HSC 2nd Year Academic Program Progressive Batch [Online/Combo]

Class & Exam Routine-02 (English Version)

Date & Day	Live Class: 1 2:30pm	Live Class: 2 6:30pm	Live Exam	Online: From 8:00am to 11:55pm / Offline: From 9:00am to 5:00pm
02 August 2025 (Saturday)	**HM-35** H.Math: Chapter-6	**P-09** Physics: Chapter-2		Daily Live Exam **B-05** MCQ (10×1=10); 10 min. / Daily Live Exam **P-21** MCQ (10×1=10); 10 min.
03 August 2025 (Sunday)	**B-04** Botany: Chapter-7	**C-10** Chemistry: Chapter-1		Daily Live Exam **HM-35** MCQ (10×1=10); 10 min. / Daily Live Exam **P-09** MCQ (10×1=10); 10 min.
04 August 2025 (Monday) **Chapter-wise Exam-03**	**C-11** Chemistry: Chapter-2	**HM-15** H.Math: Chapter-4		Daily Live Exam **B-04** MCQ (10×1=10); 10 min. / Daily Live Exam **C-10** MCQ (10×1=10); 10 min.
	H.Math 2nd Paper Chapter-01 (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.			
Online classes and exams will be closed on 05 August 2025 (Tuesday) on the occasion of "July Mass Uprising Day".				
06 August 2025 (Wednesday)	**HM-36** H.Math: Chapter-6	**P-10** Physics: Chapter-2		Daily Live Exam **C-11** MCQ (10×1=10); 10 min. / Daily Live Exam **HM-15** MCQ (10×1=10); 10 min.
07 August 2025 (Thursday)	**B-06** Botany: Chapter-8	**P-22** Physics: Chapter-3		Daily Live Exam **HM-36** MCQ (10×1=10); 10 min. / Daily Live Exam **P-10** MCQ (10×1=10); 10 min.
08 August 2025 (Friday) **Chapter-wise Exam-04**	**Chemistry Problem Solving Class-01 (Evening- 6:30pm)**			
	Physics 2nd Paper Chapter-01 (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.			
09 August 2025 (Saturday)	**HM-37** H.Math: Chapter-6	**P-11** Physics: Chapter-2		Daily Live Exam **B-06** MCQ (10×1=10); 10 min. / Daily Live Exam **P-22** MCQ (10×1=10); 10 min.
10 August 2025 (Sunday)	**Z-07** Zoology: Chapter-8	**C-12** Chemistry: Chapter-2		Daily Live Exam **HM-37** MCQ (10×1=10); 10 min. / Daily Live Exam **P-11** MCQ (10×1=10); 10 min.
11 August 2025 (Monday) **Chapter-wise Exam-05**	**C-13** Chemistry: Chapter-2	**HM-16** H.Math: Chapter-4		Daily Live Exam **Z-07** MCQ (10×1=10); 10 min. / Daily Live Exam **C-12** MCQ (10×1=10); 10 min.
	Botany Chapter-07 (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.			
12 August 2025 (Tuesday)	**C-14** Chemistry: Chapter-2	**B-07** Botany: Chapter-8		Daily Live Exam **C-13** MCQ (10×1=10); 10 min. / Daily Live Exam **HM-16** MCQ (10×1=10); 10 min.
13 August 2025 (Wednesday)	**HM-38** H.Math: Chapter-6	**P-12** Physics: Chapter-2		Daily Live Exam **C-14** MCQ (10×1=10); 10 min. / Daily Live Exam **B-07** MCQ (10×1=10); 10 min.
14 August 2025 (Thursday)	**B-08** Botany: Chapter-8	**P-23** Physics: Chapter-3		Daily Live Exam **HM-38** MCQ (10×1=10); 10 min. / Daily Live Exam **P-12** MCQ (10×1=10); 10 min.
