NATIONAL UNIVERSITY

First Year Syllabus
Department of Mathematics

Four Year B.Sc. Honours Course
Effective from the Session: 2013–2014

National University

Subject: Mathematics
Syllabus for Four Year B.Sc Honours Course
Effective from the Session: 2013-2014

Year wise Papers and marks distribution

FIRST YEAR

Paper Code	Paper Title	Marks	Credits
213701	Fundamentals of Mathematics	75	3
213703	Calculus – I	75	3
213705	Linear Algebra	75	3
213707	Analytic and Vector Geometry	75	3
	Any TWO of the following:		
212807	Chemistry-I	100	4
212808	Chemistry-I Practical	50	2
213607	Introduction to Statistics	100	4
213608	Statistics Practical-I	50	2
212707	Physics-I (Mechanics, Properties of Matter, Waves & Optics)	100	4
212709	Physics-II (Heat, Thermodynamics and Radiation)	50	2
211501	History of the Emergence of Independent Bangladesh	100	4
	Total =	700	28

Detailed Syllabus

Paper Code	213701	Marks: 75	Credits: 3	Class Hours: 45
Paper Title:	Fundamentals of Mathematics			

Elements of logic: Mathematical statements, Logical connectives, Conditional and bi-conditional statements, Truth tables and tautologies, Quantifiers, Logical implication and equivalence, Deductive reasoning.
Set Theory : Sets and subsets, Set operations, Cartesian product of two sets, Operations on family of sets, De Morgan's laws.
Relations and functions:. Relations. Order relation. Equivalence relations. Functions. Images and inverse images of sets. Injective, surjective, and bijective functions. Inverse functions. **Real Number System:** Field and order properties, Natural numbers, Integers and rational numbers, Absolute value and their properties, Basic inequalities. (Including inequalities of means, powers; inequalities of Cauchy, Chebyshev, Weierstrass).
Complex Number System: Field of Complex numbers, De Moivre's theorem and its applications. **Theory of Equations:** Relations between roots and coefficients, Symmetric functions of roots, Sum of the powers of roots, Synthetic' division, Des Cartes rule of signs, Multiplicity of roots, Transformation of equation.

Elementary number theory: Divisibility. Fundamental theorem of arithmetic. Congruences (basic properties only).
Summation of series: Summation of algebraic and trigonometric series.

Books Recommended :

Schaums Outline Series- *Theory and problems on set theory and related topics.* S. Bernard & J M Child- *Higher algebra.*
Md. Abdur Rahman - *Basic Algebra.*

Paper Code	213703	Marks: 75	Credits: 3	Class Hours: 45
Paper Title:	Calculus-I			

Functions & their graphs : Polynomial and rational functions, logarithmic and exponential functions, trigonometric functions & their inverses, hyperbolic functions & their inverses, combinations of such functions.
Limit and continuity: Definitions and basic theorems on limit and continuity. Limit at infinity & infinite limits, Computation of limits. Indeterminate form (L'Hospital'srule)
Differentiation: Tangent lines and rates of change. Definition of derivative. One-sided derivatives. Rules of differentiation (proofs and applications). Successive differentiation. Leibnitz's theorem (proof and application). Related rates. Linear approximations and differentials.
Applications of Differentiation: Mean value theorem. Maximum and minimum values of functions. Concavity and points of inflection. Optimization problems.
Integration: Antiderivatives and indefinite integrals. Techniques of integration. Definite integration using antiderivatives. Fundamental theorems of calculus (proofs and applications). Basic properties of integration. Integration by reduction.
Applications of Integration: Arc length. Plane areas. Surfaces of revolution. Volumes of solids of revolution. Volumes by cylindrical shells. Volumes by cross sections.
Graphing in polar coordinates: Tangents to polar curves. Arc length in polar coordinates. Areas in polar coordinates.
Improper integrals : Tests of convergence and their applications. Gamma and Beta functions.
Approximation and Series: Taylor polynomials and series. Convergence of series. Taylor's series. Taylor's theorem and remainders. Differentiation and integration of series. Validity of Taylor expansions and computations with series.

