## HSC 2nd Year Academic Program Progressive Batch

Online Batch Time
English Version - 3:00pm

Class & Exam Routine (Part-01)

Online Exam Time
From 9:00am to 11:00pm

Date & Day	Live Class	Live Exam	
0 August 2024 (Tuesday)	Live Class (Z-27+28) Zoology: Chapter - 07	Basic Introductory Exam MCQ (10×1=10); 10 min.	
1 August 2024 (Wednesday)	Live Class (C-01+02) Chemistry: Chapter - 01	Daily Live Exam (Z-27+28) <b>MCQ</b> (10×1=10); 10 min.	
2 August 2024 (Thursday)	Live Class (P-01+02) Physics: Chapter - 01	Daily Live Exam (C-01+02) <b>MCQ</b> (10×1=10); 10 min.	
4 August 2024 (Saturday)	Live Class (C-03+04) Chemistry: Chapter - 01	Daily Live Exam (P-01+02) <b>MCQ</b> (10×1=10); 10 min.	
5 August 2024 (Sunday)	Live Class (HM-01+02) H.Math: Chapter - 03	Daily Live Exam (C-03+04) <b>MCQ</b> (10×1=10); 10 min.	
6 August 2024 (Monday)	Live Class (Z-29+30) Zoology: Chapter - 07	Daily Live Exam (HM-01+02) <b>MCQ</b> (10×1=10); 10 min.	
27 August 2024 (Tuesday)	Live Class (C-05+06) Chemistry: Chapter - 01	Daily Live Exam (Z-29+30) <b>MCQ</b> (10×1=10); 10 min.	
28 August 2024 (Wednesday)	Live Class (P-03+04) Physics: Chapter - 01	Daily Live Exam (C-05+06) <b>MCQ</b> (10×1=10); 10 min.	
29 August 2024 (Thursday)	Live Class (C-07+08) Chemistry: Chapter - 01	Daily Live Exam (P-03+04) <b>MCQ</b> (10×1=10); 10 min.	
	Chapter-wise Exam [Chemistry 2nd Paper Chapter-0	01] (Part-01); Lecture C-01 to 04; (CQ 2×10=20); Time: 50min &	
80 August 2024 (Friday)	(Pre-Admission MCQ 10×1=10); Time: 10min.		
31 August 2024 (Saturday)	Live Class (P-05+06) Physics: Chapter - 01	Daily Live Exam (C-07+08) <b>MCQ</b> (10×1=10); 10 min.	
01 September 2024 (Sunday)	Live Class (C-09+10) Chemistry: Chapter - 01	Daily Live Exam (P-05+06) <b>MCQ</b> (10×1=10); 10 min.	
02 September 2024 (Monday)	Live Class (HM-03+04) H.Math: Chapter - 03	Daily Live Exam (C-09+10) <b>MCQ</b> (10×1=10); 10 min.	
3 September 2024 (Tuesday)	Live Class (Z-31+32) Zoology: Chapter – 07	Daily Live Exam (HM-03+04) <b>MCQ</b> (10×1=10); 10 min.	
04 September 2024 (Wednesday)	Live Class (P-07+08) Physics: Chapter - 02	Daily Live Exam (Z-31+32) <b>MCQ</b> (10×1=10); 10 min.	
05 September 2024 (Thursday)	Live Class (C-11+12) Chemistry: Chapter - 02	Daily Live Exam (P-07+08) MCQ (10×1=10); 10 min.	
06 September 2024 (Friday)	Chapter-wise Exam [Physics 2nd Paper Chapter-01]	(CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10	
