



**MGM HIGHER SECONDARY SCHOOL, B. S. CITY**  
**SYLLABUS BREAK UP--- 2022-23**  
**CLASS– XII**  
**SUBJECT –English**

MONTH	WEEK	CHAPTER/TOPIC
MARCH	3 <sup>RD</sup>	The last lesson,
	4 <sup>TH</sup>	The Lost Spring (Contd.), My mother at sixty six
APRIL	1 <sup>ST</sup>	Deep water, Report writing
	2 <sup>ND</sup>	The Lost Spring
	3 <sup>RD</sup>	The Lost Spring
	4 <sup>TH</sup>	Drafting Invitation, Report writing
	5 <sup>TH</sup>	Drafting Invitation(Contd.)
MAY	1 <sup>ST</sup>	Note Making, Summary, Letter
	2 <sup>ND</sup>	The Third Level
JUNE	3 <sup>RD</sup>	The Tiger King
	4 <sup>TH</sup>	Journey to The End Of The Earth
	5 <sup>TH</sup>	Notice
JULY	1 <sup>ST</sup>	Indigo
	2 <sup>ND</sup>	The Enemy
	3 <sup>RD</sup>	The Enemy(Contd.)
	4 <sup>TH</sup>	1 <sup>ST</sup> PERIODIC TEST Notice
	5 <sup>TH</sup>	Invitation
AUGUST	1 <sup>ST</sup>	Poets and Pancakes
	2 <sup>ND</sup>	Article
	3 <sup>RD</sup>	Keeping Quiet
	4 <sup>TH</sup>	A Thing of beauty
	5 <sup>TH</sup>	A Thing of beauty(Contd.)
SEPTEMBER	1 <sup>ST</sup>	A Roadside stand
	2 <sup>ND</sup>	A Roadside stand (Contd.)
	3 <sup>RD</sup>	Revision for H.Y
	4 <sup>TH</sup>	HALF-YEARLY EXAMINATION
	5 <sup>TH</sup>	HALF-YEARLY EXAMINATION
OCTOBER	2 <sup>ND</sup>	The Interview
	3 <sup>RD</sup>	The Interview (Contd.)
	4 <sup>TH</sup>	Going Places
NOVEMBER	1 <sup>ST</sup>	Going Places (Contd.)
	2 <sup>ND</sup>	On the face of it
	3 <sup>RD</sup>	On the face of it
	4 <sup>TH</sup>	On the face of it
	5 <sup>TH</sup>	Aunt Jennifer's Tigers
DECEMBER	1 <sup>ST</sup>	Memories of Childhood
	2 <sup>ND</sup>	Revision SYLLABUS COMPLETION

(P.T.O)

<b>MARCH</b>	PROSE : 1. THE LAST LESSON POETRY : MY MOTHER AT 66 WRITING SECTION : REPORT WRITING
<b>APRIL</b>	FLAMINGO:-PROSE- 2 - THE LOST SPRING 3 - DEEPWATER 4 - RAT TRAP POETRY - 1 - MY MOTHER AT 66 WRITING SECTION – DRAFTING INVITATION
<b>MAY</b>	VISTAS - 1 - THE THIRD LEVEL FLAMINGO – 4. RAT TRAP READING SECTION – NOTE MAKING, SUMMARY WRITING SECTION - LETTER WRITING
<b>JUNE</b>	VISTAS-2-THE TIGER KING 3 - JOURNEY TO THE END OF THE EARTH WRITING-SECTION-PRACTICE SESSIONS
<b>JULY</b>	FLAMINGO - CH - 5 – INDIGO VISTAS CH- 4 – THE ENEMY WRITING-SECTION-ARTICLE
<b>AUGUST</b>	FLAMINGO - CH6 – POETS AND PANCAKES POEM – 3 - KEEPING QUIET POEM – 4 - A THING OF BEAUTY WRITING SECTION – LETTER WRITING
<b>SEPTEMBER</b>	FLAMINGO – POEM - 5-A ROADSIDE STAND PROSE - THE INTERVIEW
<b>OCTOBER</b>	FLAMINGO- CH- 8 GOING PLACES CH- 8- MEMORIES OF CHILD HOOD VISTAS- ON THE FACE OF IT
<b>NOVEMBER</b>	POEM - AUNT JENNIFER'S TIGERS
<b>DECEMBER</b>	REVISION

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**PORTION OF EXAM— 2022-2023**

**CLASS – 12 – ENGLISH**

**1ST PERIODIC**

**FLAMINGO** – PROSE - CH- 1) THE LAST LESSON  
2) LOST SPRING

**POETRY-** 1) MY MOTHER AT SIXTY SIX

**WRITING SECTION** – INVITATION

**READING SECTION** –  
COMPREHENSION

**VISTAS** - CH 1: THE THIRD LEVEL

**HALF YEARLY**

**FLAMINGO**-(CH-1,2,3,4 FROM THE LAST LESSON ----- THE RAT TRAP)  
(POETRY-1, 3, 4 FROM MY MOTHER AT SIXTY SIX --- A THING OF BEAUTY)