Books Recommended:

1. Howard Anton - *Calculus (7th and forward edition).*
2. E.W. Swokowski - *Calculus with Analytic Geometry.*
3. Md. A Matin & B Chakraboty - *Differential Calculus.*
4. B.C Das & BN Mukharjee – *Differential Calculus*
5. B.C Das & BN Mukharjee – *Integral Calculus*
6. Rahman and Bhattacharjee - *Differential Calculus*
7. Rahman and Bhattacharjee - *Integral Calculus*
8. Fazlur Rahman & Hafiqur Rahman – *Calculus*

Paper Code	213705	Marks: 75	Credits: 3	Class Hours: 45
Paper Title:	Linear Algebra			

Matrices and Determinants:,
Notion of matrix. Types of matrices. Algebra of matrices. Determinant function. Properties of determinants. Minors, Cofactors, expansion and evaluation of determinants. Elementary row and column operations and row-reduced echelon matrices. Invertible matrices. Different types of matrices, Rank of matrices.
Vectors in R_n and C_n: Review of geometric vectors in R_2 and R_3 spaces. Vectors in R_n and C_n. Inner product. Norm and distance in R_n and C_n.
System of Linear Equations: System of linear equations (homogeneous and non-homogeneous) and their solutions. Application of matrices and determinants for solving system of linear equations. Applications of system of equations in real life problems.
Vector Spaces: Notion of groups and fields. Vector spaces. Subspaces. Linear combination of vectors. Linear dependence of vectors. Basis and dimension of vector spaces. Row and column space of a matrix. Rank of matrices. Solution spaces of systems of linear equations.
Linear Transformation: Linear transformations. Kernel and image of a linear transformation and their properties. Matrix representation of linear transformations. Change of bases.
Eigenvalues and Eigenvectors: Eigenvalues and Eigenvectors. Diagonalization. Cayley-Hamilton theorem and its application.

Books Recommended :
1. Howard Anton & Chris Rorres – *Elementary Linear Algebra with Application.*
2. Seymour Lipschutz (Schaum's Outline Series)-*Linear Algebra.*
3. Md. Abdur Rahman- *Linear Algebra.*

Paper Code	213707	Marks: 75	Credits: 3	Class Hours: 45
Paper Title:	Analytic and Vector Geometry			

Two-dimensional Geometry: Transformation of coordinates, Pair of straight lines (homogeneous second degree equations, general second degree equations representing pair of straight lines, angle between pair of straight lines, bisectors of angle between pair of straight lines), General equations of second degree (reduction to standard forms, identifications, properties and tracing of conics).
Three-dimensional Geometry: Coordinates, Distance, Direction cosines and direction ratios, Planes (equation of plane, angle between two planes, distance of a point from a plane), Straight lines (equations of lines, relationship between planes and lines, shortest distance). Spheres. Conicoids (basic properties).
Vector Geometry: Vectors in plane and space. Algebra of vectors. Rectangular Components. Scalar and Vector products. Triple scalar product. Applications of vectors to geometry (vector equations of straight lines and planes, areas and volumes).

Books Recommended :
1. H.H. Askwith - *Analytic Geometry of Conic Section.*
2. J. A. Hummel- *Vector Geometry.*
3. S.K. Bhattacharjee – *mœvZK wØgvwÎK RvwgwZ*

