

# GOVT. LOHIA COLLEGE ,CHURU

DEPARTMENT OF CHEMISTRY

NAME –RAMESH KUMAR

SESSION-2017-18

PAPER-I

CLASS-M.Sc. (PREVIOUS)

SUBJECT- CHEMISTRY

S.N.	MONTH	TEACHING PLAN
1.	JULY	VSEPR , Walsh diagrams (Tri and penta- atomic molecules), dp-pp bonds, Bent rule and energetic of hybridization, some simple reactions of covalently bonded molecules.
2.	AUGUST	Stepwise and overall formation constants and their interaction, trends in stepwise constant, factors affecting the stability of metal complexes with reference to the nature of metal ion and ligand.
3.	SEPTEMBER	Chelate effect and its thermodynamic origin, determination of binary formation constants by pH-metry and spectrophotometry.
4.	OCTOBER	Limitation of Crystal field theory, molecular orbital theory, octahedral, tetrahedral and square planar complexes, bonding and molecular orbital theory.
5.	NOVEMBER	Symmetry elements and symmetry operation, definition of group sub group, relation between orders of a finite group and subgroup conjugacy relation and classes.
6.	DECEMBER	Point symmetry group Schonfiles symbols representation of groups by matrices. Character of a representation. The great orthogonality theorem and its importance Charater tables and their use.
7.	JANUARY	Electronic spectra and magnetic properties of transition metal complexes spectroscopic ground states, correlation, Orgel and Tanabe-sugano diagram for transition metal complexes ( $d^1$ - $d^9$ - states) calculations of $Dq$ , $B$ and $b$ parameters.
8.	FEBRUARY	Charge transfer spectra spectroscopic method of assignment of absolute configuration in optically active metal chelates and their chemical information. magnetic moments magnetic exchange coupling and spin crossover.
9.	MARCH	REVISION

RAMESH KUMAR

Assistant Professor  
Department of Chemistry

# LOHIA COLLEGE, CHURU

## DEPARTMENT OF HISTORY

### TEACHING PLAN - SESSION – 2017-18

TEACHER – K S KOTHARI

CLASS - BA PART 1

PAPER – I – HISTORY OF INDIA (FROM EARLIEST TIMES TO 1206 AD)

MONTH	UNIT	TOPIC
JULY – 2017	I	<p>Introduction.</p> <ol style="list-style-type: none"> <li>1. Impact of Geography on Indian History and Culture.</li> <li>2. Main sources of Ancient Indian History.</li> </ol>
AUG – 2017	I	<ol style="list-style-type: none"> <li>3. Features of Indus Civilization; Society, Polity, Economy, Culture and religion as reflected in Vedic literature.</li> <li>4. The rise of Janpadas and Republics.</li> </ol>
SEP – 2017	II	<ol style="list-style-type: none"> <li>1. Rise of Magadha upto the Nandas.</li> <li>2. Magadha Imperialism and role of Chandragupta Maurya.</li> <li>3. Chakravarti Ashoka - His Policies and Dhamma.</li> <li>4. Mauryan Administration, Cultural Achievements of Mauryan period.</li> <li>5. Factors leading to disintegration of the Mauryan Empire</li> </ol>
OCT – 2017	III	<ol style="list-style-type: none"> <li>1. Age of the Saka-Satvahans and Kushans.</li> <li>2. Saka-Satvahan Struggle.</li> <li>3. Satavahans and Foreign Powers.</li> </ol>
NOV – 2017	III	<ol style="list-style-type: none"> <li>4. Contribution and Achievements of               <ol style="list-style-type: none"> <li>(i) Pushyamitra Sunga</li> <li>(ii) Gautamiputra Shatkarni</li> <li>(iii) Rudradaman I</li> <li>(iv) Kanishka I</li> </ol> </li> <li>5. Economic Progress in the Pre-Gupta period with special reference to trade and commerce.</li> </ol>
DEC – 2017	IV	<ol style="list-style-type: none"> <li>1. Early history of the Gupta Dynasty upto Chandragupta-I</li> <li>2. Samudragupta.</li> <li>3. Chandragupta-II.</li> <li>4. Skandgupta.</li> </ol>
JAN – 2018	IV	<ol style="list-style-type: none"> <li>5. Invasion of Huns.</li> <li>6. Features of Gupta administration.</li> <li>7. Cultural Revivalism in Gupta period</li> <li>8. Emergence of Scientific view of the world.</li> </ol>
FEB – 2018	V	<ol style="list-style-type: none"> <li>1. India in the Post-Gupta period.</li> <li>2. Formation and Expansion of Vardhana Empire -Harsh</li> <li>3. Features of Chola and Charlukya administration</li> <li>4. Achievements of               <ol style="list-style-type: none"> <li>(i) Vigraharaja Chahamana</li> <li>(ii) Kumarapal Charlukya and</li> <li>(iii) Bhojaj Pramara</li> </ol> </li> <li>5. Tripartite Struggle</li> <li>6. Pallavas.</li> <li>7. Sangam Age- Literature, Society and Culture</li> <li>8. Factors leading to disintegration of Rajput states</li> </ol>
MAR – 2018	V	<p>Revision</p>

