HSC 1st Year Academic Program

Pioneer Batch

Online Batch Time

English Version - 3 :00 PM

Class & Exam Routine

(Part-02)

Online Exam time:

9:00 am to 11:00 pm

Date and time	Live Class (Online Smart Board)	Live Exam (Online)
26 May 2024 (Sunday)	**Live Class (HM-01+02)** H.Math: Chapter- 01	**Board Standard** Daily Live Exam (B-07+08) **MCQ** (10×1=10); 10 min
28 May 2024 (Tuesday)	**Live Class (C-19+20)** Chemistry: Chapter- 02	**Board Standard** Daily Live Exam (HM-01+02) **MCQ** (10×1=10); 10 min
29 May 2024 (Wednesday)	**Chapter-wise Exam [Botany Chapter-01] (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.**	
30 May 2024 (Thursday)	**Live Class (P-01+02)** Physics: Chapter- 01	**Board Standard** Daily Live Exam (19+20) **MCQ** (10×1=10); 10 min
31 May 2024 (Friday)	**Live Class (Z-15+16)** Zoology: Chapter- 03	**Board Standard** Daily Live Exam (P-01+02) **MCQ** (10×1=10); 10 min
1 June 2024 (Saturday)	**Chapter-wise Exam [Physics Chapter-01] (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.**	
2 June 2024 (Sunday)	**Live Class (C-21+22)** Chemistry: Chapter- 01	**Board Standard** Daily Live Exam (Z-15+16) **MCQ** (10×1=10); 10 min
4 June 2024 (Tuesday)	**Live Class (Z-17+18)** Zoology: Chapter- 03	**Board Standard** Daily Live Exam (C-21+22) **MCQ** (10×1=10); 10 min
6 June 2024 (Thursday)	**Live Class (P-15+16)** Physics: Chapter- 03	**Board Standard** Daily Live Exam (Z-17+18) **MCQ** (10×1=10); 10 min
7 June 2024 (Friday)	**Live Class (HM-03+04)** H.Math: Chapter- 01	**Board Standard** Daily Live Exam (P-15+16) **MCQ** (10×1=10); 10 min
8 June 2024 (Saturday)	**Chapter-wise Exam [Chemistry Chapter-02] (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.**	
9 June 2024 (Sunday)	**Live Class (C-23+24)** Chemistry: Chapter- 03	**Board Standard** Daily Live Exam (HM-03+04) **MCQ** (10×1=10); 10 min
11 June 2024 (Tuesday)	**Live Class (HM-05+06)** H.Math: Chapter- 01	**Board Standard** Daily Live Exam (C-23+24) **MCQ** (10×1=10); 10 min
12 June 2024 (Wednesday)	**Chapter-wise Exam [Zoology Chapter-03] (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.**	
Classes and examinations will be closed from 13th June to 22th June 2024 on the occasion of Eid-ul-Azha		
23 June 2024 (Sunday)	**Live Class (C-25+26)** Chemistry: Chapter- 03	**Board Standard** Daily Live Exam (HM-05+06) **MCQ** (10×1=10); 10 min
25 June 2024 (Tuesday)	**Live Class (HM-37+38)** H.Math: Chapter- 06	**Board Standard** Daily Live Exam (C-25+26) **MCQ** (10×1=10); 10 min
26 June 2024 (Wednesday)	**Chapter-wise Exam [H.Math Chapter-01] (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.**	
27 June 2024 (Thursday)	**Live Class (P-17+18)** Physics: Chapter- 03	**Board Standard** Daily Live Exam (HM-37+38) **MCQ** (10×1=10); 10 min
28 June 2024 (Friday)	**Live Class (B-09+10)** Botany: Chapter- ০২	**Board Standard** Daily Live Exam (P-17+18) **MCQ** (10×1=10); 10 min
30 June 2024 (Sunday)	**Live Class (C-27+28)** Chemistry: Chapter- 03	**Board Standard** Daily Live Exam (B-09+10) **MCQ** (10×1=10); 10 min
2 July 2024 (Tuesday)	**Live Class (HM-39+40)** H.Math: Chapter- 07	**Board Standard** Daily Live Exam (C-27+28) **MCQ** (10×1=10); 10 min
4 July 2024 (Thursday	**Live Class (P-19+20)** Physics: Chapter- 03	**Board Standard** Daily Live Exam (HM-39+40) **MCQ** (10×1=10); 10 min
5 July 2024 (Friday)	**Live Class (B-11+12)** Botany: Chapter- 02	**Board Standard** Daily Live Exam (P-19+20) **MCQ** (10×1=10); 10 min
06 July 2024 (Saturday)	**Chapter-wise Exam [Physics Chapter-03] (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.**	
7 July 2024 (Sunday)	**Live Class (C-29+30)** Chemistry: Chapter- 03	**Board Standard** Daily Live Exam (B-11+12) **MCQ** (10×1=10); 10 min
9 July 2024 (Tuesday)	**Live Class (HM-41+42)** H.Math: Chapter- 07	**Board Standard** Daily Live Exam (C-29+30) **MCQ** (10×1=10); 10 min
11 July 2024 (Thursday)	**Live Class (P-21+22)** Physics: Chapter- 04	**Board Standard** Daily Live Exam (HM-41+42) **MCQ** (10×1=10); 10 min
12 July 2024 (Friday)	**Live Class (Z-07+08)** Zoology: Chapter- 02	**Board Standard** Daily Live Exam (P-21+22) **MCQ** (10×1=10); 10 min
13 July 2024 (Saturday)	**Chapter-wise Exam [Botany Chapter-02] (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.**	
14 July 2024 (Sunday)	**Live Class (C-31+32)** Chemistry: Chapter- 03	**Board Standard** Daily Live Exam (Z-07+08) **MCQ** (10×1=10); 10 min
16 July 2024 (Tuesday)	**Live Class (HM-43+44)** H.Math: Chapter- 07	**Board Standard** Daily Live Exam (C-31+32) **MCQ** (10×1=10); 10 min
18 July 2024 (Thursday)	**Live Class (P-23+24**) Physics: Chapter- 04	**Board Standard** Daily Live Exam (HM-43+44) **MCQ** (10×1=10); 10 min
19 July 2024 (Friday)	**Live Class (Z-09+10)** Zoology: Chapter- 02	**Board Standard** Daily Live Exam (P-23+24) **MCQ** (10×1=10); 10 min
20 July 2024 (Saturday)	**Chapter-wise Exam [H.Math Chapter-06] (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.**	
21 July 2024 (Sunday)	**Live Class (C-33+34**) Chemistry: Chapter- 03	**Board Standard** Daily Live Exam (Z-09+10) **MCQ** (10×1=10); 10 min
23 July 2024 (Tuesday)	**Live Class (HM-45+46)** H.Math: Chapter- 07	**Board Standard** Daily Live Exam (C-33+34) **MCQ** (10×1=10); 10 min