Paper Code	212807	Marks: 100	Credits: 4	Class Hours:60
Paper Title:	Chemistry-I			

1. **Measurements and the Scientific Method:** Measurements, units, SI units, reliability of measurements – precision and accuracy, rounding off, significant figures, significant figures in calculation, mean and median, errors, sources of errors.
2. **Structure of atom:** Atom, isotopes, Atomic masses, Mass spectroscopy, Atomic nucleus, Nuclear binding energy, Nuclear reactions –fission and Fusion reactions, Bohr atom model, Spectrum of atomic hydrogen, Dual nature of electron, Heisenberg uncertainty principle, Quantum numbers, Atomic orbitals, Aufbau principle, Pauli exclusion principle, Hund's rule of maximum multiplicity, Electronic configuration of atoms.
3. **Periodic Table:** Periodic law, Periodic table, Electronic configurations from the periodic table, Periodic properties of the elements such as ionization energies, Electron affinity, Electro negativity, Atomic/ionic radius along a period and down a group, Diagonal relationship
4. **Chemical Bonds:** Chemical bond, Types of chemical bonds – ionic, Covalent coordination, Metallic, Hydrogen, Polar and no polar covalent bonds, Lewis dot structure, Shapes of molecules, VSEPR theory, Valence bond theory, Hybridization, ó- and ð-bonding in compounds, Molecular orbital theory.
5. **Oxidation and reduction:** Redox reactions, Writing and balancing Redox reactions,
6. **States of Matter:** Comparison between solids, Liquids and gases, Changes of state, m.p. and b.p, phase transition, Phase diagram of water.
7. **Gaseous and Their Properties:** The gas laws , The perfect gas equation, The kietic theory of gases, Van der waals equations, Real gases, Graham's laws of diffusion and Effusion.
8. **Solutions:** Solubility and intermolecular forces, Solubility product, Types of concentration units, Colligative properties of solutions, Henry's law, Nernst distribution law.
9. **Acids and Bases:** Various concepts on acids and bases, Conjugate acids and bases, Neutralization reactions acid- base strength, p_H, Acid-base titrations, Acid-base indicatiors, Acid-base properties of salts, The common ion effect, Buffer solutions, Hard and soft acids and bases.
10. **Chemical Equilibrium:** Reversible reactions and the equilibrium state, The equilibrium law, Reaction quotients and equilibrium constants, Calculations using K_c, K_p, Homogeneous and heterogeneous equilibria, The principle of Le Chatelier and Brown.
11. **Hydrocarbons:** Hydrocarbons, Saturated and unsaturated hydrocarbons, Alkanes, Alkenes, And Alkynes, Nomenclature of organic compounds-the IUPAC system natural gas, Petroleum, Petrochemicals.
12. **Study of different classes of organic Compounds:** Alcohols, Aldehydes, Ketones, Carboxylic Acids, Esters, Amines and Amides.

Books recommended:
1. General Chemistry, D. D. Ebbing, Houghton Miffin Co.
2. Chemistry – The Molecular Nature of Matter and Change, M. Siberberg. WCB /Mc Graw- Hill.
3. Introduction to Modern Inogranic Chemistry, S.Z. haider, Friends' International.
4. Principles of physical chemistry, M. M. Huque and M. A Nawab, students' publications.
5. Essentials of Physical chemistry, B.S Bahl, G.D Tuli and A Bahl, S. Chand & Co.Ltd.
6. Advanced Organic Chemistry, B.S. Bahl and A Bahl, S. Chand & Co. Ltd.
7. A Level chemistry by C.W. Ramsden
8. Organic Chemistry: T Morrison and R.N Boyed,
9. Fundamental of Organic Chemistry by W Solomons

Paper Code	212808	Marks: 50	Credits: 2	Class Hours: 30
Paper Title:	Chemistry-I Practical			

1. Preparation of $FeSO_4$ $7H_2O$, Mohr's salt and potash alum.
2. Separation and identification of four radicals from a mixture of anions and cations
   The cations are pb^{2+}, cu^{2+}, Cd^{2+} , Al^{3+} , Fe^{2+} , Fe^{3+}, Co^{2+}, Ni^{2+}, Zn^{2+} Ca^{2+}, Ba^{2+}, Na_+, K_+ , and NH_{4+}, the anions are NO_3, CO_{32-}, S^{2-}, SO_4^{2-}, Cl , Br and I_+