)7 September 2024 (Saturday)	Live Class (P-09+10) Physics: Chapter - 02	Daily Live Exam (C-11+12) <b>MCQ</b> (10×1=10); 10 min.	
08 September 2024 (Sunday)	Live Class (C-13+14) Chemistry: Chapter - 02	Daily Live Exam (P-09+10) <b>MCQ</b> (10×1=10); 10 min.	
	Live Class (HM-05+06) H.Math: Chapter - 03	Daily Live Exam (C-13+14) <b>MCQ</b> (10×1=10); 10 min.	
9 September 2024 (Monday)	Chapter-wise Exam [Chemistry 2nd Paper Chapter-01] (Part-02); Lecture C-05 to 10; (CQ 2×10=20); Time: 50min &		
	(Pre-Admission MCQ 10×1=10); Time: 10min.		
0 September 2024 (Tuesday)	Live Class (B-21+22) Botany: Chapter - 08	Daily Live Exam (HM-05+06) <b>MCQ</b> (10×1=10); 10 min.	
1 September 2024 (Wednesday)	Live Class (P-11+12) Physics: Chapter - 02	Daily Live Exam (B-21+22) <b>MCQ</b> (10×1=10); 10 min.	
2 September 2024 (Thursday)	Live Class (C-15+16) Chemistry: Chapter - 02	Daily Live Exam (P-11+12) <b>MCQ</b> (10×1=10); 10 min.	
3 September 2024 (Friday)	Chapter-wise Exam [Zoology Chapter-07] (CQ 2×10=	20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.	
4 September 2024 (Saturday)	Live Class (P-13+14) Physics: Chapter - 02	Daily Live Exam (C-15+16) <b>MCQ</b> (10×1=10); 10 min.	
5 September 2024 (Sunday)	Live Class (C-17+18) Chemistry: Chapter - 02	Daily Live Exam (P-13+14) <b>MCQ</b> (10×1=10); 10 min.	
	Live Class (HM-07+08) H.Math: Chapter - 04	Daily Live Exam (C-17+18) <b>MCQ</b> (10×1=10); 10 min.	
6 September 2024 (Monday)	Chapter-wise Exam [H.Math 2nd Paper Chapter-03]	(CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10	
7 September 2024 (Tuesday)	Live Class (B-23+24) Botany: Chapter - 08	Daily Live Exam (HM-07+08) <b>MCQ</b> (10×1=10); 10 min.	
8 September 2024 (Wednesday)	Live Class (P-15+16) Physics: Chapter - 02	Daily Live Exam (B-23+24) MCQ (10×1=10); 10 min.	
9 September 2024 (Thursday)	Live Class (C-19+20) Chemistry: Chapter - 02	Daily Live Exam (P-15+16) <b>MCQ</b> (10×1=10); 10 min.	
20 September 2024 (Friday)	Chapter-wise Exam [Physics 2nd Paper Chapter-02]	(CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time:10	
21 September 2024 (Saturday)	Live Class (P-17+18) Physics: Chapter - 03	Daily Live Exam (C-19+20) <b>MCQ</b> (10×1=10); 10 min.	
. ,,	Live Class (C-21+22) Chemistry: Chapter - 02	Daily Live Exam (P-17+18) <b>MCQ</b> (10×1=10); 10 min.	
22 September 2024 (Sunday)			
22 September 2024 (Sunday)	Live Class (HM-09+10) H.Math: Chapter - 04	Daily Live Exam (C-21+22) <b>MCQ</b> (10×1=10); 10 min.	