25 July 2024 (Thursday	**Live Class (P-25+26)** Physics: Chapter- 05	**Board Standard** Daily Live Exam (HM-45+46) **MCQ** (10×1=10); 10 min
26 July 2024 (Friday)	**Live Class (Z-11+12)** Zoology: Chapter- 02	**Board Standard** Daily Live Exam (P-25+26) **MCQ** (10×1=10); 10 min
28 July 2024 (Sunday)	**Live Class (C-35+36**) Chemistry: Chapter- 03	**Board Standard** Daily Live Exam (Z-11+12) **MCQ** (10×1=10); 10 min
30 July 2024 (Tuesday)	**Live Class (HM-47+48)** H.Math: Chapter- 07	**Board Standard** Daily Live Exam (C-35+36) **MCQ** (10×1=10); 10 min
31 July 2024 (Wednesday)	**Chapter-wise Exam [Chemistry Chapter-03] (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.**	
01 August 2024 (Thursday)	**Live Class (P-27+28)** Physics: Chapter- 04	**Board Standard** Daily Live Exam (HM-47+48) **MCQ** (10×1=10); 10 min
02 August 2024 (Friday)	**Live Class (Z-13+14)** Zoology: Chapter- 02	**Board Standard** Daily Live Exam (P-27+28) **MCQ** (10×1=10); 10 min

Next routine will be Publish ....