**VISTAS** -(-CH-1,2,3,4 FROM THE THIRD LEVEL----- THE ENEMY)

**WRITING-SECTION-** NOTICE, LETTER, SPEECH, ARTICLE, REPORT ETC.

**READING SECTION-** COMPREHENSION

**REVISION TEST-1**

**FLAMINGO**-PROSE-CH 5, 6, 7, 8  
POEM - 4, 5, 6  
VISTAS-CH- 5, 6, 8

**REVISION TEST-2**

**FLAMINGO**-PROSE-CH-1, 2, 3, 4  
POEM - 1, 3  
VISTAS - CH-1, 2, 3

**PRE-BOARD :** ENTIRE SYLLABUS

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**M.G.M HIGHER SECONDARY SCHOOL, BOKARO**  
**SYLLABUS BREAKUP FOR THE YEAR : 2022 - 2023**  
**CLASS – XII**  
**SUBJECT – PHYSICS**

Month	Week	Chapter No.	Chapter/Topic name
March	4 <sup>th</sup>	1	Unit-1 Electrostatics- Electric charges, Conservation of charge, Coulombs law, force between 2 point charges, force between multiple charges, superposition principle and continuous charge distribution.
	5 <sup>th</sup>		Electric field, electric field due to a point charge, Electric field lines , electric dipole, electric field due to dipole, torque on a dipole in uniform electric field
April	1 <sup>st</sup>		Electric flux, statement of Gauss' theorem and its application to find electric field due to infinitely long st. line ,uniformly charged infinite plane sheet and uniformly charged thin spherical shell, field inside and outside.
	1 <sup>st</sup> & 2 <sup>nd</sup>	2	Electrostatic potential and capacitance Electric potential, potential difference, electric potential due to a point charge, dipole and system of charges, equipotential surface, electric potential energy of system of two point charges and electric dipole in electrostatic field.
	3 <sup>rd</sup>	2	Conductors and insulators, free charges and bound charges in a conductor. Dielectrics and electric polarisation, capacitors and capacitances , combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with or without dielectric medium between the plates ,energy stored in a capacitor(formula only) Practical1:To Find resistivities of two or more wires by plotting a graph of potential differences vs current
	4 <sup>th</sup>	3	UNIT-2 Current electricity Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current , Ohms law, electric resistance V-I characteristics ( linear and non linear ) Electrical energy and power ,electric resistivity and conductivity, temperature dependence of resistance Practical 1
May	1 <sup>st</sup>	3	Internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel. Practical 2:metre bridge specific resistance Activities A1,A2
	2 <sup>nd</sup>	3	Kirchhoff's laws and Wheat stone bridge .

June	2nd	4	UNIT-3 Magnetic effects of current and magnetism. concept of magnetic field, Oersted's experiments. Biot-Savart law and its application to current carrying circular loop Practical 3: To verify combination of resistors (series /parallel) using metre bridge
	3rd	4	Ampere's law and its application to infinitely long straight line, straight and toroidal solenoids Force on a moving charge in uniform magnetic and electric fields Practical 3
	4th	4	Force on a current carrying conductor in a uniform magnetic field, force between two parallel current carrying conductors- definition of one ampere. Torque experienced by a current loop in uniform magnetic field, Current loop as a magnetic dipole and its magnetic dipole moment, moving coil galvanometer its current sensitivity and conversion to ammeter and voltmeter Practical 4: To determine angle of minimum deviation in case of a prism by plotting a graph between $i$ and $d$ Activity A3
	5th	5	Magnetism and matter Bar magnet, bar magnet as an equivalent solenoid, magnetic field intensity due to a magnetic dipole along its axis and perpendicular to its axis Practical 4
July	1st	5	torque on a magnetic dipole placed in uniform magnetic field. revision Practical 5: determine focal length of concave mirror
	2nd	5	Para, dia and ferromagnetic substances with examples, magnetisation of materials, effect of temperature on magnetic properties.
	3rd	6	UNIT IV Electromagnetic induction and alternating currents. Electromagnetic induction, Faraday's laws, induced emf and current. Practical 5
	3rd	6	Lenz law, Self and mutual induction.  Practical 6: To determine focal length of convex lens by plotting a graph between $u$ and $v$ or between $1/u$ and $1/v$
	4th	7	Alternating current Alternating currents, peak and RMS value of alternating current voltage. Practical 6
	5th	7	Resistance and impedance, LCR circuits in series. Resonance, Power in ac circuits, power factors, wattless current Practical 7: To determine focal length of convex mirror using convex lens Activities B1, B2

