×1=10); 10 min.
11 March 2026 (Wednesday)	Chemistry (C-05)	Physics (P-11)	Daily Live Exam C-04 MCQ (10×1=10); 10 min. Daily Live Exam HM-24 MCQ (10×1=10); 10 min.
12 March 2026 (Thursday)	Zoology (Z-03)	Physics (P-03)	Daily Live Exam C-05 MCQ (10×1=10); 10 min. Daily Live Exam P-11 MCQ (10×1=10); 10 min.
15 March 2026 (Sunday)	Botany (B-11)	H.Math (HM-09)	Daily Live Exam Z-03 MCQ (10×1=10); 10 min. Daily Live Exam P-03 MCQ (10×1=10); 10 min.

Online classes and exams will be closed from March 16 to March 26 on the occasion of Shab-e-Qadr, Eid-ul-Fitr and Independence Day.

Date & Day	Live Class-01 2:30pm	Live Class-02 6:30pm	Live Exam Online: From 8:00am to 11:55pm
<b>27 March 2026 (Friday)</b> <b>Chapter-wise Exam-01</b>	<b>Chemistry 2nd Paper Chapter-01 (Part-01); Lecture C-01 to 05; (CQ 2×10=20); Time: 50min &amp; (Pre-Admission MCQ 10×1=10); Time: 10min.</b>		
29 March 2026 (Sunday)	Botany (B-12)	Physics (P-12)	Daily Live Exam B-11 MCQ (10×1=10); 10 min. Daily Live Exam HM-09 MCQ (10×1=10); 10 min.
30 March 2026 (Monday)	Chemistry (C-06)	H.Math (HM-25)	Daily Live Exam B-12 MCQ (10×1=10); 10 min. Daily Live Exam P-12 MCQ (10×1=10); 10 min.
01 April 2026 (Wednesday)	Chemistry (C-07)	H.Math (HM-10)	Daily Live Exam C-06 MCQ (10×1=10); 10 min. Daily Live Exam HM-25 MCQ (10×1=10); 10 min.
02 April 2026 (Thursday)	Zoology (Z-04)	Physics (P-04)	Daily Live Exam C-07 MCQ (10×1=10); 10 min. Daily Live Exam HM-10 MCQ (10×1=10); 10 min.
05 April 2026 (Sunday)	Botany (B-13)	Physics (P-13)	Daily Live Exam Z-04 MCQ (10×1=10); 10 min. Daily Live Exam P-04 MCQ (10×1=10); 10 min.
06 April 2026 (Monday)	Chemistry (C-08)	H.Math (HM-26)	Daily Live Exam B-13 MCQ (10×1=10); 10 min. Daily Live Exam P-13 MCQ (10×1=10); 10 min.
08 April 2026 (Wednesday)	Chemistry (C-09)	H.Math (HM-11)	Daily Live Exam C-08 MCQ (10×1=10); 10 min. Daily Live Exam HM-26 MCQ (10×1=10); 10 min.
09 April 2026 (Thursday)	Zoology (Z-05)	Physics (P-05)	Daily Live Exam C-09 MCQ (10×1=10); 10 min. Daily Live Exam HM-11 MCQ (10×1=10); 10 min.