24 September 2024 (Tuesday)	Live Class (B-25+26) Botany: Chapter - 09	Daily Live Exam (HM-09+10) <b>MCQ</b> (10×1=10); 10 min.	
25 September 2024 (Wednesday)	Live Class (C-23+24) Chemistry: Chapter - 02	Daily Live Exam (B-25+26) <b>MCQ</b> (10×1=10); 10 min.	
26 September 2024 (Thursday)	Live Class (HM-11+12) H.Math: Chapter - 04	Daily Live Exam (C-23+24) <b>MCQ</b> (10×1=10); 10 min.	
27 September 2024 (Friday)	Chapter-wise Exam [Botany Chapter-08] (CQ 2×10=2	0); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min.	
28 September 2024 (Saturday)	Live Class (P-19+20) Physics: Chapter - 03	Daily Live Exam (HM-11+12) <b>MCQ</b> (10×1=10); 10 min.	
29 September 2024 (Sunday)	Live Class (C-25+26) Chemistry: Chapter - 02	Daily Live Exam (P-19+20) <b>MCQ</b> (10×1=10); 10 min.	
20.0	Live Class (HM-13+14) H.Math: Chapter - 04	Daily Live Exam (C-25+26) <b>MCQ</b> (10×1=10); 10 min.	
30 September 2024 (Monday)	Chapter-wise Exam [Physics 2nd Paper Chapter-03 (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time:10min.		
01 October 2024 (Tuesday)	Live Class (B-27+28) Botany: Chapter - 09	Daily Live Exam (HM-13+14) <b>MCQ</b> (10×1=10); 10 min.	
02 October 2024 (Wednesday)	Live Class (C-27+28) Chemistry: Chapter - 02	Daily Live Exam (B-27+28) <b>MCQ</b> (10×1=10); 10 min.	
03 October 2024 (Thursday)	Live Class (HM-25+26) H.Math: Chapter - 07	Daily Live Exam (C-27+28) <b>MCQ</b> (10×1=10); 10 min.	
	Chapter-wise Exam [Chemistry 2nd Paper Chapter-02] (Part-02); Lecture C-19 to 26; (CQ 2×10=20); Time: 50min &		
04 October 2024 (Friday)	(Pre-Admission MCQ 10×1=10); Time: 10min.		
05 October 2024 (Saturday)	Live Class (C-29+30) Chemistry: Chapter - 02	Daily Live Exam (HM-25+26) <b>MCQ</b> (10×1=10); 10 min.	
06 October 2024 (Sunday)	Live Class (C-31+32) Chemistry: Chapter - 02	Daily Live Exam (C-29+30) <b>MCQ</b> (10×1=10); 10 min.	
07 October 2024 (Manday)	Live Class (HM-27+28) H.Math: Chapter - 07	Daily Live Exam (C-31+32) <b>MCQ</b> (10×1=10); 10 min.	
07 October 2024 (Monday)	Chapter-wise Exam [H.Math 2nd Paper Chapter-04] (CQ 2×10=20); Time: 50min & (Pre-Admission MCQ 10×1=10); Time: 10min		
08 October 2024 (Tuesday)	Live Class (B-29+30) Botany: Chapter - 09	Daily Live Exam (HM-27+28) <b>MCQ</b> (10×1=10); 10 min.	
09 October 2024 (Wednesday)	Live Class (C-33+34) Chemistry: Chapter - 02	Daily Live Exam (B-29+30) <b>MCQ</b> (10×1=10); 10 min.	
Online classes a	nd exams will be closed from October 10 to Oct	ober 13 on the occasion of Sharadiya Durga Puja.	
	Live Class (HM-29+30) H.Math: Chapter - 07	Daily Live Exam (C-33+34) <b>MCQ</b> (10×1=10); 10 min.	
14 October 2024 (Monday)	Chapter-wise Exam [Chemistry 2nd Paper Chapter-02] (Part-03); Lecture C-27 to 34; (CQ 2×10=20); Time: 50min &		
	(Pre-Admission MCQ 10×1=10); Time: 10min.		
15 October 2024 (Tuesday)	Live Class (B-31+32) Botany: Chapter - 09	Daily Live Exam (HM-29+30) <b>MCQ</b> (10×1=10); 10 min.	
16 October 2024 (Wednesday)	Live Class (HM-31+32) H.Math: Chapter - 07	Daily Live Exam (B-31+32) <b>MCQ</b> (10×1=10); 10 min.	
	Next class & exam routine (Part-02)		