August	I st	7 and 8	A.C generators and transformers UNIT V Electromagnetic waves Basic idea of displacement current, electromagnetic waves, their characteristics, their transverse nature, electromagnetic spectrum including elementary facts about their uses. Practical 7
	2nd	9	UNIT VI OPTICS Ray optics and optical instruments Reflection of light, spherical mirrors ,mirror formula, refraction of light, total internal reflection and its applications, optical fibre, refraction at spherical surfaces.
	3rd	9	Lenses , lens formula, lens makers formula, magnification , power of a lens, combination of thin lenses in contact,
	4th	9	Refraction of light through the prism Optical instruments: microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers. Half yearly practical examination
	5th	10	Wave optics Wave front and Huygens principle. Reflection and refraction of plane wave at a plane surface using wave fronts. Proof of laws of reflection and refraction using Huygens principle. Half yearly practical examination.
September	I st	10	Interference .Young's double slit experiment and expression for fringe width (No derivation final expression only) coherent sources and sustained interference of light Diffraction due to single slit , width of central maxima
	2nd		Revision
	3rd		Half yearly examination
	4th		Half yearly examination
October	I st + 2 <sup>nd</sup>	Unit VII Chapter 11	UNIT VII :Dual nature of radiation and matter Dual nature of radiation, photoelectric effect, Hertz and Lenard's observations, Einstein's photoelectric equation- particle nature of light. Experimental study of photoelectric effect. Matter waves -wave nature of particle, de -Broglie relation
	3rd	12	UNIT –V Atoms Alpha particle scattering experiment , Rutherford Model of atom, Bohr's model of hydrogen atom, expression for radius of nth possible orbit, velocity and energy of electron in its orbit hydrogen line spectra Practical8:To study characteristics of p.n. junction diode in forward and reverse bias Activity B3
November	1st	13	Nucleus Composition and size of nucleus ,nuclear force Practical 8
	2nd	13	Mass-energy relation ,mass defect; binding energy per nucleon and its variation with mass number, nuclear fission and fusion

	3 <sup>rd</sup> &4th	14	UNIT –IX – Electronic devices Energy bands in conductor insulator and semi-conductors, intrinsic and extrinsic semi-conductor p and n types, pn junction. Semi conductor diodes ,I V characteristics in forward and reverse bias, application of junction diode as a rectifier
December	1st	9	Revision

**PORTION OF EXAM WITH MARK WEIGHTAGE FOR THE YEAR 2022-23**

**CLASS -XII**

EXAM	NAME OF THE UNIT/CHAPTER	MARK WEIGHTAGE
1 <sup>ST</sup> PERIODIC	Electrostatics	10
	Current electricity	07
	Magnetic effect of current upto moving coil galvanometer	08
HALFYEARLY	Electrostatics	20
	Current electricity	14
	Magnetic effect of electric current and magnetism	18
	EMI and a.c.	18
2 <sup>nd</sup> PERIODIC TEST	EM waves	04
	Optics	14
	Dual nature of matter and radiation	07
PRE BOARD	Electrostatics	10
	Current electricity	6
	Magnetic effect of current	9
	EMI and a.c.	8
	Electromagnetic waves	03
	Optics	15
	Dual nature of matter and radiation	05
	Atoms and nuclei	07
	Electronic devices	07

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**M.G.M HIGHER SECONDARY SCHOOL, BOKARO**  
**PORTION FOR THE YEAR: 2022-2023**  
**CLASS– XII**  
**SUBJECT–CHEMISTRY**

**Periodic Test**

1. Solutions
2. Electrochemistry

**Portion for Half Yearly Examination:-**

1. Solution
2. Electrochemistry
3. Chemical Kinetics
4. Haloalkanes and Haloarenes

**Pre-board / Board Examination**

As per CBSE Board

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**M.G.M HIGHER SECONDARY SCHOOL, BOKARO**  
**SYLLABUS BREAKUP FOR THE YEAR : 2022 - 2023**  
**CLASS – XII**  
**SUBJECT – BIOLOGY**

MONTH	WEEK	CHAPTER NO.	TOPIC NAME
March	3rd	Chapter 1	Reproduction in living organisms
	4th	Chapter 2	Reproduction in flowering plants
April	1st	Chapter 2	Reproduction in flowering plants
	2nd	Chapter 2	Reproduction in flowering plants
	3rd	Chapter 2	Reproduction in flowering plants
	4th	Chapter 3	Human Reproduction
	5th	Chapter 3	Human Reproduction
May	1 <sup>st</sup>	Chapter 3	Human Reproduction
	2 <sup>nd</sup>	Chapter 4	Reproductive Health
June	4th	Chapter 4	Principles of heredity & Variation
	5th	Chapter 5	
July	1st	Chapter 5	
	2nd	Chapter 5	
	3rd	Chapter 6	Molecular basis of inheritance
	4th	Chapter 6	Molecular basis of inheritance
	5th	Chapter 6	Molecular basis of inheritance
August	1st	Chapter 6	Molecular basis of inheritance
	2nd	Chapter 6	Evolution
	3rd	Chapter 8	Human health and diseases
	4th	Chapter 8	Human health and diseases
September			Revision and HALF YEARLY EXAMINATION
			HALF YEARLY EXAMINATION
October	1st	Chapter 10	Microbes in human welfare
	3rd	Chapter 11	Biotechnology: Principles and processes and Applications
	4th	Chapter 11	Biotechnology: Principles and processes and Applications
November	1st	Chapter 12	Biotechnology: Application
	2nd	Chapter 12	Biotechnology: Application
	3rd	Chapter 13	Organism and population
	4th	Chapter 13	Organism and population
December	1 <sup>st</sup>	Chapter 14	Ecosystem
	2 <sup>nd</sup>	Chapter 15	Biodiversity & Conservation