15 August 2025 (Friday) **Chapter-wise Exam-06**	**Physics Problem Solving Class-01 (Evening- 6:30pm)**			
	Chemistry 2nd Paper Chapter-01 [Part-02 Lecture C-06 to 10]; (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.			
16 August 2025 (Saturday)	**HM-07** H.Math: Chapter-3	**P-13** Physics: Chapter-2		Daily Live Exam **B-08** MCQ (10×1=10); 10 min. / Daily Live Exam **P-23** MCQ (10×1=10); 10 min.
17 August 2025 (Sunday)	**Z-08** Zoology: Chapter-8	**C-15** Chemistry: Chapter-2		Daily Live Exam **HM-07** MCQ (10×1=10); 10 min. / Daily Live Exam **P-13** MCQ (10×1=10); 10 min.
18 August 2025 (Monday) **Chapter-wise Exam-07**	**C-16** Chemistry: Chapter-2	**HM-17** H.Math: Chapter-4		Daily Live Exam **Z-08** MCQ (10×1=10); 10 min. / Daily Live Exam **C-15** MCQ (10×1=10); 10 min.
	H.Math 2nd Paper Chapter-06 (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.			
19 August 2025 (Tuesday)	**C-17** Chemistry: Chapter-2	**Z-13** Zoology: Chapter-9		Daily Live Exam **C-16** MCQ (10×1=10); 10 min. / Daily Live Exam **HM-17** MCQ (10×1=10); 10 min.
20 August 2025 (Wednesday)	**HM-08** H.Math: Chapter-3	**P-14** Physics: Chapter-2		Daily Live Exam **C-17** MCQ (10×1=10); 10 min. / Daily Live Exam **Z-13** MCQ (10×1=10); 10 min.
21 August 2025 (Thursday)	**Z-14** Zoology: Chapter-9	**P-24** Physics: Chapter-3		Daily Live Exam **HM-08** MCQ (10×1=10); 10 min. / Daily Live Exam **P-14** MCQ (10×1=10); 10 min.
22 August 2025 (Friday) **Chapter-wise Exam-08**	**H.Math Problem Solving Class-01 (Evening- 6:30pm)**			
	Botany Chapter-08 (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.			
23 August 2025 (Saturday)	**HM-09** H.Math: Chapter-3	**P-15** Physics: Chapter-2		Daily Live Exam **Z-14** MCQ (10×1=10); 10 min. / Daily Live Exam **P-24** MCQ (10×1=10); 10 min.
24 August 2025 (Sunday)	**Z-09** Zoology: Chapter-8	**C-18** Chemistry: Chapter-2		Daily Live Exam **HM-09** MCQ (10×1=10); 10 min. / Daily Live Exam **P-15** MCQ (10×1=10); 10 min.
25 August 2025 (Monday) **Chapter-wise Exam-09**	**C-19** Chemistry: Chapter-2	**HM-18** H.Math: Chapter-4		Daily Live Exam **Z-09** MCQ (10×1=10); 10 min. / Daily Live Exam **C-18** MCQ (10×1=10); 10 min.
	Physics 2nd Paper Chapter-03 (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.			
26 August 2025 (Tuesday)	**C-20** Chemistry: Chapter-2	**Z-15** Zoology: Chapter-9		Daily Live Exam **C-19** MCQ (10×1=10); 10 min. / Daily Live Exam **HM-18** MCQ (10×1=10); 10 min.
27 August 2025 (Wednesday)	**HM-10** H.Math: Chapter-3	**P-16** Physics: Chapter-2		Daily Live Exam **C-20** MCQ (10×1=10); 10 min. / Daily Live Exam **Z-15** MCQ (10×1=10); 10 min.