3.   Standardization of NaOH solution using standard oxalic acid solution,
4.   Determination of Fe^{2+} using standard permanganate solution 5.
     Iodometric determination of copper(II) using standard Na_2SO3 solution.
6. Gravimetric determination of nickel as $Ni(HDMG)_2$ complex 7.
     Determination of the enthalpy change for the decomposition sodium dicarbonate into
     sodium carbonate.
8.   Determination of the p_H- neutralization curves of a strong acid by a strong base.
9.   Investigation of the conductance behaviour of electrolytic solution and applications (acetic acid)
10. Determination of the presence of nitrogen, halogen and sulphur in organic compounds.
11. Identification of the functional groups (unsaturation, alcohol, phenol, carbonyl, aldehlyde, ketone,
     carboxylic acid, aromatic amine, amide and nitro- groups) in organic compound.

Books Recommended:

1.   A Text Book of Quantitative Inorganic Analysis, A.I. Vogel, 3rd/4th
     edition, ELBS and Longman Green & Co. Ltd.
2.   A Text Book of Quantitative Inorganic Analysis, A.I. Vogel 3rd /4th
     edition, ELBS and Longman Green & Co. Ltd.
3.   Practical physical chemistry, A Faraday.
4.   A Text Book of practical organic chemistry, A.I. vogel, ELBS edition.

Paper Code	213607	Marks: 100	Credits: 4	Class Hours: 60
Paper Title:	Introduction to Statistics			

1. **Descriptive Statistics:** Statistics-Its nature and some important use, Qualitative and quantitative data, Classification, Tabulation and frequency distribution, Graphical representation of data, Measure of location, Measures of Dispersion, Skewness and Kurtosis, Mathmatical relationtionship among different measures of location, dispersion, Skewness and kurtosis.

2. **Bivariate Data:** Correlation coefficient, Correlation analysis, The purpose and uses of regression analysis, Simple regression and methods of least squares and estimation of parameters Correlation ratio, Rank correlation, Partial and multiple correlation.

3. **Elementary Probability:** Meaning of probability, Classical and empirical definitions of Probability, Axiomatic approch of defining probability, Event, Sample space and simple problems of probability, Addition rule, Conditional probability, Multiplication rule and Bayes theorems, The concept of a random variables, Probability function and probability density   function, Joint probability function. Marginal and conditional distributions, Statistical   independence, Expected value and related theorems, Moment generating function, Common   probability distributions, Binomial, Poisson and Normal.

4. **Index Number:** Concept of an index number and problems in the construction of index number, Types of indices (Price, Quantity, Value and cost of living indices) and their uses, Tests for index numbers.

5. **Time Series anlysis:** Elements of time-series analysis, Measurement of trend by moving average, By least square method, Trend curve, Determination of seasonal indices, Cylical.

6. **Numerical Mathematics:** Differences of a polynomial, Finite difference operator, Difference table, Newton's formula and starling's central difference formula, Inverse interpolation, Numerical integration.

Books Recommended:

1. Yule and Kendall   : Introduction to Theory of Statistics.
2. Islam, M. Nurul.   : An Introduction to Statistics and Probability.
3. Jalil A. and Ferdous R.   : Basic Statistics.

4. Mostafa M.G. : Methods of Statistics.
5. David E.N. : Probability Theory for Statistical Methods.
6. Weatherburn C.F. : A First Paper in Mathematical statistics.
7. Mosteller, Roure and Thomas : Probability with Statistical Applications.
8. Ali A. : Theory of Statistics Vol. I
9. Mallick, S.A. : মৌলিক পরিসংখ্যান
10. Freeman H. : Acturial, Mathematics Vols; I and II
11. Scarborough : Numerical Mathematics.
12. David F.N. : Probability theory for Statistical Methods.
13. Shil R.N. : Introduction to Theory of Statistics.
14. Feller, W : Introduction to Statistical Time Series (latest ed.).
15. Gupta and Kapoor : Applied Statistics.