HSC 1st Year Academic Program Pioneer Batch Part-02 Syllabus (Online)

Physics 1st Paper (Reference Book: UDVASH Parallel Text)		
Chapter	**Lecture**	**Syllabus**
Chapter-1 Physical World and Measurement	P-01	Scope of Physics, Physics and Other Branches of Science, Evolution of Physics, Definition of concepts, formulae, postulates and theories of Physics. Measurement, Unit, Dimension, Equation of Dimension, Principle of Homogeneity, Unit conversion of physical quantities, Limitations of dimensional equations, Error, Instrumental Errors, Observational Errors, Random Errors, Systematic Errors, Least Count Error, Calculation of Error, Accuracy and Precision, Significant Figures.
	P-02	Some instruments of measurement, Vernier Scale, Slide Callipers, Screw Gauge, Spherometer, Scale Balance, All Important Formulae at a Glance, Mathematical Problems.
Chapter-3 Dynamics	P-15	Reference Frame, Rest and Motion, Distance and Displacement, Average Velocity and Average Speed, Instantaneous Velocity and Instantaneous Speed, Acceleration. Laws of Motion for Uniform Acceleration.
	P-16	Describing motion with Graphs, Determining velocity with the concepts of slope and area.
	P-17	Motion of Free-Falling Bodies, Vertical Projectile, Some Special Equations for Vertical Projectiles, Proof of Galileo's Laws from the Equations of Motion.
	P-18	Motion of an object in a curve, Vector Equations of the Laws of Motion for Uniform Acceleration, Projectile Motion, Equations for Projectile Motion, Equations relating to Projectiles.
	P-19	Some problems related to projectiles.
	P-20	Uniform Circular Motion, Some Quantities related to Uniform Circular Motion, Centripetal Acceleration, Equations relating to Centripetal Acceleration, Resultant of Acceleration, Equations for Angular Motion.
Chapter-4 Newtonian Mechanics	P-21	Primary concept of Force, Newtonian Mechanics, Newton's first Law of motion, Inertia of rest and motion, Intuitive Idea of Force, General Characteristics of Force, Types of Force, Fundamental forces, Gravitational Force, Electromagnetic Force, Strong Nuclear force, Weak Nuclear force.
	P-22	Momentum, Newton's second law of motion, Equilibrium of Forces.
	P-23	Newton's third law of motion, System, External and Internal Force, Types of forces, Gravitational Force, Normal Force, Weight, Tension.
	P-24	Friction, Friction angle, Static Angle.
	P-25	Conservation of momentum, Vector format of Conservation of momentum, Collision, Quantities of One dimentional collision.
	P-26	Center of mass, Impulse, Application of Newton's forces, standing of the ground, Walking, running horse cart, Pulling Boat, Motion of Rocket, Relation between Newton's Laws.
	P-27	Uniform Circular motion, Centripetal force, Centrifugal force, Banking on roads. Cycle, Train/Cars.
	P-28	Rotational inertia: Moment of inertia, Radius of gyration, Perpendicular Axis theorem, Parallel axis theorem.

Chemistry 1st Paper (Reference Book: UDVASH Parallel Text)		
Chapter	**Lecture**	**Syllabus**
Chapter-2 Qualitative Chemistry Introduction	C-19	Qualitative Analysis (Ion identification)- Flame test, wet test (+ve and –ve ion identification), detecting presence of Carbon in organic compounds, detection of Hydrogen in organic compounds, Detection of N, S, X (F, Cl, Br, I) in organic compounds.
	C-20	Applications of Qualitative Chemistry (Physical Analysis)- crystallization, distillation and partial distillation, steam distillation, sublimation, low pressure distillation,
	C-21	solvent extraction.
	C-22	Nernst's distribution formula, chromatography, column chromatography, thin layer chromatography, paper chromatography, importance of qualitative analysis.
Chapter-3 Periodic	C-23	History, idea and significance of periodic table, Classification of elements based on e^- configuration, Block elements (s, p, d, f) characteristics.
	C-24	Chemical properties of block elements (Chemical properties of s block elements).