<b>10 April 2026 (Friday)</b>	<b>Chemistry Problem Solving Class-01</b>		
12 April 2026 (Sunday)	Botany (B-14)	Physics (P-14)	Daily Live Exam Z-05 MCQ (10×1=10); 10 min. Daily Live Exam P-05 MCQ (10×1=10); 10 min.
13 April 2026 (Monday)	Chemistry (C-10)	H.Math (HM-27)	Daily Live Exam B-14 MCQ (10×1=10); 10 min. Daily Live Exam P-14 MCQ (10×1=10); 10 min.
<b>Online classes and exams will be closed on April 14 on the occasion of Pahela Boishakh.</b>			
15 April 2026 (Wednesday)	Chemistry (C-11)	H.Math (HM-12)	Daily Live Exam C-10 MCQ (10×1=10); 10 min. Daily Live Exam HM-27 MCQ (10×1=10); 10 min.
16 April 2026 (Thursday)	Zoology (Z-06)	Physics (P-06)	Daily Live Exam C-11 MCQ (10×1=10); 10 min. Daily Live Exam HM-12 MCQ (10×1=10); 10 min.
<b>17 April 2026 (Friday)</b> <b>Chapter-wise Exam-02</b>	<b>Chemistry 2nd Paper Chapter-01 (Part-02); Lecture C-06 to 10; (CQ 2×10=20); Time: 50min &amp; (Pre-Admission MCQ 10×1=10); Time: 10min.</b>		
19 April 2026 (Sunday)	Botany (B-15)	Physics (P-15)	Daily Live Exam Z-06 MCQ (10×1=10); 10 min. Daily Live Exam P-06 MCQ (10×1=10); 10 min.
20 April 2026 (Monday)	Chemistry (C-12)	H.Math (HM-28)	Daily Live Exam B-15 MCQ (10×1=10); 10 min. Daily Live Exam P-15 MCQ (10×1=10); 10 min.
<b>21 April 2026 (Tuesday)</b>	<b>H.Math Problem Solving Class-01</b>		
22 April 2026 (Wednesday)	Chemistry (C-13)	H.Math (HM-13)	Daily Live Exam C-12 MCQ (10×1=10); 10 min. Daily Live Exam HM-28 MCQ (10×1=10); 10 min.
23 April 2026 (Thursday)	Physics (P-07)	Botany (B-05)	Daily Live Exam C-13 MCQ (10×1=10); 10 min. Daily Live Exam HM-13 MCQ (10×1=10); 10 min.
<b>24 April 2026 (Friday)</b> <b>Chapter-wise Exam-03</b>	<b>Zoology Chapter-07 (CQ 2×10=20); Time: 50min &amp; (Pre-Admission MCQ 10×1=10); Time: 10min.</b>		
<b>25 April 2026 (Saturday)</b> <b>Chapter-wise Exam-04</b>	<b>H.Math 2nd Paper Chapter-05 (CQ 2×10=20); Time: 50min &amp; (Pre-Admission MCQ 10×1=10); Time: 10min.</b>		
26 April 2026 (Sunday)	Botany (B-16)	Physics (P-16)	Daily Live Exam P-07 MCQ (10×1=10); 10 min. Daily Live Exam B-05 MCQ (10×1=10); 10 min.
27 April 2026 (Monday)	Chemistry (C-14)	H.Math (HM-01)	Daily Live Exam B-16 MCQ (10×1=10); 10 min. Daily Live Exam P-16 MCQ (10×1=10); 10 min.
<b>28 April 2026 (Tuesday)</b>	<b>Physics Problem Solving Class-01</b>		
29 April 2026 (Wednesday)	Chemistry (C-15)	H.Math (HM-14)	Daily Live Exam C-14 MCQ (10×1=10); 10 min. Daily Live Exam HM-01 MCQ (10×1=10); 10 min.
30 April 2026 (Thursday)	Physics (P-08)	Botany (B-06)	Daily Live Exam C-15 MCQ (10×1=10); 10 min. Daily Live Exam HM-14 MCQ (10×1=10); 10 min.
<b>01 May 2026 (Friday)</b> <b>Chapter-wise Exam-05</b>	<b>Guideline Seminar-01</b>		
	<b>Botany Chapter-09 (CQ 2×10=20); Time: 50min &amp; (Pre-Admission MCQ 10×1=10); Time: 10min.</b>		
<b>02 May 2026 (Friday)</b> <b>Chapter-wise Exam-06</b>	<b>H.Math 2nd Paper Chapter-03 (CQ 2×10=20); Time: 50min &amp; (Pre-Admission MCQ 10×1=10); Time: 10min.</b>		
<b>The next class and exam routine-02 will be published...</b>			
<b>***The routine can change or be modified in case of special necessities***</b>			

#### Online Class and Exam Procedure:

- To participate in classes and exams, visit [udvash.com](http://udvash.com) and click on the "Join Now" menu. Log in using your admitted registration number.
- **Daily Live Classes** will be held as per the schedule, with **two separate subject classes per day** at the mentioned date and time.
- **Daily Live Exams** will be available as per the schedule from **8:00am to 11:55pm**, where students can take the exam once per with **two separate subjects**. However, for additional practice, students can take the Practice Exam multiple times with the same syllabus.
- To watch recorded videos and PDFs of daily classes, use the "**Past Classes/Course & Content**" option.
- To access **Archive Classes & One Shot CQ-MCQ Classes**, use the "**Course & Content**" option.
- The **Q&A** option is available **24/7** to resolve subject-related queries after the class.
- All students enrolled in the Combo Batch can take chapter-based exams both online and at any nearby branch (**from 9:00am to 5:00pm**).
- To get updates quickly, join our Facebook group (**HSC & Admission উদ্ভাস-উন্মেষ**).