Paper Code	213608	Marks: 100	Credits: 2	Class Hours: 30
Paper Title:	Statistics Practical-I			

Condensation and tabulation of data, Graphical representation of data, Frequency table, Measures of location, Dispersion, Moments, Skewness and Kurtosis, measures of correlation coefficient, Rank correlation, Fitting of simple regression lines, Fitting of Binomial, Normal and Poisson's distributions, Finding trend values and seasonal variation from time series data by different methods, Calculation of Index numbers and test of index number, Use of Newton's forward and backward formula, Solution of numerical integration.

Paper Code	212707	Marks: 100	Credits: 4	Class Hours: 60
Paper Title:	Physics-I (Mechanics, Properties of Matter, Waves & Optics)			

1. **Vector Analysis:** Vectors and scalars, Addition and multiplication of vectors, Triple scalar & vector products, Derivatives of vectors, Gradient, divergence and curl-their physical significance, Theorems of Gauss, Green & Stoke's.
2. **Work, Energy and Power:** Work energy theorem, Conservation of energy and linear momentum, Conservative and non-conservative forces and systems, Conservation of energy and momentum, Centre of mass, Collision problems.
3. **Rotational Motions:** Rotational variables, Rotation with constant angular acceleration, Relation between linear and angular kinematics, Torque on a particle, Angular momentum of a particle, kinetic energy of rotation and moment of intertia. Combined translational and rotational motion of a rigid body, Conservation of angular momentum.
4. **Gravitation:** Centre of gravity of extended bodies, Gravitational field and potential their calculations, Determination of gravitation constant and gravity, Compound and kater's pendulums, Motion of planets and satellites, Escape velocity.

6. **Surface Tension:** Surface tension as a molecular phenomenon, Surface tension and surface energy, Capillary rise or fall of liquids, Pressure on a curved membrane due to surface tension, Determination of surface tension of water, mercury and soap solution, Effect of temperature.
7. **Fluid Dynamics:** Viscosity and coefficient of viscosity, Poiseulle's equation, Determination of the coefficient of viscosity of liquid by Stoke's method, Bernoulli's theorem and its applications, Toricelli 's theorem, Venturimeter.
8. **Waves:** Mechanical waves, types of waves, travelling waves. The superposition principle. Wave speed, Power and intensity in wave motion. Interference of waves, Standing Waves and resonance.
9. **Oscillatory Motions:** Simple harmonic motion, Combination of harmonic motions, Damped harmonic motion, Forced oscillations and resonance.
10. **Geometrical Optics:** Fermat's Principles, Theory of equivalent lenses, Defect of images, Optical instrument, Dispersion rainbow.
11. **Nature and Propagation of light:** Properties of light, Wave theory and Huygene's Principle, Theories of light.
12. **Interference:** Young's experiment: Bi-prism, Newton's ring.
13. **Diffraction:** Fresnels and Fraunhofer types, Diffraction through single slit and double slit, diffraction

grating, Dispersive and resolving powers of gratings.
14. **Polarization:** Plane, Elliptical and circular Polarizations, Optical, Rotatory dispersion, Polarimeters.

Books Recommended:

1.	Spiegel, M.R.	:	Vector Analysis
2.	R.S. Halliday, R. Resnick, and J.Walker	:	Fundamentals of Physics
3.	Halliday, D and Resnick, R.	:	Physics
4.	Sears, F.W., Zimansky, M.W. and Young, H.D.	:	University Physics
5.	Mathur, D.S.	:	Properties of Matter
6.	Newman, F.W. and Serale, V.H.L	:	General Properties of Matter.
7.	A text Book of Light	:	Choudhury, Saha & Pramanik
8.	Fundamantals of Optics	:	F.A. Jenking & H.E. White
9.	A Text Book of Light	:	K.G. Mazumder
10.	Principles of Optics	:	B.K. Mathur