Date	Column 1	Column 2	Daily Live Exam
28 August 2025 (Thursday)	**Z-16** Zoology: Chapter-9	**P-45** Physics: Chapter-7	Daily Live Exam **HM-10** MCQ (10×1=10); 10 min. Daily Live Exam **P-16** MCQ (10×1=10); 10 min.
29 August 2025 (Friday) **Chapter-wise Exam-10**	Guideline Seminar-01		
	Chemistry 2nd Paper Chapter-02 [Part-01 Lecture C-11 to 19]; (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.		
30 August 2025 (Saturday)	**HM-11** H.Math: Chapter-3	**P-17** Physics: Chapter-2	Daily Live Exam **Z-16** MCQ (10×1=10); 10 min. Daily Live Exam **P-45** MCQ (10×1=10); 10 min.
31 August 2025 (Sunday)	**Z-10** Zoology: Chapter-8	**C-21** Chemistry: Chapter-2	Daily Live Exam **HM-11** MCQ (10×1=10); 10 min. Daily Live Exam **P-17** MCQ (10×1=10); 10 min.
01 September 2025 (Monday)	**C-22** Chemistry: Chapter-2	**HM-19** H.Math: Chapter-4	Daily Live Exam **Z-10** MCQ (10×1=10); 10 min. Daily Live Exam **C-21** MCQ (10×1=10); 10 min.
02 September 2025 (Tuesday)	**C-23** Chemistry: Chapter-2	**Z-17** Botany: Chapter-9	Daily Live Exam **C-22** MCQ (10×1=10); 10 min. Daily Live Exam **HM-19** MCQ (10×1=10); 10 min.
03 September (Wednesday)	**HM-12** H.Math: Chapter-3	**P-18** Physics: Chapter-2	Daily Live Exam **C-23** MCQ (10×1=10); 10 min. Daily Live Exam **Z-17** MCQ (10×1=10); 10 min.
04 September 2025 (Thursday)	**B-09** Botany: Chapter-9	**P-46** Physics: Chapter-7	Daily Live Exam **HM-12** MCQ (10×1=10); 10 min. Daily Live Exam **P-18** MCQ (10×1=10); 10 min.
05 September 2025 (Friday) **Chapter-wise Exam-11**	Biology Problem Solving Class-02 (Evening- 6:30pm)		
	Zoology Chapter-09 (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.		
06 September 2025 (Saturday)	**HM-13** H.Math: Chapter-3	**P-25** Physics: Chapter-4	Daily Live Exam **B-09** MCQ (10×1=10); 10 min. Daily Live Exam **P-46** MCQ (10×1=10); 10 min.
07 September 2025 (Sunday)	**Z-11** Zoology: Chapter-8	**C-24** Chemistry: Chapter-2	Daily Live Exam **HM-13** MCQ (10×1=10); 10 min. Daily Live Exam **P-25** MCQ (10×1=10); 10 min.
08 September 2025 (Monday) **Chapter-wise Exam-12**	**C-25** Chemistry: Chapter-2	**HM-20** H.Math: Chapter-4	Daily Live Exam **Z-11** MCQ (10×1=10); 10 min. Daily Live Exam **C-24** MCQ (10×1=10); 10 min.
	Physics 2nd Paper Chapter-02 (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.		
09 September 2025 (Tuesday)	**C-26** Chemistry: Chapter-2	**B-10** Botany: Chapter-9	Daily Live Exam **C-25** MCQ (10×1=10); 10 min. Daily Live Exam **HM-20** MCQ (10×1=10); 10 min.
10 September (Wednesday)	**HM-14** H.Math: Chapter-3	**P-26** Physics: Chapter-4	Daily Live Exam **C-26** MCQ (10×1=10); 10 min. Daily Live Exam **B-10** MCQ (10×1=10); 10 min.
11 September 2025 (Thursday)	**B-11** Botany: Chapter-9	**P-47** Physics: Chapter-7	Daily Live Exam **HM-14** MCQ (10×1=10); 10 min. Daily Live Exam **P-26** MCQ (10×1=10); 10 min.