Properties and Bonding in Elements	C-25	Chemical properties of block elements (Chemical properties of p block elements) Part-01
	C-26	Chemical properties of block elements (Chemical properties of p block elements) Part-02
	C-27	Chemical properties of block elements (Chemical properties of d block elements, Chemical properties of f block elements).
	C-28	Transitional Element, properties of transitional element.
	C-29	Periodic properties- atomic size, Ionization energy, electron affinity.
	C-30	Electronegativity, Melting point/Boiling point, Acidity/Basicity of oxides.
	C-31	Chemical Bonds- Ionic bond, Metallic bond, Covalent bond, Classification of covalent bond, lewis dot structure.
	C-32	Orbital overlapping. Hybridization, Classification of Hybrid orbitals.
	C-33	Determination of Hybridization state of central atom, Relation between Shapes of covalent compounds and hybrid orbitals, Effect of lone pair electrons on Molecular shapes.
	C-34	Ligand, Coordinate covalent bond.
	C-35	Effect of electronegativity on compounds with chemical bonds- Polarization or deformation of ion, Covalent properties in ionic compounds, Fajan's rule, Effect of polarization on salt.
	C-36	Weak chemical bonds- Vander Waals force, H bond, Importance of H bond, Naming of inorganic compounds.

H.Math 1st Paper (Reference Book: UDVASH Parallel Text)		
Chapter	**Lecture**	**Syllabus**
Chapter-1 Matrix and Determinant	HM-01	Exercise – 1.1; Types of Matrix, Problems Related to Types of Matrix, Addition and subtraction of matrices, Problems on Matrix Addition and Subtraction, Equality of matrices, Problems on Equality of matrices.
	HM-02	Exercise – 1.1; Scalar Product of Matrix, Matrix multiplication of matrices, Problems related to multiplication of matrix, Exponent of matrix, Problems related to polynomials in matrices, Some special matrices, Properties of some special matrices.
	HM-03	Exercise – 1.1; Related to trace of matrix, Matrix in Real life, Problems related to Matrix in Real life, Exercise – 1.2; Minor of determinant, Co-Factor, Value of Determinant, Determinant values, coefficients, regression problems.
	HM-04	Exercise – 1.2; Singular and Non-singular matrix, Problems related to singular and non-singular matrix, Inverse Matrix, Problems related to inverse matrix.
	HM-05	Exercise – 1.2; Properties of determinant, Invariant Proof Problems with Determinants, prove without expansion, Solving equations with determinants.
	HM-06	Exercise – 1.2; Solving set of equations – Cramer's Method, Solving Set of Equations – Inverse Matrix Method, Problems related to solving set of equations, Special formulas regarding the value of determinants, Special formulas for determining value of determinants.
Chapter-6 Trigonometric ratio	HM-37	Exercise - 6; Types of trigonometry, Quadrant, Two-Dimensional Angle, Measurement of two-dimensional angles, Radian angle is a constant angle, Relation between Degrees and Radians, Three-Dimensional Angle and its Measurement, Problems related to interconversion of sexagesimal, centesimal, and circular systems of angle, Determination of length of arc, Determination of area of sector.
	HM-38	Exercise - 6; Angle between hour and minute hands of a clock, Interior Angle of Polygon, Similar Triangle, Ratio of trigonometric angles, Basic theory, Trigonometric ratio of axial angles, Relationship between ratios of trigonometric angles.
	HM-39	Exercise - 6; Problems related to mutual conversion and determination of values of trigonometric ratios, Proof related problems, Trigonometric identities related problems, Circular functions and their domain range.
	HM-40	Exercise - 6; Graphs of trigonometric functions, Problems related to Graphs, Period of Trigonometric functions, Different changes in the graph of trigonometric functions, Related to Fundamental Period.
Chapter-7 Trigonometric Ratio of Associated Angle	HM-41	Exercise – 7.1; θ or Trigonometric ratio of positive acute angle: (-θ) or Trigonometric ratio of negative angle: (90° – θ), i.e. Trigonometric ratio of θ angle: Co-Function: (90° + θ), (180° – θ), (180° +θ), (270° - θ), (270° + θ) are the trigonometric ratios of the angles, Trigonometric Equations and Problems involving Associated Angles, Sum of Squares of Trigonometric Ratios and Problems.
	HM-42	Exercise – 7.1; Properties and problems of tangent or cotangent ratios, determination of values and problems using various trigonometric formulae, Exercise - 7.2; Trigonometric Proportions of Compound Angles, A and B are positive acute angles where A > B, Problems on Trigonometric ratios.
	HM-43	Exercise - 7.2; Formulas and Problems on A±B, Expansion related problem, $\frac{coscos\ A \pm sinsin\ A}{coscos\ A \mp sinsin\ A}$ Formula related problems, A + B = constant related problems.
	HM-44	Exercise - 7.2; Determination of maximum/minimum values of trigonometric expressions, Exercise - 7.3; Formulas and problems related to $sin(A+B) \pm sin\ (A-B)$ or $cos(A+B) \pm cos(A-B)$.
	HM-45	Exercise - 7.3; $TF_1C \pm TF_2D$ related problems, $sinA + cosA$ related problems.
	HM-46	Exercise - 7.4; Trigonometric Ratios of Multiple Angles, Formulas and Problems related to Trigonometric Ratios of Angles 2A, Series (Arithmetic and Geometric series) and Problems.
	HM-47	Exercise - 7.4; Periodic Square Roots related and Problems, Trigonometric Ratios of 3A Angles and Problems related to Trigonometric Ratios of 3A Angles, Trigonometric Ratios of Certain Angles.
	HM-48	Exercise - 7.5; Formulas and problems related to proof, problems related to determination of values of various trigonometric ratios from values of $cos\ x + cos\ y$ and $sinx + siny$.