## Online Classes & Exam Procedure:

- \* Go to this website udvash.com and click on 'Join Now' menu to give Live Class & Exam. Login to class HSC 2nd year academic program progressive batch using your admitted registration number to participate in classes and exams.
- \* The Daily Live Exam will run from 09:00 am to 11:00 pm as per the date mentioned in the routine. A student can participate in the Live Exam only once during this period. However, for more practice, students can participate in the Practice Exam of the same syllabus multiple times.

## HSC 2nd year academic Progressive Batch course syllabus part-01 (online)

Physics 2nd Paper (Reference Book: <b>UDVASH</b> Parallel Text)			
Chapter	Lecture	Syllabus	
	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, Molar Heat capacity, Thermal function of static and path, Isobaric Process, Isochoric Process.	
Chapter-1	P-03	Isothermal Process, Adiabatic Process, Concept of Second law of thermodynamics, Thermal Engine.	
Thermodynamics	P-04	Efficiency of thermal engines, Reversible and Irreversible process, Factors of Irreversible process, Carnot Cycle, Efficiency of Carnot engine.	
	P-05	Refrigerator, Efficiency coefficient of refrigerator, Refrigeration cycle of Carnot, Mechanism of refrigerator.	
	P-06	Entropy, Entropy in reversible and irreversible process, Change of entropy in various process, Entropy and disorder, Thermal death of the universe.	
	P-07	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.	
Chapter-2 Static Electricity	P-08	Electric Field on a point for point charge, Law of superposition of electricity intensity, Field line, Uniform electric field, Electric field intensity.	
	P-09	Electric Potential, Equations of electric potential, Potential Difference, Relation of potential difference with intensity, Flow of charge.	

	P-10	Electric potential and intensity of a charged conductor sphere, Plane density and electric intensity.
	P-11	Torque of a dipole in uniform electric field, Dipole moment, Work done by rotation of dipole, Potential energy of a dipole, Potential
	P-11	and intensity for a dipole.
	P-12	Insulator and dielectric, Capacitor and Capacitance, Spherical and Parallel plate capacitor, Connection of capacitors, energy stored in
	F-12	capacitor, energy stored in a capacitor.
	P-13	Gauss' Theorem, Electric flux, Electric flux in a closed surface, Gauss' law from Coulomb's law.
	P-14	Use of Gauss's theorem, Electric field for charged conductor sphere, Electric field for charged insulator sphere, Electric field for line
<u> </u>	P-14	of charges, Electric field for charged conductor plate, Electric field for charged conductor parallel plates.
	P-15	Current flow, Direction of current flow, Drifting velocity of electron, Current density, Ohm's Law, Resistance, Conductivity, Effect of
		temperature on resistance, Conductivity coefficient, Electric cell, Electromotive force of a cell, Internal resistance of a cell.
	P-16	Electric Circuit, Resistance combination, Series combination, Parallel combination, Equivalent resistance, Work done by electricity
Chapter-3		and electric force, Joule's thermal law.
Current	P-17	Voltage divider law, Current divider law, Shunt, Relation between shunt current and galvanometer current, Use of shunt on ammeter,
Electricity		Increasing the range of ammeter, Use of Sh <mark>unt on vol</mark> tmeter, Increasing the range of voltmeter.
Licetricity	P-18	kWh, Rating of Electrical Devices, Rating of Voltage, Rating of Watt, Security fuse, Voltage on various points of a circuit, Combination
	1 10	of cells, Series and parallel conne <mark>ctio</mark> n, Mi <mark>xed conne</mark> ction.
1	P-19	Kirchhoff's law: First law, seco <mark>nd law</mark> , Whe <mark>atstone B</mark> ridge.
<u> </u>	P-20	Potentiometer, Meter Bridge.