Paper Code	212709	Marks: 50	Credits: 2	Class Hours: 30
Paper Title:	**Physics-II (Heat, Thermodynamics and Radiation)**			

1. **Thermometry:** Temperature, Concepts of thermal equilibrium, measurement of low and high temperature: Gas thermometers, Resistance thermometer, Thermocouple, Pyrometry, International temperature scale.
2. **Calorimetry:** Specific heats of solids, liquids and gases by method of mixture with radiation corrections: Newton's Law of cooling, Variations of specific heats, Atomic and molecular heats.
3. **Transmission of Heat:** Thermal conductivity, Determination of thermal conductivities of good and bad conductors.
4. **Thermodynamic Systems:** Concept of internal energy: The first law of thermodynamics, Work and specific heats, Isothermal and adiabatic processes.
5. **The second law of thermodynamics:** Reversible and irreversible processes: Carnot cycle, Efficiency of reversible engines, Absolute thermodynamic temperature scale, Change of phase: Clausius and Clapeyron equation, Porous plug experiment.
6. **Entropy:** Entropy of an ideal gas, Temperature-entropy diagram, Increase of entropy.
7. **Thermodynamic Functions:** The Maxwell's relations, Specific heat equations.
8. **Radiation:** Concept of black body radiation, Kirchhoff's law, Stefan–Boltzmann law, Wien's dis-

Books Recommended:

1. R.S. Halliday, R. Resnick, and J.Walker : Fundamentals of Physics
2. Halliday, D and Resnick, R. : Physics
3. A Text Book of Heat : T. Hossain
4. Principles of Heat, Thermodynamics : M.A. Haque
   and Radiation
5. Text Book of Heat, Thermodynamics : M. Ishaque & A.M.Z. Islam
   and Radiation
6. Taxt Book of Heat , Thermodynamics : Z.I. Bhuiyan & S. Rahman
   and Radation
7. Heat and Theromodynamics : N. Uddin & A Kalam
8. Tap O Tapagati Bijnan : M.A. Jabbar
9. Heat & Thermodynamics : M.W. Zemansky

Paper Code	211501	Marks: 100	Credits: 4	Class Hours: 60
Paper Title:	History of the Emergence of Independent Bangladesh			

¯^vaxb evsjv‡`‡ki Afy¨`‡qi BwZnvm

f~wgKv: ¯^vaxb evsjv‡`‡ki Afy¨`‡qi BwZnvm-cwiwa I cwiwPwZ

1| ‡`k I Rb‡Mvwôi cwiPq
   K) f~ cÖK…wZi ˆewkó¨ I cÖfve
   L) b„ZvwË¡K MVb
   M) fvlv
   N) ms¯‹…wZi mgš^qevw`Zv I ag©xq mnbkxjZv
   O) Awfbœ evsjvi cwi‡cÖw¶‡Z ZrKvjxb c~e©e½ I eZ©gvb evsjv‡`‡ki ¯^Kxq mËv

2| ALÛ ¯^vaxb evsjv ivó² MV‡bi cÖqvm I Dcgnv‡`‡ki wefw³, 1947
   K) Jcwb‡ewkK kvmb Avg‡j mv¤cÖ`vwqKZvi D™¢e I we¯—vi
   L) jv‡nvi cÖ¯—ve, 1940
   M) ALÛ ¯^vaxb evsjv ivó² MV‡bi D‡`¨vM, 1947 I cwiYwZ
   N) cvwK¯—vb m„wó, 1947

3| cvwK¯—vb: ivó²xq KvVv‡gv I ˆelg¨
   K) †K›`ªxq I cÖv‡`wkK KvVv‡gv
   L) mvgwiK I †emvgwiK AvgjvZ‡š¿i cÖfve
   M) A_©‰bwZK, mvgvwRK I mvs¯‹…wZK ˆelg¨