# Govt Lohia College, Churu

## Department of ABST

### Detailed teaching plan

Session- 2018-19

Class- MCom (F) ABST

### Paper- I : TAXATION-INCOME TAX LAW & ACCOUNTS

Name of Teacher – Prof. Suresh Kumar

Month	Topic to be taught
July	Introduction and definitions, Residential Status and incidence of tax
August	computation of taxable income under the head salary.
September	Computation of taxable income under the heads : income from house property, income from business or profession
October	Computation of income from capital gains, Income from other sources Aggregation and clubbing of income, set off and carry forward of losses, Exempted incomes.
November	Deductions from Gross Total income, Computation of total income and tax liability of individuals
December	Computation of total income and tax liability of Hindu Undivided family
January	Computation of total income and tax liability of partnership firms assessed as such and assessed as Association of Persons
February	Provisions regarding deduction of tax at source and Advance payment of tax. Assessment procedure
March	Discussing and solving previous years papers

  
(Prof. Suresh Kumar)



GOVT LOHIYA COLLEGE

Churu

Teaching Plan For  
B.Sc. III - Paper II<sup>nd</sup>.  
Chemistry

Session.

2019 - 2020

Months

July:

Spectroscopy (N.M.R.)

Aug:-

Structure elucidation  
by UV, IR and NMR.

} Unit I

~~Aug~~

Organometallic compounds

Sep:-

Fats, oils and Detergents.

} Unit II

Oct:

Organic Synthesis via Enolates

Amino Acids, Peptides, Proteins

} Unit III

Nov:

Nucleic Acids

Dec:-

Carbohydrates

} Unit IV

Jan:-

Synthetic Polymers

Feb:

Synthetic Dyes

} Unit V

Prepared  
From: Dr Renu Agarwal  
Associate Professor  
Chemistry -

GOVT LOHIA COLLEGE, CHURU  
DEPARTMENT OF MATHEMATICS

TEACHING PLAN FOR THE SESSION 2019-20

Date 01/07/2019

FACULTY MEMBER: Dr. Punishottam Jha, Assistant Professor

B. Sc. Part I B

SUBJECT: MATHEMATICS PAPER I (ALGEBRA)