**HSC 2nd Year Academic Program Pioneer Batch Syllabus-01**

Physics 2nd Paper		
Chapter	Chapter	Chapter
<b>Chapter-1</b> Thermodynamics	P-01	Principles of measurement of temperature, Thermal Equilibrium, Zero'th law of Thermodynamics, Measurement of Temperature, Method of two points, relation between various scales, Faulty thermometer, One point method.
	P-02	Thermal System, Thermal quantities, Thermal Processes, Heat, Work done and Internal Energy, First law of thermodynamics and general mathematical problems.
	P-03	CQ and Admission Standard questions on First law of thermodynamics, Molar Heat capacity, Thermal function of static and path, Isobaric Process, Isochoric Process.
	P-04	Isothermal Process, Adiabatic Process, General mathematical problems on Isothermal and Adiabatic process.
	P-05	CQ and Admission standard mathematical problems on Isothermal and Adiabatic process, Concept of Second law of thermodynamics, Thermal Engine, Efficiency of thermal engines, Reversible and Irreversible process, Factors of Irreversible process.
	P-06	Carnot Cycle, Efficiency of Carnot engine and general mathematical problem.
	P-07	CQ & Admission Standard mathematical problems on Engine, Refrigerator, Efficiency coefficient of refrigerator, Refrigeration cycle of Carnot, Mechanism of refrigerator, Entropy, Entropy in reversible and irreversible process, Change of Entropy for the change of physical state.
	P-08	Change of entropy in various process, Entropy and disorder, Thermal death of the universe.
<b>Chapter-2</b> Static Electricity	P-09	Concept of Charge, Nature of charge, Quantization of charge, Conservation of charge, Surface Charge density, Coulomb's Law, Vector format of Coulomb's Law, Limitations of Coulombs's Law.
	P-10	Electric Field on a point for point charge, Law of superposition of electricity intensity, Field line, Uniform electric field, Electric field intensity, General Mathematical problems for Electric intensity.
	P-11	CQ and Admission standard mathematical problems for Electric force and field intensity.
	P-12	Electric Potential, Equations of electric potential, Potential Difference, Relation of potential difference with intensity, Flow of charge.
	P-13	CQ and Admission standard Mathematical Problems for Potential, Electric potential and intensity of a charged conductor sphere, Plane density and electric intensity.
	P-14	Dipole moment, Potential and intensity for a dipole.
	P-15	Insulator and dielectric, Capacitor and Capacitance, Spherical and Parallel plate capacitor, Connection of capacitors, energy stored in capacitor, energy stored in capacitor, capacitor related general mathematical problem.
	P-16	CQ and Admission standard Mathematical Problems related to capacitors, Use of capacitors.
Chemistry 2nd Paper		
Chapter	Chapter	Chapter
<b>Chapter-1</b> Environmental Chemistry	C-01	Gas, Components of atmosphere, Atmospheric temperature, Effect of pressure and density, Cyclone and tidal bore
	C-02	Boyle's law, Charle's law, Avogadro's law, Gay-Lussac's law, related math
	C-03	Combined law, Ideal gas equation ( $PV = nRT$ ), Explanation of R, related math
	C-04	Dalton's law of partial pressure, Graham's law of diffusion.
	C-05	Diffusion, Effusion, Rate of diffusion and formula, Kinetic theory of gas, Postulates of kinetic theory, Calculation of kinetic energy.
	C-06	Real gas, Ideal gas, Deviation, Coefficient of compressibility, Amagat's curve, Vander Walls equation.
	C-07	Gas cylinderisation, Reactions occurred during lightning, Fixation of $N_2$ in soil.
	C-08	Greenhouse gas, Source of greenhouse gas, Effect of greenhouse gas, Introduction to CFC and its use, origination of $O_3$ layer, Damage of $O_3$ layer.
	C-09	Concept related to acid base- Acid base theory, Arrhenius concept, Bronsted-Lowry concept (Theory, conjugate), Luis theory, Acid rain, Cause of acid rain, Effect of acid rain, Prevention of acid rain.
	C-10	Source of surface water, Importance of surface water, Criteria of purity of Surface water, Hardness, pH, DO, BOD, COD, TDS, Water pollution, Reason and cause of water pollution, Natural pollutant, Arsenic pollutant, Effect of water pollution.
<b>Chapter-2</b> Organic Chemistry	C-11	Introduction and Classification of Organic Chemistry- Introduction to organic compounds, Hydrocarbon and organic compounds, Roll of carbon in hydrocarbon, Classification of organic compounds, Homologous series, Functional group.
	C-12	Nomenclature of Organic Compounds- (Tribal system, derived system, IUPAC system)
	C-13	Isomerism- Introduction, Classification, Structural isomerism, Types of structural isomerism (Chain isomerism, Position isomerism Functional group isomerism, Metamerism, Tautomerism),
	C-14	Geometric isomerism (cis-trans isomerism, E-Z isomerism, Syn-Anti isomerism)
	C-15	Stereo Isomerism (Cyral carbon, Enantiomer, Diastereomer, Racemic mixture)