Botany (Reference Book: UDVASH Parallel Text)		
Chapter	**Lecture**	**Syllabus**
Chapter-2 Cell Division	B-09	Amitosis, Cell Cycle: Cell Cycle Regulators, Interphase: G_1 Phase, S Phase, G_2 Phase.
	B-10	M-phase (prophase, prometaphase, metaphase, anaphase, telophase)
	B-11	Importance of mitosis, uncontrolled mitosis, cell death. Meiosis Cell Division: Meiosis-1: Prophase-1, Metaphase-1, Anaphase-1, Telophase-1, Interkinesis-1
	B-12	Meiosis-2: Prophase-2, Metaphase-2, Anaphase-2, Telophase-2, Cytokinesis-2, Characteristics of Meiosis, Importance of Meiosis, Crossing over.

Zoology (Reference Book: UDVASH Parallel Text)		
Chapter	**Lecture**	**Syllabus**
Chapter-2 Introduction to Animal	Z-07	Hydra, external structure of hydra, internal structure of hydra, cells of epidermis, structure of ideal cnidocyte, types of nematocyst, technique of nematocyst discharge.
	Z-08	Cells of Gastrodermis, Mesoglia, Coelenteron, Feeding and Digestion mechanism of Hydra, Locomotion of Hydra, Reproduction of Hydra, Regeneration of Hydra, Division of Labor in Hydra, symbiosis.
	Z-09	Grasshopper, external structure of grasshopper, regions of grasshopper, Mouthparts of grasshopper.
	Z-10	Alimentary system (alimentary canal, alimentary glands), feeding and digestion of grasshopper.
	Z-11	Circulatory system, respiratory system, excretory system.
	Z-12	Sensory organs of grasshopper, Compound eye of grasshopper, vision mechanism, reproduction process, metamorphosis, role of hormones in metamorphosis.
	Z-13	The Rohu fish, external structure, scale, circulatory system, blood, heart, blood vessels (arterial system).
	Z-14	Fish venous system, respiratory system, structure of gills, respiratory mechanism, air bladder, reproduction and life cycle of fish.
Chapter-3 Human Physiology: Digestion and Absorption	Z-15	Digestion, types of digestion, digestive system, oral cavity, digestion of food inside oral cavity, dental formula, pharynx, oesophagus.
	Z-16	Stomach, digestion of food inside stomach, small intestine, digestion of food inside small intestine, large intestine.
	Z-17	Digestive glands: salivary gland, Liver, pancreas, gastric gland, intestinal gland, role of nervous system and hormone in digestion.
	Z-18	Absorption of digested food materials, fate of absorbed food materials, obesity.