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**M.G.M HIGHER SECONDARY SCHOOL, BOKARO**  
**SYLLABUS BREAKUP FOR THE YEAR : 2021 - 2022**  
**CLASS – XII**

**SUBJECT – Computer Science-083**

Month	Week	Unit no.	Chapter/topic
<b>MARCH</b>	3 <sup>RD</sup>	1	<b>PYTHON REVISION TOUR-I</b> <ul style="list-style-type: none"> <li>▪ Tokens</li> <li>▪ Barebones of a Python Program</li> <li>▪ Variables and Assignments</li> <li>▪ Simple Input and Output</li> <li>▪ Data Types</li> </ul>
	4 <sup>TH</sup>	1	<b>PYTHON REVISION TOUR-I</b> <ul style="list-style-type: none"> <li>▪ Mutable and Immutable types</li> <li>▪ Statement flow control</li> <li>▪ The if Condition</li> <li>▪ Looping Statements</li> </ul>
<b>APRIL</b>	1 <sup>ST</sup>	1	<b>PYTHON REVISION TOUR-I</b> <ul style="list-style-type: none"> <li>▪ Jump Statements-break and continue</li> <li>▪ More on Loops</li> </ul>
	2 <sup>ND</sup>	1	<b>PYTHON REVISION TOUR-II</b> <ul style="list-style-type: none"> <li>▪ Strings in Python</li> </ul>
	3 <sup>RD</sup>	1	<b>PYTHON REVISION TOUR-II</b> <ul style="list-style-type: none"> <li>▪ Lists in Python</li> <li>▪ Tuples in Python</li> </ul>
	4 <sup>TH</sup>	1	<b>PYTHON REVISION TOUR-II</b> <ul style="list-style-type: none"> <li>▪ Dictionaries in Python</li> </ul>
	5 <sup>TH</sup>	1	<b>PYTHON REVISION TOUR-II</b> <ul style="list-style-type: none"> <li>▪ Sorting Techniques</li> </ul>
<b>MAY</b>	1 <sup>ST</sup>	1	<b>WORKING WITH FUNCTION</b> <ul style="list-style-type: none"> <li>▪ Understanding Functions</li> <li>▪ Defining Function in Python</li> <li>▪ Flow of Execution in a Function call</li> <li>▪ Passing Parameters</li> <li>▪ Returning values from Function</li> </ul>
	2 <sup>ND</sup>	1	<b>WORKING WITH FUNCTION</b> <ul style="list-style-type: none"> <li>▪ Composition</li> <li>▪ Scope of Variables</li> </ul>
<b>JUNE</b>	3 <sup>RD</sup>	1	<b>WORKING WITH FUNCTION</b> <ul style="list-style-type: none"> <li>▪ Mutable /Immutable properties of passed data objects</li> </ul>
	4 <sup>TH</sup>	1	<b>FILE HANDLING</b> <ul style="list-style-type: none"> <li>▪ Need of Data files</li> <li>▪ Opening and closing files</li> <li>▪ Types of Files</li> </ul>

	5 <sup>TH</sup>	1	<b>FILE HANDLING</b> <ul style="list-style-type: none"> <li>Working with Text File</li> </ul>
<b>JULY</b>	1 <sup>ST</sup>	1	<b>FILE HANDLING</b> <ul style="list-style-type: none"> <li>Working with Text File (contd.)</li> </ul>
	2 <sup>ND</sup>	1	<b>FILE HANDLING</b> <ul style="list-style-type: none"> <li>Standard input, output and error streams</li> <li>Working with Binary File</li> </ul>
	3 <sup>RD</sup>	1	<b>FILE HANDLING</b> <ul style="list-style-type: none"> <li>Working with CSV File</li> </ul>
	4 <sup>TH</sup>	1	<b>1<sup>st</sup> periodic test</b>
			<b>DATA STRUCTURE</b> <ul style="list-style-type: none"> <li>Elementary Data Representation</li> <li>Types of Data Structure</li> <li>Operations on Data Structure</li> </ul>
	5 <sup>TH</sup>	1	<b>DATA STRUCTURE</b> <ul style="list-style-type: none"> <li>Nested/ Two dimensional lists in Python</li> </ul>
<b>AUGUST</b>	1 <sup>ST</sup>	1	<b>DATA STRUCTURE</b> <ul style="list-style-type: none"> <li>Stacks</li> </ul>
	2 <sup>ND</sup>	2	<b>COMMUNICATION AND NETWORK CONCEPTS</b> <ul style="list-style-type: none"> <li>Computer network-An introduction</li> <li>Types of networks</li> <li>Evolution of Networking</li> </ul>
	3 <sup>RD</sup>	2	<b>COMMUNICATION AND NETWORK CONCEPTS</b> <ul style="list-style-type: none"> <li>Switching Techniques</li> <li>Data Communication Terminologies</li> </ul>
	4 <sup>TH</sup>	2	<b>COMMUNICATION AND NETWORK CONCEPTS</b> <ul style="list-style-type: none"> <li>Transmission Media</li> <li>Network Devices</li> <li>Network Topologies and Types</li> </ul>
	5 <sup>TH</sup>	2	<b>COMMUNICATION AND NETWORK CONCEPTS</b> <ul style="list-style-type: none"> <li>Network Protocol</li> <li>Wireless / Mobile Computing</li> <li>Internetworking terms and concepts</li> </ul>
<b>SEPTEMBER</b>	1 <sup>ST</sup>	2	<b>COMMUNICATION AND NETWORK CONCEPTS</b> <ul style="list-style-type: none"> <li>Introduction to web services</li> </ul>
	2 <sup>ND</sup>		Revision for Half-yearly examination
	3 <sup>RD</sup>		Revision for Half-yearly examination
	4 <sup>TH</sup>		<b>Half-yearly examination</b>
	5 <sup>TH</sup>		
<b>OCTOBER</b>	2 <sup>ND</sup>	3	<b>RELATIONAL DATABASES</b> <ul style="list-style-type: none"> <li>Purpose of DBMS</li> <li>Database Concepts</li> <li>Relational Data Model</li> <li>The relational model terminology</li> <li>Brief history of MYSQL</li> </ul>
	3 <sup>RD</sup>	3	<b>RELATIONAL DATABASES</b> <ul style="list-style-type: none"> <li>MySQL database system</li> <li>Starting MySQL</li> <li>MySQL and SQL</li> </ul>