		Chemistry 2nd Paper (Reference Book: <b>UDVASH</b> Parallel Text)
Chapter	Lecture	Syllabus
	C-01	Gas and Gas laws – Gas, Components of atmosphere, Atmospheric temperature, Effect of pressure and density, Cyclone and tidal bore,
	C-01	Boyle's law, Charle's law, Av <mark>o</mark> gadro <mark>'s law, Gay-Lus</mark> sac's law.
	C-02	Combined Gas law- Comb <mark>ined</mark> law, Ideal gas equation (PV = nRT), Explanation of R.
	C-03	Diffusion, Effusion and K <mark>inetic t</mark> heory <mark>of Gas- Dalton's law</mark> of partial pressure, Graham's law of diffusion.
	C-04	Diffusion, Effusion, Rate of diffusion and formula, Kinetic theory of gas, Postulates of kinetic theory, Calculation of kinetic energy.
Chapter-1	C-05	Ideal Gas and Real Gas – R <mark>eal gas, Ideal gas,</mark> Devi <mark>ation, Coefficie</mark> nt of compressibility, Amagat's curve, Vander Walls equation.
Environmental	C-06	Gas cylinderisation, Effect <mark>s of different gas on</mark> envir <mark>onment- R</mark> eactions occurred during lightning, Fixation of N₂ in soil.
Chemistry	C-07	Greenhouse gas, Source of greenhouse gas, Effect of greenhouse gas, Introduction to CFC and its use, origination of O₃ layer, Damage of
(Partial)	C-07	O₃ layer.
	C-08	Concept related to acid base- Acid base theory, Arrhenius concept, Bronsted-Lowry concept (Theory, conjugate), Luis theory, Acid rain,
	C 00	Cause of acid rain, Effect of acid rain, Prevention of acid rain.
	C-09	Effect of Chemistry on Environment- Source of surface water, Importance of surface water, Criteria of purity of Surface water,
		Hardness, pH, DO, BOD, COD, TDS.
	C-10	Water pollution, Reason and cause of water pollution, Natural pollutant, Arsenic pollutant, Effect of water pollution.
	C-11	Introduction and Classification of Organic Chemistry- Introduction to organic compounds, Hydrocarbon and organic compounds, Roll of
	<b></b>	carbon in hydrocarbon, Classification of organic compounds, Homologous series, Functional group.
	C-12	Nomenclature of Organic Compounds- (Tribal system, derived system)
	C-13	Nomenclature of Organic Compounds- (IUPAC system)
	C-14	Isomerism- Introduction, Classification.
	C-15	Structural isomerism, Types of structural isomerism (Chain isomerism, Position isomerism, Functional group isomerism, Metamerism,
	C 15	Tautomerism), Geometric isomerism (cis-trans isomerism, E-Z isomerism, Syn-Anti isomerism)
Chapter-2	C-16	Isomerism (Cyral carbon, Enantiomer, Diastereomer, Racemic mixture)
Organic	C-17	Technique of Organic Reaction- Division of bond (uniform and ununiform), Electrophile, Nucleophile, Carbocation, Carbanion.
Chemistry	C-18	Nucleophile substitution ( $S_N1$ and $S_N2$ ), Electrophilic elimination (E1 and E2)
(Partial)	C-19	Aliphatic hydrocarbon-Saturated hydrocarbon (Alkane and everything of alkane)
	C-20	Unsaturated hydrocarbon (Alkene and everything of alkene)
	C-21	Alkyl halide and everything about it.
	C-22	Everything about alcohol and ether.
	C-23	Aldehyde-Ketone and everything about them (part-01)
	C-24	Aldehyde-Ketone and everything about them (part-02)
	C-25	Carboxylic acid and everything about it.
	C-26	Amine and everything about it.

	C-27	Aromatic Hydrocarbon – Benzene and Its Discussion -6 Source of benzene, Characteristics and speciality of benzene, Aromaticity and
		Huckle law.
	C-28	Preparation and technique of benzene reaction, Homologous of benzene.
	C-29	Benzene derivative- Aryal and everything of it, Phenol and everything of it.
	C-30	Toluene and everything of it, Aromatic Nitro compound and everything of it.
	C-31	Aneline and everything of it, Benzene Diazonium Chloride and everything of it.
	C-32	Aromatic aldehyde-ketone and everything of it.
	C-33	Benzoic acid and everything of it.
	C-34	Polymer and Plasticity- Introduction, Classification, Different polymer compounds, Organic polymer.