For any information regarding the online program contact the following numbers

Dhaka Branches: **Mirpur**-01713-236705, **Rupnagar**-01713-236734, **Cantonment**-01713-236724, **Uttara**-01713-236707, **Mohammadpur** -01713-236701 **Science Lab**.- 01713-236706, **Farmgate (Green Road)**- 01713-236710, **Farmgate (Malek Tower)**- 01713-236711, **Shantinagar**-01713-236703 **Malibagh**-01713-236702, **Motijheel**-01713-236908, **Basabo**-01713-236722, **Banshri**-01713-236723, **Laxmibazar**- 01713-236720, **Jatrabari**-01713-236719 **Dania**-01713-236718 **Savar**-01713-236721 **Gazipur**-01713-236746, **Narayanganj**-01713-236717,**Konapara**-01713-236757,**Tongi**-01713-236759 **Bakshibazar**-01713-236712 **Khilgaon**-01713-236768.

Branches outside Dhaka: **Mymensingh (Natun Bazar)**-01713-236716, **Mymensingh (KB)**-01713-236769, **Kishoreganj**-01713-236739 **Netrokona**- 01713-236767, **Jamalpur**-01713-236740, **Sherpur**-01713-236749, **Tangail**-01713-236737, **Sirajganj**-01713-236742, **Bogura**- 01713-236727 **Gaibandha**-01713-236755, **Rangpur (Medical Mor)**-01713-236726, **Rangpur (Khamar Mor)**- 01713-236783, **Kurigram**- 01713-236753 **Lalmonirhat-**01713-236777, **Saidpur**-01713-236741, **Dinajpur**-01713-236733, **Thakurgaon**-01713-236748, **Panchagarh-** 01713-236778 **Joypurhat**-01713-236754, **Naogaon**-01713-236756, **Chapainawabganj**-01713-236747, **Rajshahi**-01713-236713, **Natore**- 01713-236751 **Pabna**-01713-236736, **Kushtia**-01713-236735 **Meherpur**-01313-368670, **Chuadanga**-01713236764, **Jhenaidah**-01713-23676 **Magura**-01713-236752, **Jashore**-01713-236731, **Narail**-01713-236788 **Khulna**- 01713-236715, **Satkhira**- 01713-236750, **Pirajpur**- 01713-236790 **Bhola**-01713-236791, **Barishal**-01713-236730, **Patukhali-**01713-236784, **Shariatpur-**01713-236782 **Gopalganj**-01713-236760 **Faridpur**-01713-236732, **Rajbari-**01713-236786, **Manikganj**-01713-236763, **Munshiganj**-01713-236762, **Brahmanbaria**- 01713-236743 **Narsingdi**-01713-236738, **Cumilla**-01713-236728, **Chandpur**-01713-236765, **Noakhali**-01713-236745, **Feni**-01713-236744 **Cox's Bazar**-01713-236766, **Chittagong** (**Chawkbazar**)-01713-236714, **Chittagong (Halisahar)**-01713-236758, **Sylhet**-01713-236729 **Habiganj-**01713-236773, **Moulvibazar-**01713-23678, **Sunamganj-**01713-236779.