	4 <sup>TH</sup>	3	<b>SIMPLE QUERIES IN SQL</b> <ul style="list-style-type: none"> <li>General Concepts: Advantages of using SQL</li> <li>Some MySQL SQL elements</li> <li>SQL command syntax</li> </ul>
<b>NOVEMBER</b>	1 <sup>ST</sup>	3	<b>SIMPLE QUERIES IN SQL</b> <ul style="list-style-type: none"> <li>Making simple queries</li> <li>MySQL functions</li> <li>Aggregate functions</li> </ul>
	2 <sup>ND</sup>	3	<b>TABLE CREATION AND DATA MANIPULATION COMMANDS</b> <ul style="list-style-type: none"> <li>Database in MySQL</li> <li>Creating tables</li> <li>Changing Data with DML commands</li> <li>More DDL commands</li> </ul>
	3 <sup>RD</sup>	3	<b>GROUPING RECORDS, JOINS IN SQL</b> <ul style="list-style-type: none"> <li>Types of SQL function</li> <li>Grouping result- GROUP BY</li> <li>Joins</li> </ul>
	4 <sup>TH</sup>	3	<b>INTERFACE PYTHON WITH MYSQL</b> <ul style="list-style-type: none"> <li>Connecting SQL with Python</li> <li>Creating Database Connectivity Applications</li> </ul>
	5 <sup>TH</sup>	3	<b>INTERFACE PYTHON WITH MYSQL</b> <ul style="list-style-type: none"> <li>Parameterized quires</li> <li>Performing Insert and Update queries</li> </ul>
<b>DECEMBER</b>	1 <sup>ST</sup>	<b>REVISION</b>	
	2 <sup>ND</sup>	<b>REVISION</b> <b>SYLLABUS COMPLETION</b>	

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**PORTION OF EXAM WITH MARKS WEIGHTAGE**

EXAM	CHAPTER NO.	CHAPTER NAME	MARKS WEIGHTAGE
<b>1<sup>ST</sup> PERI ODIC TEST</b>	<b>CHAPTER -1</b>	Python Revision Tour-I	15
	<b>CHAPTER -2</b>	Python Revision Tour-II	15
	<b>CHAPTER -3</b>	Working With Function	20
	<b>TOTAL</b>		<b>50</b>
<b>HALF- YEARLY EXAMINATION</b>	<b>CHAPTER -1</b>	Python Revision Tour-I	10
	<b>CHAPTER -2</b>	Python Revision Tour-II	10
	<b>CHAPTER -3</b>	Working With Function	10
	<b>CHAPTER-4</b>	File Handling	15
	<b>CHAPTER-5</b>	Data structure	5
	<b>CHAPTER-6</b>	Communication and network concepts	20
<b>TOTAL</b>			70
<b>PRE- BOARD EXAMINATION</b>	<b>UNIT-1</b>	Computational Thinking and Programming - 2	40
	<b>UNIT-2</b>	Computer Networks	10
	<b>UNIT-3</b>	Database Management	20
	<b>TOTAL</b>		70

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**MGM HIGHER SECONDARY SCHOOL, B.S.CITY**  
**SYLLABUS BREAK-UP YEAR 2022-2023**  
**CLASS – XII**  
**SUBJECT – ECONOMICS**