12 September 2025 (Friday) **Chapter-wise Exam-13**	Chemistry Problem Solving Class-02 (Evening- 6:30pm)		
	H.Math 2nd Paper Chapter-03 (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.		
13 September 2025 (Saturday)	**HM-47** H.Math: Chapter-8	**P-27** Physics: Chapter-4	Daily Live Exam **B-11** MCQ (10×1=10); 10 min. Daily Live Exam **P-47** MCQ (10×1=10); 10 min.
14 September 2025 (Sunday)	**Z-12** Zoology: Chapter-8	**C-27** Chemistry: Chapter-2	Daily Live Exam **HM-47** MCQ (10×1=10); 10 min. Daily Live Exam **P-27** MCQ (10×1=10); 10 min.
15 September 2025 (Monday) **Chapter-wise Exam-14**	**C-28** Chemistry: Chapter-2	**HM-21** H.Math: Chapter-4	Daily Live Exam **Z-12** MCQ (10×1=10); 10 min. Daily Live Exam **C-27** MCQ (10×1=10); 10 min.
	Zoology Chapter-08 (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.		
16 September 2025 (Tuesday)	**C-29** Chemistry: Chapter-2	**B-12** Botany: Chapter-9	Daily Live Exam **C-28** MCQ (10×1=10); 10 min. Daily Live Exam **HM-21** MCQ (10×1=10); 10 min.
17 September (Wednesday)	**HM-48** H.Math: Chapter-8	**P-28** Physics: Chapter-4	Daily Live Exam **C-29** MCQ (10×1=10); 10 min. Daily Live Exam **B-12** MCQ (10×1=10); 10 min.
18 September 2025 (Thursday)	**B-13** Botany: Chapter-9	**P-48** Physics: Chapter-7	Daily Live Exam **HM-48** MCQ (10×1=10); 10 min. Daily Live Exam **P-28** MCQ (10×1=10); 10 min.
19 September 2025 (Friday) **Chapter-wise Exam-15**	Physics Problem Solving Class-02 (Evening- 6:30pm)		
	Chemistry 2nd Paper Chapter-02 [Part-02 Lecture C-20 to 27]; (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.		
20 September 2025 (Saturday)	**HM-49** H.Math: Chapter-8	**P-29** Physics: Chapter-4	Daily Live Exam **B-13** MCQ (10×1=10); 10 min. Daily Live Exam **P-48** MCQ (10×1=10); 10 min.
21 September 2025 (Sunday)	**Z-18** Zoology: Chapter-10	**C-30** Chemistry: Chapter-2	Daily Live Exam **HM-49** MCQ (10×1=10); 10 min. Daily Live Exam **P-29** MCQ (10×1=10); 10 min.
22 September 2025 (Monday)	**C-31** Chemistry: Chapter-2	**HM-22** H.Math: Chapter-4	Daily Live Exam **Z-18** MCQ (10×1=10); 10 min. Daily Live Exam **C-30** MCQ (10×1=10); 10 min.
23 September 2025 (Tuesday)	**C-32** Chemistry: Chapter-2	**B-14** Botany: Chapter-9	Daily Live Exam **C-31** MCQ (10×1=10); 10 min. Daily Live Exam **HM-22** MCQ (10×1=10); 10 min.
24 September (Wednesday)	**HM-50** H.Math: Chapter-8	**P-30** Physics: Chapter-4	Daily Live Exam **C-32** MCQ (10×1=10); 10 min. Daily Live Exam **B-14** MCQ (10×1=10); 10 min.
25 September 2025 (Thursday)	**B-15** Botany: Chapter-9	**P-49** Physics: Chapter-7	Daily Live Exam **HM-50** MCQ (10×1=10); 10 min. Daily Live Exam **P-30** MCQ (10×1=10); 10 min.
26 September 2025 (Friday) **Chapter-wise Exam-16**	Guideline Seminar-02		
	H.Math 2nd Paper Chapter-04 (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.		