	H.Math 2nd Paper (Reference Book: <b>UDVASH</b> Parallel Text)		
Chapter	Lecture	Syllabus	
	1114 01	Exercise - 3; Concept & Significance of i Brief Discussion on the Exponents of i, Real Axis & Imaginary Axis, Introduction to Complex	
	HM-01	Numbers.	
	HM-02	Exercise - 3; Geometric Representation of Complex Numbers in Argand's Diagram, Complex Numbers and Modulus And Argument of	
Chapter-03	1111-02	Complex Numbers, Polar Form of Com <mark>pl</mark> ex Nu <mark>mbers.</mark>	
Complex	HM-03	Exercise - 3; Algebraic Calculations of Complex Numbers, Addition and Subtraction of Complex Numbers, Geometric Representation of	
Numbers	HI-03	Multiplication and Division of Complex Numbe <mark>rs, Square</mark> Roots and Quadratic Roots of Complex Numbers.	
	HM-04	Exercise - 3; Cube Roots and Sixt <mark>h Roots</mark> of Com <mark>plex Num</mark> bers.	
	HM-05	Exercise - 3; De Moivre's Theorem, Mathematical Significance of $ z_1-z_2 $ .	
	HM-06	Exercise - 3; Geometrical Applications of Complex Numbers, Conditional Proofs and Value Determination.	
		Exercise - 4; Polynomial & Polynomial Equations, Zero Polynomials, Conditions for Polynomials Using Differentiation, Polynomial	
	HM-07	Equations and Roots of Eq <mark>ua</mark> tions <mark>, Identity and Eq</mark> uations, Some Theorems of Polynomials, Solution of Quadratic Equations by	
		Factorization.	
	HM-08	Exercise - 4; General Solu <mark>tions of Quadratic Equations, Disc</mark> riminant, Determining the Nature of Roots of a Quadratic Equation, Problems	
		on Roots of Quadratic Eq <mark>uations &amp; Na</mark> ture of Roots, Determining the Nature of Roots of a Quadratic Equation Using Graphs.	
	HM-09	Exercise - 4; Properties of Roots in Terms of Coefficients, Relation Between Roots & Coefficients of a Quadratic Equation.	
Chapter-04	HM-10	Exercise - 4; Polynomial Equations with Real Coefficients, Polynomial Equations with Rational Coefficients, Formation of Equations from	
Polynomial &		Roots.	
Polynomial	HM-11	Exercise - 4; Determining the x-intercept of a Polynomial Function, Maximum and Minimum Values of Quadratic Polynomial Functions,	
Equations		Finding Lines of Symmetry of Quadratic Functions, and Graphing Any Quadratic Function.	
	HM-12	Exercise - 4; Graph and Domain-Range of $y = f(x) = ax^n + b[n \text{ Even \& Odd}]$ , Common Roots, Relation Between Roots & Coefficients of	
		a Cubic Equation.	
	HM-13	Exercise - 4; Relation Between Roots & Coefficients of a Polynomial Equation & Formation of Quadratic Equations, Equations with	
		Symmetric Roots.	
	HM-14	Exercise - 4; Cubic Polynomial Functions and Their Types, Equations with Roots in Progression, Values of Symmetric Expressions of	
	05	Roots.	
	HM-25	Exercise – 7.1; Conditions for Existence of Inverse Trigonometric Functions & Graphs (Proofs of Formulae & Examples), Arc Functions.	
	HM-26	Exercise – 7.1; Principal Value of the Inverse Trigonometric Relations, Domain-Range of the Inverse Trigonometric Functions, Some	
Chapter-07	HM-27	Important Relations.  Exercise – 7.1; Transformation of Inverse Trigonometric Functions, Formulae of Inverse Trigonometric Functions.	
Inverse	ΠI*I-27	Exercise – 7.1; Problems on Determining the Values of Inverse Trigonometric Functions, Problems on Solutions & Proofs of Inverse	
Trigonometric Functions &	HM-28	Trigonometric Functions.	
Trigonometric	HM-29	Exercise – 7.2; General Solutions of Trigonometric Equations, Solution of Trigonometric Equations in a Given Range, Quadratic Problems.	
Equations	HM-30	Exercise – 7.2; Extraneous Roots, Problems Related to $a \sin \theta + b \cos \theta = c$ .	
	HM-31	Exercise – 7.2; Solution Using the Formula of $(x + y)$ , Problems Related to secant/cosecant.	
	HM-32	Exercise – 7.2; Solution from the Sum of Trigonometric Equations, Solution from the Product of Trigonometric Equations.	
	02		