MONTH	WEEK	CHAPTER NO.	TOPIC/TOPIC NAME
MARCH	4 <sup>th</sup> & 5 <sup>th</sup>	MACRO. Ch.-5	Unit 5: Money and Banking Money - meaning and supply of money - Currency held by the public and net demand deposits held by commercial banks
		ECONOMIC DEV. Ch.-1	Unit 1: Development Experience (1947-90) and Economic Reforms since 1991: A brief introduction of the state of Indian economy on the eve of independence.
APRIL	1 <sup>st</sup> -2nd	MACRO. Ch.-5	Money creation by the commercial banking system. Implementation of Jan Dhan Yojna by government Concept of Multiplier= $1/CRR$
		ECONOMIC DEV. Ch.-1	Indian economy on the eve of independence- Agricultural sector, Industrial sector.  Indian economy on the eve of independence- Foreign Trade, Demographic profile during British rule.
	3rd	MACRO. Ch.-5	Central bank and its functions (example of the Reserve Bank of India): Bank of issue, Govt. Bank, Banker's Bank, Control of Credit through Bank Rate, CRR, SLR, Repo Rate and Reverse Repo Rate, Open Market Operations, Margin requirement.
		ECONOMIC DEV. Ch.-1	Indian economy on the eve of independence- Occupational Structure, Infrastructure.
	4th	MACRO. Ch.-9	Unit 7: Government Budget and the Economy Government budget - meaning, objectives. Balanced Budget & Unbalanced Budget
		ECONOMIC DEV. Ch.-2	Common goals of Five Year Plans: Long period and Short period goals.
	5th	MACRO. Ch.-9	Classification of receipts - revenue receipts and capital receipts; Classification of expenditure – revenue expenditure and capital expenditure. Measures of government deficit - revenue deficit, fiscal deficit, primary deficit their meaning.
		ECONOMIC DEV. Ch.-2	Common goals of Five Year Plans: Achievement of the Goals of planning, Failures of planning.
		ECONOMIC DEV. Ch.-3	Main features, problems of Agriculture.

MAY	1 <sup>st</sup> -2 <sup>nd</sup>	MACRO. Ch.-9	Implications of each type of deficit in government deficit.
		ECONOMIC DEV. Ch.-3	Policies of agriculture (institutional aspects and new agricultural strategy, etc.)
JUNE	3 <sup>rd</sup> -4 <sup>th</sup>	MACRO. Ch.- 10	<b>Foreign exchange rate</b> - meaning of fixed and flexible rates and managed floating, Determination of exchange rate in a free market, Appreciation and Depreciation of Domestic Currency
		ECONOMIC DEV. Ch.-5	Economic Reforms since 1991: Need and main features of liberalisation, globalization.
	5 <sup>th</sup>	MACRO. Ch.-10	<b>Foreign exchange rate-</b> Appreciation and Depreciation of Domestic Currency
		ECONOMIC DEV. Ch.-5&6	Need and main features of Privatization; An appraisal of LPG policies.
JULY	1 <sup>st</sup>	MACRO. Ch.-11	Balance of payments account - meaning and components: <ul style="list-style-type: none"> <li>• Current A/C ( Visible trade)</li> <li>• Capital A/c ( Invisible trade)</li> <li>• Official Reserves A/c ( maintained by RBI)</li> </ul>
		ECONOMIC DEV. Ch.-7	Economic Reforms since 1991: GST & DEMONITISATION
	2 <sup>nd</sup>	MACRO. Ch.-11	Balance of payments equilibrium & disequilibrium (Bop Surplus & Deficit)
		ECONOMIC DEV. Ch.-7	Economic Reforms since 1991: Impact of GST & DEMONITISATION on Indian Economy
	3 <sup>rd</sup>	MACRO. Ch.-11	Significance of Bop Data: <ol style="list-style-type: none"> <li>1.Finding of Exports and Imports</li> <li>2. Calculation of NFIA</li> <li>3. Indicator of country's exchange rate</li> </ol>
		ECONOMIC DEV. Ch.-8	Human Capital Formation: How people become resource; Role of human capital in Economic development.
	4 <sup>th</sup>	MACRO. Ch.-11	Significance of Balance of Payment continued..
		ECONOMIC DEV. Ch.-8	Human Capital Formation: Growth of Education Sector in India.
	5 <sup>th</sup>	MACRO. Ch.-11	Autonomous and Accomodating items of BOP(Showing Currency market by Internet)
		ECONOMIC DEV. Ch.-9	Rural development: Key issues - credit and marketing - role of cooperatives