4| fvlv Av‡›`vjb I evOvwji AvZ¥cwiPq cÖwZôv
   K) gymwjg jx‡Mi kvmb I MYZvwš¿K ivRbxwZi msMÖvg
   L) AvIqvgx jx‡Mi cÖwZôv, 1949
   M) fvlv Av‡›`vjb: cÖUf~wg I NUbv cÖevn
   N) nK-fvmvbx-†mvnivIqv`©xi hy³d«›U, 1954 mv‡ji wbe©vPb I cwiYwZ

5| mvgwiK kvmb: AvBqye Lvb I Bqvwnqv Lv‡bi kvmbvgj (1958-71)

K) mvgwiK kvm‡bi msÁv I ˆewkó¨

L) AvBqye Lv‡bi ¶gZv `Lj I kvm‡bi ˆewkó¨ (ivR‰bwZK wbcxob, †gŠwjK MYZš¿, a‡g©i
  ivR‰bwZK e¨envi)

M) AvBqye Lv‡bi cZb I Bqvwnqv Lv‡bi kvmb, GK BDwbU wejywßKiY, mve©Rbxb †fvUvwaKvi,   GjGdI (Legal Framework Order)

6| RvZxqZvev‡`i weKvk I ¯^vwaKvi Av‡›`vjb

K) mvs¯‹…wZK AvMÖvm‡bi wei“‡× cÖwZ‡iva I evOvwj ms¯‹…wZi
  D¾xeb

L) †kL gywReyi ingv‡bi 6-`dv Av‡›`vjb

M) 6-`dv Av‡›`vj‡bi cÖwZwµqv, ¸i“Z¡ I Zvrch©

N) AvMiZjv gvgjv, 1968

7| 1969-Gi MYAf¨Ìvb I 11-`dv Av‡›`vjb

K) cUf~wg

 L) Av‡›`vj‡bi Kg©m~Px, ¸i“Z¡ I cwiYwZ

8| 1970 Gi wbe©vPb, Amn‡hvM Av‡›`vjb I e½eÜzi ¯^vaxbZv †NvlYv

K) wbe©vP‡bi djvdj Ges Zv †g‡b wb‡Z †K‡›``ªi A¯^xK…wZ

L) Amn‡hvM Av‡›`vjb, e½eÜzi 7B gv‡P©i fvlY, Acv‡ikb mvP©jvBU

M) e½eÜzi ¯^vaxbZv †NvlYv I †MÖdZvi

9| gyw³hy× 1971

K) MYnZ¨v, bvix wbh©vZb, kiYv_©x

L) evsjv‡``k miKvi MVb I ¯^vaxbZvi †NvlYvcÎ

M)   ¯^Z:ù‚Z© cÖv_wgK cÖwZ‡iva I msMªwVZ cÖwZ‡iva (gyw³‡dŠR, gyw³evwnbx, †Mwijv I m¤§yL hy×)

N) gyw³hy‡× cÖPvi gva¨g (¯^vaxb evsjv †eZvi †K›`ª, we‡`kx cÖPvi gva¨g I RbgZ MVb)

O) QvÎ, bvix I mvaviY gvby‡li Ae`vb (MYhy×)

P) gyw³hy‡× e„nrkw³ I gymwjg iv‡ªi mg~¤ni f~wgKv

Q) `Lj`vi evwnbx, kvwš—KwgwU, Avje`i, Avjkvgm, ivRvKvi evwnbx, ivR ‰bwZK `j I †`kxq