Botany (Reference Book: <b>UDVASH</b> Parallel Text)		
Chapter	Lecture	Syllabus
	B-21	Meristem, classification of meristemic tissue, Difference between meristemic tissue and permanent tissue
Chapter- 08	B-22	Epidermal tissue system, stomate, Hydathode
	B-23	Ground tissue system, vascular tissue system

Tissue and Tissue system	B-24	Structure of root and stem of monocot plants, structure of stem of dicot plants
	B-25	Absorption of mineral salts, essential nutrients for plants, availability of mineral salts in soil, process of absorption of mineral salts by plants.
	B-26	Transpiration, Types of Transpiration, factors influencing Transpiration.
	B-27	Structure of stomata, explanation of necessary terms related to Transpiration, mechanism of opening and closing of stomata.
	B-28	Photosynthesis, photosynthetic organs and pigments, light absorption spectrum, photosystem, phases in photosynthesis, light dependent
Chapter- 09		phase, cyclic and acyclic photophosphorylation.
Plant	B-29	Light independent phase, Calvin Cycle, Hatch and Slack Cycle, Comparison between $C_3$ and $C_4$ Plants, Comparison between Calvin cycle &
Physiology		Hatch and Slack Cycle, Characteristics and Importance of C <sub>4</sub> Plants.
Triysiology	B-30	Source of oxygen released in photosynthesis process, factors affecting photosynthesis, limiting factor, rate of photosynthesis,
		importance of photosynthesis process in living world.
	B-31	Respiration, aerobic respiration, steps of aerobic respiration (glycolysis, oxidation of pyruvic acid, Krebs cycle, electron transport and
		oxidative phosphorylation).
	B-32	Anaerobic Respiration, use of anaerobic respiration in various industries, respiration rate/quotient, factors affecting respiration,
		importance of respiration.

	Zoology (Reference Book: <b>UDVASH</b> Parallel Text)			
Chapter	Lecture	Syllabus		
Chapter-07	Z-27	Skeletal system (classification, fu <mark>nction, elem</mark> ents, classi <mark>ficatio</mark> n), bones of the mature human skeleton.		
Human	Z-28	Axial skeleton		
Physiology:	Z-29	Appendicular Skeletor		
Locomotion	Z-30	Bone, Haversian system, ca <mark>rtila</mark> ge, type <mark>s of cartilage.</mark>		
and body	Z-31	Musclar tissue, types of mu <mark>scle, mu</mark> scles can pull but cannot pushed.		
movement	Z-32	The 'rods and levers' system, bone and muscle coordination in the knee joint, fractures and first aid, joint injuries and first aid.		

## 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-01713-236786Manikganj-01713-236745, Feni-01713-236762, Brahmanbaria- 01713-236743 Narsingdi-01713-236738, Cumilla-01713-236728, Chandpur-01713-236758 Sylhet-01713-236745, Feni-01713-236773, Moulvibazar-01713-236788 Sunamganj-01713-236779.