AUGUST	1 <sup>st</sup> -2 <sup>nd</sup>	MACRO. Ch.-11	Foreign Exchange Rate: Determination of Equilibrium exchange rate.
		ECONOMIC DEV. Ch.-9	Agricultural diversification; alternative farming. Organic farming.
	3 <sup>rd</sup>	MACRO. Ch.-2	Unit 1-4: National Income and Related Aggregates Some basic concepts: consumption goods, capital goods, final goods, intermediate goods. Stocks and flows; gross investment and depreciation. Circular flow of income (two sector model)
		ECONOMIC DEV. Ch.-10	Employment: Formal and informal, Growth and other issues: Problems and policies.
SEPTEMBER	4 <sup>th</sup> -5 <sup>th</sup>	MACRO. Ch.-3	Aggregates related to National Income: Gross National Product (GNP), Net National Product (NNP) and other related terms. Gross and Net Domestic Product (GDP and NDP) - at market price, at factor cost. Concept of Domestic Income and National Income
		ECONOMIC DEV. Ch.-11	.Inflation: Problems
	1 <sup>st</sup> -2 <sup>nd</sup>	MACRO CH-4	Methods of calculating National Income-Value Added Method & Income method
		ECONOMIC DEV. Ch.-11	Inflation: Types & Implications
OCTOBER	3 <sup>rd</sup>		REVISION FOR HALF YEARLY EXAMINATION
	5 <sup>th</sup>	MACRO Ch-4	Methods of Calculating National Income
		ECONOMIC DEV. Ch.-11	Inflation: Policies
	1 <sup>st</sup>	MACRO. Ch.-4	Methods of calculating National Income-Expenditure method.
OCTOBER		ECONOMIC DEV. Ch.-12	Inflation: Ways to tackle Inflation
	2 <sup>nd</sup> -3 <sup>rd</sup>	MACRO. Ch.-4	Precautions Under National Income calculation under Value, Income & Expenditure method. Real and Nominal GDP(GDP deflator)
		ECONOMIC DEV. Ch.-12	Sustainable Economic Development: Meaning, Features
	4 <sup>th</sup>	MACRO. Ch.-4	<b>National Income:</b> Classification of Economy- 2 sector, 3 sector & 4 sector economy Concept of Depreciation- Expected & Unexpected Obsolescence
OCTOBER		ECONOMIC DEV. Ch.-13	Sustainable Economic Development: Effects of Economic Development on Resources and Environment, including global warming.
	5 <sup>th</sup>	MACRO.	<b>AD &amp; its Components</b>



		Ch.-7	AD schedule, Concept of Autonomous Consumption, C and S function graphs and their numericals
		ECONOMIC DEV. Ch.-14	Unit 3: Development Experience of India: A comparison with neighbours India and Pakistan; India and China
NOVEMBER	1st-2nd	MACRO. Ch.-8	Meaning of full employment and involuntary unemployment. Process of Multiplier(Graphic presentation)
		ECONOMIC DEV. Ch.-14	Issues: growth, population, sectoral development and other developmental indicators.
	3rd	MACRO. Ch.-8	AS-AD and S=I approach for income determination
		ECONOMIC DEV. Ch.-14	Issues: growth, population, sectoral development and other developmental indicators.
	4th-5th	MACRO Ch-8	Problems of excess demand and deficient demand; measures to correct them - changes in government spending, taxes and money supply
		ECONOMIC DEV. Ch.-14	Tabular presentation of comprision between India,Pakistan & China.
COMPLETION OF SYLLABUS			

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**M.G.M HIGHER SECONDARY SCHOOL, BOKARO**  
**SYLLABUS BREAK UP FOR THE YEAR: 2022-2023**  
**CLASS– XII**  
**SUBJECT–CHEMISTRY**

MONTH	CHAPTER No.	CHAPTER/TOPICNAME
MARCH	1	Solutions-introduction, types, concentration sand its Methods to express
APRIL	1	Solutions-introduction, types, concentration sand its Methods to express
		Henry's law, application, ideal & non – ideal solutions, Raoult's Law.
		Colligative Properties, Graphical methods, Van't Hoff Factor etc.
	2	Electrochemistry - Introduction, Electrochemical Cells, Nemst Equation and its application, Kohlrausch law, Electrolysis
		Faraday's Laws of electrolysis, applications, conductivity and its types, applications.
		Cells and Batteries, Primary & Secondary Electrochemical theory of Rusting of Iron.
MAY	3	Chemical Kinetics – Introduction, Rate Law, Law of mass action order and Molecularity of reaction.
JUNE	3	Pseudo First order reactions, Activation Energy, Threshold Energy, Arrhenius Equation, Mechanism of reactions.
JULY	4	Haloalkanes & Haloasenes - physical and chemical properties, mechanism of substitution reaction, nomenclature, methods of preparation.
	5	Alcohols, Phenols & Ethers – nomenclature, Physical and Chemical properties, methods of preparation, identification of primary, secondary and tertiary alcohols.
August	6	Aldehydes, Ketones and Carboxy licacids, all name reactions, tests For aldehydes and Ketones, Iodo form test, nomenclature, preparation, Nucleophilic addition
September	7	Amines and diazonium slats -Introduction, methods of preparations, properties and uses, nomenclature,
October	8	d and f block elements – introduction, general properties of first row transition metals, preparation and properties of $K_2Cr_2O_7$ and $KMnO_4$ .
November	9	Co-ordination compounds – Introduction, ligands, nomenclature, bonding, VBT and CFT, applications.
December	10	Biomolecules – classification – monosaccharides, proteins, amino acids, nucleic acids – DNA and RNA