The next class and exam routine (Part-03) will be published...

∗∗∗The routine can change or be modified in case of special necessities∗∗∗

- To participate in classes and exams, visit **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 subject**. 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 Progressive Batch (Class & Exam Syllabus-2)

Physics 2nd Paper Reference Book: মাতালাল TEXT		
Chapter	**Lecture**	**Lecture-based discussion topics**
Chapter-2 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.
	P-17	Torque of a dipole in uniform electric field, Work done by rotation of dipole, Potential energy of a dipole, Gauss' Theorem, Electric flux, Electric flux in a closed surface, Gauss' law from Coulomb's law.
	P-18	Use of Gauss's theorem, Electric field for charged conductor sphere, Electric field for charged insulator sphere, Electric field for line of charges, Electric field for charged conductor plate, Electric field for charged conductor parallel plates.
Chapter-3 Current Electricity	P-22	kWh, Rating of Electrical Devices, Rating of Voltage, Rating of Watt, Security fuse, Voltage on various points of a circuit, Combination of cells, Series and parallel connection, Mixed connection.
	P-23	Kirchhoff's law: First law, second law, General mathematical problems related to Kirchhoff's law.
	P-24	CQ and admission standard mathematical problems related to Kirchhoff's law, Wheatstone Bridge, Potentiometer, Meter Bridge.
Chapter-4 Magnetic Effects of Current and Magnetism	P-25	Basic concepts of magnetic materials, magnetic field, Oersted's principle, Biot-Savart law, applications of Biot-Savart law, determination of the magnitude and direction of the magnetic field at a point near an infinitely long straight current-carrying wire, and general mathematical problems.
	P-26	Determination of the magnitude and direction of the magnetic field at the center of a current-carrying circular coil, Ampere's law, applications of Ampere's law, and general mathematical problems related to magnetic field determination.
	P-27	CQ & Admission Standard mathematical problems related to magnetic field determination, magnetic force, Lorentz force, and related mathematical problems, motion of a charge in a magnetic field, circular motion, and related mathematical problems.
	P-28	Spiral motion of a charge and mathematical problems, Hall effect, Hall voltage, and related mathematical problems, force on a current-carrying conductor in a magnetic field, Fleming's left-hand rule, and related mathematical problems.
	P-29	Force between two infinitely long parallel current-carrying conductors, torque acting on a closed current loop in a magnetic field, and general mathematical problems.
	P-30	CQ & Admission Standard mathematical problems related to force and torque in a magnetic field, magnetic field due to the orbital motion of an electron and the expression for magnetic dipole moment, magnetic dipole moment due to the spin of an electron or its rotation about its own axis.
Chapter-7 Physical Optics	P-45	Primary concepts of light, Newton's particle theory, Electromagnetic wave, Pointing vector, Electromagnetic spectrum, Wave and wavefront, Huygen's wave theory.
	P-46	Explanation of reflection and refraction with Huygen's theorem, Superposition of Wave, Coherent source.
	P-47	Interference, Young's double slit experiment, Central maximum, Position of light and dark points, Constructive interference, Destructive interference, Fringe distance, Fringe width, General Mathematical problems.
	P-48	CQ & Admission Standard Mathematical problems related to Interference.
	P-49	Diffraction, Fraunhofer diffraction, Grating diffraction.

Chemistry 2nd Paper Reference Book: मातालाल TEXT		
Chapter	**Lecture**	**Lecture-based discussion topics**
Chapter-1 Environmental Chemistry	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.
Chapter-2 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)
	C-16	Technique of Organic Reaction- Division of bond (uniform and ununiform), Electrophile, Nucleophile, Carbocation, Carbanion.
	C-17	Aliphatic hydrocarbon- Saturated hydrocarbon (Alkane and everything of alkane)
	C-18	Unsaturated hydrocarbon (Alkene and everything of alkene)
	C-19	Unsaturated hydrocarbon (Alkyne and everything of alkyne)
	C-20	Benzene and Its Discussion, Source of Benzene, Characteristics and specialty of benzene, Aromaticity and Huckle law.
	C-21	Preparation and technique of benzene reaction, Homologous of benzene.
	C-22	Toluene and everything of it
	C-23	Alkyl halide and everything about it.
	C-24	Nucleophile substitution (S_N1 and S_N2), Electrophilic elimination (E1 and E2)
	C-25	Aryl Halide and everything of it
	C-26	Everything about alcohol and ether.
	C-27	Phenol and everything about it.
	C-28	Aldehyde-Ketone introduction & preparation
	C-29	Aldehyde-Ketone chemical reaction and everything else
	C-30	Aromatic aldehyde-ketone and everything of it.
	C-31	Carboxylic acid and everything about it.
	C-32	Benzoic acid and everything about it.

H.Math 2nd Paper Reference Book: मातालाल TEXT		
Chapter	**Lecture**	**Lecture-based discussion topics**
Chapter-3 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; Religion 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. ω related series, ω 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.
Chapter-4 Polynomials and Polynomial equations	HM-15	Exercise-4; Polynomial functions and polynomial equations, roots of polynomial equations, some theorems related to polynomials, solving quadratic equations with the help of factors.
	HM-16	Exercise-4; General solution of quadratic equations, discriminant, determining the nature of roots of quadratic equations
	HM-17	Exercise-4; Properties of roots in terms of coefficients, root-coefficient relationship of quadratic equations.
	HM-18	Exercise-4; Polynomial equations with real coefficients, polynomial equations with rational coefficients, forming equations from roots.
	HM-19	Exercise-4; Determining the x-intercept of a polynomial function related, maximum and minimum values of a quadratic polynomial function, determining the line of symmetry of a quadratic function. Drawing a graph of any quadratic function.
	HM-20	Exercise-8; Graph of $y = f(x) = ax^n + b$[n odd and even], common root, Relationship between coefficients and roots of cubic equations.
	HM-21	Exercise-4; Relationship between coefficients and roots of polynomial equations and formation of polynomial equations, equations with symmetric roots.
	HM-22	Exercise-4; Trigonometric polynomial functions and their types, equations with roots included in the progression, value of symmetric terms of roots.