R. No 140 TIME 11:00 AM - 12:00 NOON

MONTH	UNIT	TOPIC to be taught
JULY	I	Relation between roots and coefficients of general polynomial equation in one variable, transformation of equations, Descartes's rule of signs
AUGUST	I II	Solution of Cubic equations (Cardan Method) Biquadratic Equations (Ferrari Method) Symmetric, Skew symmetric, Hermitian and skew Hermitian matrices
SEPTEMBER	II	Linear Independence of row and column matrices. Row rank, Column rank, Rank of a matrix by Echelon form, the characteristic equation of a matrix and eigenvectors. Cayley Hamilton theorem and its use in finding inverse of a matrix. Applications of matrices to a system of linear (both homogeneous and non-homogeneous) equations. Theorems of consistency of a system of linear equations.
OCTOBER	III	Definitions and examples of groups, general properties of groups subgroups
NOVEMBER	III	Cyclic groups, Cosets, decomposition, Lagrange's theorem and its consequences, Fermat's and Euler's theorems.
DECEMBER	IV	Homomorphism and isomorphism of groups, Normal subgroups, quotient groups.
JANUARY	IV V	The fundamental theorem of homomorphism. Kernel of homomorphism and its properties. Permutations groups, even, odd and cyclic permutations, transposition and alternating group $A_n$
FEBRUARY	V	Conjugacy and simple groups. Cayley's theorem. Order of an element.
MARCH	I-V	REVISION & TESTS
APRIL		ANNUAL EXAMINATION
MAY		SUMMER VACATION
JUNE		SUMMER VACATION

LOHIA COLLEGE, CHURU

DEPARTMENT OF HISTORY  
TEACHING PLAN - SESSION - 2020-21

TEACHER - DR. S. D. SONI

CLASS - BA PART 2

PAPER - I - History of Medieval India (1206-1740 AD)

MONTH	UNIT	TOPIC
JULY - 2020	I	<i>Introduction.</i> <i>1. Main Sources of Medieval Indian History.</i> <i>2. Establishment of Turkish rule in India - Qutbuddin Aibak, Iltutmish, Razia and Balban</i>
AUG - 2020	I	<i>1. Khalji imperialism - Expansion in Rajputana and Deccan.</i> <i>2. Khaljis - Administrative and economic regulations and their impact on the state and people.</i>
SEP - 2020	II	<i>1. Innovations under Muhammad Tughlaq.</i> <i>2. Religious policy and public works of Firuz Tughlaq, Timur's invasion.</i> <i>3. Sikandar Lodi.</i> <i>4. Formation of Vijaynagar Empire and Bahamani Kingdom and causes of their decline.</i> <i>5. Social and Economic condition and administrative system during Sultanate Period.</i>
OCT - 2020	III	<i>1. Political Condition of India on the eve of Babur's invasion, his role in the establishment of the Mughal Empire.</i> <i>2. Humayun - Early difficulties and causes of his failure.</i>
NOV - 2020	III	<i>1. Shershah - Expansion of his empire and administration.</i> <i>2. Political unification, Expansion and consolidation of the Mughal Empire under Akbar.</i>
DEC - 2020	IV	<i>1. Jahangir, Nurjahan's role in the Mughal Court.</i> <i>2. Shahjahan's achievements.</i> <i>3. Aurangzeb's Policy towards Rajputs and Deccan.</i>
JAN - 2021	IV	<i>1. Religious policy of the Mughal Emperors.</i> <i>2. Shivaji - His conquests and Administration.</i> <i>3. Causes of downfall of the Mughal Empire.</i>
FEB - 2021	V	<i>1. Nature of Mughal State; Agrarian system</i> <i>2. Mansabdari system.</i> <i>3. Foreign Trade and Commerce</i> <i>4. Social classes - Ulema, nobility, zamindars, peasantry, artisans, agricultural labourer and slaves, status of women</i>
MAR - 2021	V	<i>Revision</i>