## H.Math 2nd Paper

Chapter	Chapter	Chapter
<b>Chapter-1</b> Real number and inequality	HM-01	Exercise-1.1 - Classification of real numbers, sets-subsets of real numbers, geometric representation, postulates of real numbers, concept of inequality and postulates related to inequality.
<b>Chapter-3</b> Complex numbers	HM-07	Exercise-3; Concept and significance of $i$ , power and series of $i$ , rotation by $i$ .
	HM-08	Exercise-3; Real axis and imaginary axis, previous introduction to complex numbers, Argand diagram of complex numbers, modulus and argument of complex numbers.
	HM-09	Exercise-3; Polar form of complex numbers. Algebraic calculation of complex numbers, addition, subtraction, multiplication and division of complex numbers, adjoint complex numbers.
	HM-10	Exercise-3; Relation of complex numbers, expression in the form $A+iB$ .
	HM-11	Exercise-3; Square root and quadratic root of complex numbers.
	HM-12	Exercise-3; Cube root and sexagesimal root of complex numbers. $\omega$ related series, $\omega$ related expression value determination and analysis of product.
	HM-13	Exercise-3; Mathematical significance of $ z_1 - z_2 $ . Geometric application of complex numbers (transmission path) related.
	HM-14	Exercise-3; Proof and determination of values under conditions related.
<b>Chapter-5</b> Binomial expansions	HM-23	Exercise-5.1; Basic concepts of binomial expansion, Pascal's triangle, binomial theorem, proof of binomial expansion theorem in ascending order.
	HM-24	Exercise-5.1; Number of terms, algebraic sum of coefficients of expansion, properties of coefficients of binomial expansion, common terms.
	HM-25	Exercise-5.1; Terms without variables in expansion, middle term, equidistant terms, ratio of two consecutive terms related, coefficients of two terms being equal related.
	HM-26	Exercise-5.2; Concept of binomial expansion in infinite series, condition of expansion for $(a+x)^n$ .
	HM-27	Exercise-5.2; Convergence of binomial series related, finding common terms.
	HM-28	Exercise-5.2; Finding coefficients related, finding sum of series using expansion, largest possible term.

## Zoology

Chapter	Chapter	Chapter
<b>Chapter-07</b> Human Physiology: Locomotion and Body Movement	Z-01	Skeletal system (classification, functions, components, parts), bones of the adult human skeleton, axial skeleton (skull).
	Z-02	Axial skeleton (vertebral column, ribcage).
	Z-03	Appendicular skeleton.
	Z-04	Bone, Haversian system, cartilage, types of cartilage.
	Z-05	Muscle tissue, types of muscles, muscles can pull but cannot push, functions of skeleton and the 'rods and lever system'
	Z-06	Bone and muscle coordination in knee movement, bone fracture and first aid, joint injuries and first aid.

## Botany

Chapter	Chapter	Chapter
<b>Chapter-08</b> Tissue and Tissue System	B-05	Meristematic Tissue, Types of meristematic tissue, Differences between permanent and meristematic tissue
	B-06	Epidermal tissue system, stomata, hydathode.
<b>Chapter-09</b> Plant Physiology	B-09	Mineral salt absorption, Essential elements for plants, Availability of mineral salts for plants, Mechanism of mineral salt absorption by plants.
	B-10	Transpiration, Types of transpiration, Factors of transpiration, Structure of stomata.
	B-11	Explanation of some relevant terms related to transpiration, Mechanism of opening and closing of stomata.
	B-12	Photosynthesis, Photosynthetic organs and pigments, Absorption spectrum of light, Effective spectrum of light, Photosystem, Mechanism of photosynthesis, Light dependent phase, cyclic and non-cyclic photophosphorylation.
	B-13	Light independent phase, Calvin cycle, Hatch and Slack cycle, Comparison between $C_3$ and $C_4$ plants, Comparison between Calvin cycle and Slack cycle, Characteristics and importance of $C_4$ plants.
	B-14	Source of the oxygen ( $O_2$ ) released in photosynthesis, factors of photosynthesis, limiting factor, Rate of photosynthesis, Importance of photosynthesis in living world.
	B-15	Respiration, Aerobic Respiration, Steps of Aerobic Respiration, Glycolysis, Oxidation of Pyruvic Acid, Krebs' Cycle.
	B-16	Transfer of electron and oxidative phosphorylation, Anaerobic respiration, Use of anaerobic respiration in various industries, Respiratory rate/quotient, Factors of respiration, Importance of respiration.