	HM-35	Exercise-6.2; Determining the equation of an ellipse from the definition of a conic, determining the equation from a focus, its opposite diretix and eccentricity of an ellipse related, special problems, Exercise-6.3; Hyperbola, standard equation of hyperbola.
Chapter-6 Conics	HM-36	Exercise-6.3; Axis transfer, determining the equation of a hyperbola from various materials.
	HM-37	Exercise-6.3; $|SP - S'P|$ = minor axis length, asymptote, rectangular hyperbola, parametric coordinates of a hyperbola, determining the equation of a hyperbola from the definition of a conic.
	HM-38	Exercise-6.3; General equation of conic, location of point with respect to conic, tangent and intersection of conic related, identification of conic.
Chapter-8 Statics	HM-47	Exercise-8.1; Basic concepts of mechanics, triangles in solving statics problems related Definition of some topics, resultant of two forces acting on a particle, addition of forces, determination of magnitude and direction of resultant of two forces acting at an angle α to each other.
	HM-48	Exercise-8.1; Application of parallelogram law in determining resultant, determination of angle included between two forces, direction of resultant unchanged related.
	HM-49	Exercise-8.1; Resolution of force, determination of resolved parts of force, application of sine law of force related, determination of resultant of force with the help resolved parts.
	HM-50	Exercise-8.1; Resultant of three or more forces, the application of the theorem of resolved parts or direct formula to determine the resultant of two or more forces related problems

Botany Reference Book: ম্যাল্টালাল TEXT		
Chapter	**Lecture**	**Lecture-based discussion topics**
Chapter-07 Gymnosperms and Angiosperms	B-04	Poaceae Family, Malvaceae Family, Differences between Poaceae and Malvaceae family, Differences between Monocot plant and Dicot plant.
Chapter-08 Tissue and Tissue System	B-06	Epidermal tissue system, stomata, hydathode.
	B-07	Ground tissue system, Vascular tissue system.
	B-08	Internal structure of monocot root and monocot stem, Primary internal structure of dicot stem.
Chapter-09 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, Kreb's Cycle.

Zoology Reference Book: ম্যাল্টালাল TEXT		
Chapter	**Lecture**	**Lecture-based discussion topics**
Chapter-8 Human Physiology: Coordination and Control	Z-07	Nervous coordination, function of the nervous system, neurons, types of neurons, neuroglia, neurotransmitters, synapses, transmission of stimuli through synapses.
	Z-08	Central nervous system, brain, forebrain, midbrain, hindbrain.
	Z-09	Brain ventricles, cerebrospinal fluid, human cranial nerves (names, origins, branches, distribution, nature and functions), spinal cord.
	Z-10	Human sensory organs, eye-organ of vision, eyeball, accessory parts of the eye, image formation and mechanism of vision, accomodation, binocular vision.
	Z-11	Ear - organ of hearing and balance (external ear, middle ear, inner ear), role of the ear in hearing and balance.
	Z-12	Chemical coordination, endocrine system, location of endocrine glands, hormones secreted and their functions, effects of hormones on body growth, effects of hormones on physiological functions of the body, effects of hormones on behavior change, consequences of uncontrolled hormone use.
Chapter-9 Continuation of human life	Z-13	Reproductive system, male reproductive system, female reproductive system, different stages and phases of reproduction, puberty, menstrual cycle.
	Z-14	formation of gamete (spermatogenesis, sperm formation, oogenesis, formation of ovum).
	Z-15	Fertilization, implantation, placenta, foetal membranes, human embryogenesis, embryo and fetus development.
	Z-16	Family planning and contraceptive methods, IVF method, reproductive system problems, reproductive hormone imbalances.
	Z-17	Problems during fetal development, sexually transmitted diseases.