  Ae¨vb¨ mn‡hvMx‡`i ¯^vaxbZvwe‡ivax Kg©KvÛ I eyw×Rxex nZ¨v

R) cvwK¯—v‡bi ew›` Ae¯’vq e½eÜzi wePvi I wek¦cÖwZwµqv

S) cÖevmx evOvwj I we‡k¦i wewfbœ †`‡ki bvMwiK mgv‡Ri f~wgKv

 T) gyw³hy‡× fvi‡Zi Ae`vb

 U) †hŠ_ evwnbx MVb I weRq

 V) ¯^vaxbZv msMÖv‡g e½eÜz †bZ…Z¡ Ges Ae`vb

10| e½eÜz †kL gywReyi ingv‡bi kvmbKvj, 1972-1975

K) ¯^‡``k cÖZ¨veZ©b

L) msweavb cÖYqb

M) hy× weaŸ¯— †`k cybM©Vb

N) mcwiev‡i e½eÜz nZ¨v I Av`wk©K cÂcweZ©b

History of the Emergence of Independent Bangladesh

Introduction: Scope and description of the emergence of Independent Bangladesh.

1. Description of the country and its people.
a. Geographical features and their influence.
b. Ethnic composition.
c. Language.
d. Cultural syncretism and religious tolerance.
e. Distinctive identity of Bangladesh in the context of undivided Bangladesh.

2. Proposal for undivided sovereign Bengal and the partition of the Sub Continent, 1947.
a. Rise of communalism under the colonial rule,
b. Lahore Resolution 1940.
c. The proposal of Suhrawardi and Sarat Bose for undivided Bengal : consequences
d. The creation of Pakistan 1947.

3. Pakistan: Structure of the state and disparity.
a. Central and provincial structure.
b. Influence of   Military and Civil bureaucracy.
C.   Economic, social and cultural disparity

4. Language Movement and quest for Bengali identity
a. Misrule by Muslim League and Struggle for democratic politics.
b. Foundation of Awami league, 1949
c. The Language Movement: context and phases.
d. United front of Haque – Vasani – Suhrawardi: election of 1954, consequences.

5. Military rule: the regimes of Ayub Khan and Yahia Khan (1958-1971)
a. Definition of military rules and its characteristics.
b. Ayub Khan's rise to power and characteristics of his rule (Political repression,   Basic   democracy, Islamisation)
c. Fall of Ayub Khan and Yahia Khan's rule (Abolition of one unit, universal suffrage,   the Legal   Framework Order)

6. Rise of nationalism and the Movement for self determination.
a. Resistance   against cultura l aggression   and resurgence   of Bengali culture.
b. The six point movement of Sheikh Mujibur Rahman
c. Reactions; Importance and significance of the six Point movement.
d. The Agortola Case1968.

7. The mass-upsurge of 1969 and 11 point movement:
a. background
b. programme significance and consequences.

8. Election of 1970 Non-cooperation movement of March 1971 and the Declaration of Independence by Bangobondhu

a. Election result and centres refusal to comply

b. The non co-operation movement, the 7th March Address of Bangobondhu, Operation Searchlight

c. Declaration of Independence by Bangobondhu and his arrest

9. The war of Liberation 1971

a. Genocide, repression of women, refugees

b. Formation of Bangladesh government and proclamation of Independence

c. The spontaneous early resistance and subsequent organized resistance (Mukti
   Fouz, Mukti Bahini, guerillas and the frontal warfare)

d. Publicity Campaign in the war of Liberation (Shadhin Bangla Betar Kendra, the
   Campaigns abroad and formation of public opinion)

e. Contribution of students, women and the masses (Peoples war)

f. The role of super powers and the Muslim states in the Liberation war.

g. The Anti-liberation activities of the occupation army, the Peace Committee,
Al- Badar, Al-Shams, Rajakars, pro Pakistan political parties and Pakistani
   Collaborators, killing of the intellectuals.

h. Trial of Bangabondhu and reaction of the World Community.

i. The contribution of India in the Liberation War

j. Formation of joint command and the Victory

k. The overall contribution of Bangabondhu and his leadership in the
   Independence struggle.

10. The Bangabondhu Regime 1972-1975

a. Homecoming

b. Making of the constitution

c. Reconstruction of the war ravaged country

d. The murder of Bangabondhu and his family and the ideological turn-around.

mnvqK MÖš'

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