श्रीमती संतोष खन्नाई  
राष्ट्र-आचार्य-हिन्दी

राजकीय लोहिया महाविद्यालय पूरन मज-2020-21

विषय - हिन्दी  
शिक्षण-कार्य-योजना

क्रम सं.	अज्ञा	पुनर्हि	अगस्त	सितम्बर	अक्टूबर	नवम्बर	दिसम्बर	जनवरी	फरवरी
1-	बी०ए० भाग-1	नीलकण्ठ दोला-भाऊ विद्यापति	मुल्कर कबीर लामसी आडिकाल	पुलसी पूर, मीरा काव्य-भाऊ	होम रत्नका सहजोबाई भास्ति- काल	कहानी का उद्भव व विकास एवं तत्त्व	कहानी लंगूर आप्याप्य	उप-भास के तत्त्व को विकास	शूल चौधों या आप्याप्य एवं प्रश्नोत्तर
2-	बी०ए० भाग-2	केशव विद्यारी देव	पद्माकर लेनापति भूषण	धनानंद गिरिधर रत्नका	रीतिकाल काव्य- शास्त्र	नाटक का उद्भव व विकास एवं नाटक के तत्त्व	दलितनाट्य की आप्याप्य अंधेरे नगरी आप्याप्य	एकांकी के तत्त्व व विकास नएकों के प्रश्नोत्तर	एकांकी को आप्याप्य व प्रश्नोत्तर
3-	एम०ए० पूर्वार्ध प्रश्नोत्तर मध्य-परीक्षा काव्य	विराट-मोक्ष आप्याप्य प्रश्नोत्तर	विराट-मोक्ष आप्याप्य प्रश्नोत्तर	सूर-सौंदर्य 50 फुट आप्याप्य प्रश्नोत्तर	जीरा-नदाल 50 फुट आप्याप्य प्रश्नोत्तर	विद्यारी रत्नका आप्याप्य प्रश्नोत्तर	विद्यारी- रत्नका आप्याप्य प्रश्नोत्तर	धनानंद काव्य- आप्याप्य प्रश्नोत्तर	धनानंद काव्य- आप्याप्य प्रश्नोत्तर
4-	एम०ए० उत्तरार्ध प्रश्नोत्तर गद्य-भाषा व्य	गोदान उप-भास का उद्भव व विकास शिक्षण की साधकता	गोदान की आप्याप्य प्रश्नोत्तर	हंकेदगुप्त नाटक का उद्भव व विकास आप्याप्य	कथा-तर आप्याप्य प्रश्नोत्तर	कथा-तर आप्याप्य एवं प्रश्नोत्तर	अतीत के चल चित्र आप्याप्य प्रश्नोत्तर	अतीत के चल चित्र आप्याप्य प्रश्नोत्तर	मेरुमरु एपरेखा- चित्र का उद्भव व विकास



# Govt Lohia College, Churu

## Department of Botany

### Detailed teaching plan

Session- 2021-22

**Class- BSc-II Bio**

**Paper- III (Cytogenetics, Plant Breeding, Evolution and Biostatistics)**

**Name of Teacher – Ashish Sharma**

Month	Topic to be taught
August 2021	Concept of Cell and cell Theory. Structure, composition and function of Cell Wall Structure, composition of cell membrane
September 2021	Function of cell membrane. Types, structure and functions of cell organelles. Cell divisions.
October 2021	Mendel's laws of inheritance. Monohybrid and dihybrid ratio. Incomplete dominance, lethal gene. Gene interaction- Epistasis. Complementary Supplementary, Duplicate Physical and chemical structure of chromosome, types of chromosomes lampbrush and supernumerary.
November 2021	Chromosomal mutations. Structure and functions of nucleic acids. Types of RNA and DNA.
December 2021	Replication of DNA. Evidences of DNA as genetic material. Synaptonemal complex, crossing over, chiasma, linkage and mapping of genes.
January 2022	Principles of Plant breeding. Methods of breeding; Introduction and acclimatization, selection (mass, pureline and clonal), hybridization, pedigree analysis, hybrid vigour, use of mutation and polyploidy in breeding
February 2022	Elementary study of biostatistics mean, mode, median, standard error, chi-square test, standard deviation.
March 2022	Lamarckism and neo-Lamarckism. Darwinism and neo-Darwinism. De Vries concept, origin of species Previous years question papers discussion