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	7	Electrochemistry-Introduction, Electro chemical cells, Nernst Equation and its application, Kohlrausch law, Electrolysis
		Faraday's Laws of electrolysis, applications, conductivity and its types, applications
	7	Cells and Batteries, Primary & Secondary, Electro chemical theory of Rusting of Iron
AUGUST	8	Chemical Kinetics, Introduction, Rate Law, Law of mass action Order and Molecularity of reaction
		Pseudo First order reactions, Activation Energy, Threshold Energy, Arrhenius Equation, Mechanism of reactions.
	9	Surface chemistry- Introduction, Adsorption, Absorption, Physisorption, chemisorption, Applications
		Catalysis, types, Homogeneous and Heterogeneous Catalysis, Mechanism, Applications

	10	D and f block elements – introduction, general properties of first row transition metals
		Lanthanoids and actinoids

SEPTEMBER	11	Co-ordination compounds – Introduction, ligands, nomenclature, bonding, VBT and CFT
		Isomerism, Werner's theory
OCTOBER	12	Aldehydes, Ketones and Carboxylic acids, all name reactions, tests For aldehydes and Ketones, Iodo form test, nomenclature, preparation, Nucleophilic addition
	13	Amines and diazonium salts - Introduction, methods of preparations, properties and uses, nomenclature,
NOVEMBER	13	Identification of primary, secondary and tertiary amines, Conversions, Practice questions

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**M.G.M HIGHER SECONDARY SCHOOL, BOKARO**  
**SYLLABUS BREAKUP FOR THE YEAR : 2021 - 2022**

**CLASS – XII**

**SUBJECT – PHYSICAL EDUCATION**

Month	CHAPTER NO.	UNIT	WEEK	TOPIC/TOPIC NAME
March	1	1	4 <sup>th</sup>	Planning in sports.(meaning and objectives of planning ,
April				Various committees and its responsibilities.
			1 <sup>st</sup>	Procedure to draw fixture (knockout and League tournament), intramural and extramural competition.
			2 <sup>nd</sup>	Specific sportsprogrammes.
	2		3 <sup>rd</sup>	Sports and Nutrition. (Balance diet, diet and nutrition : macro & micro nutrients, nutritive & non nutritive components of diet, Eating for weight control – A Healthy weight, The pitfalls of dieting, food intolerance and food myths.
			4 <sup>th</sup>	Topic continued.... Sports nutrition and it's Effect on performance (Fluid and meal intake, pre, during and post completion. Food supplements for children's.
	3		5 <sup>th</sup>	YOGA and LIFESTYLE :Asans as preventive measures ,Obesity : Asana, procedure, benefits and contraindication for forvajasana, padahastasana, trikonasana., Diabetes.
May			1 <sup>st</sup>	Hypertension and back pain, procedure ,benefits and contraindication.
	4		2 <sup>nd</sup>	Topic continued.... ,PHYSICAL EDUCATION AND SPORTS FOR CWSN(CHILDREN WITHSpecial NEED-DIVYANG) : Concept of disability, their causes and nature (cognitive, intellectual & physical disability)
			3 <sup>rd</sup>	Revision, Advantages of physical activities children's with special needs..., strategies to make physical accessible for children with special needs.
	5		4 <sup>th</sup>	CHILDREN& WOMEN IN SPORTS : Motor development and factors affecting, Exercise guidelines at different stages of growth development.,
			5 <sup>th</sup>	Advantage and disadvantages of weight training, concept and advantages of correct posture,
June			1 <sup>st</sup>	Common posturaldeformities –spinal curvature, knock knees, bowleg, flat foot, round shoulder..., corrective measures for postural deformities.
			2 <sup>nd</sup>	Sports participation of women in India, special consideration (menarche &menstrual dysfunction), Female athletes triad (oestoporosis, amenorrhoea, eating disorder).

July	6		3 <sup>rd</sup>	1 <sup>st</sup> periodic, TEST AND MEASUREMENT IN SPORTS: Introduction, Motor fitness test ,50m standing start 600 m Run/Walk, Sit & Reach test, Partial curl up, push ups (Boys), Modified push-up (Girls), standing Broad Jump, Agility -4x 10m Shuttle Run. General Motor fitness Test : Barrow three -item general motor ability ( Standing Broad Jump, Zigzag Run, Medicine Ball Put )
		3	4 <sup>th</sup>	Measurement of Cardiovascular Fitness : Harvard Step Test / Rockport Test-Computation of Fitness Index : Duration of the exercise in seconds x 100 ÷ 5.5 x pulse count of 1-1.5 min after exercise,
			5 <sup>th</sup>	Rikki & Jones – Senior Citizen Test : chair stand test for lower body strength, Arm curl test for upper body strength, chair sit & reach test for lower body flexibility, Back scratch test for upper body flexibility, Eight foot up & go test for agility, six minute walk test for aerobic endurance.
August	7		1 <sup>st</sup>	PHYSIOLOGY & INJURIES IN SPORTS : Physiological factors determining components of physical fitness, Effects Of exercise on Cardio Respiratory system, Effects of exercise on Muscular system, Physiological changes due to ageing,
			2 <sup>nd</sup>	Sports Injuries : classification (soft tissue injuries, Bone and joint injuries, their causes, prevention and treatment, First Aid – aim and objectives.
	8		3 <sup>rd</sup>	Topic continued...., BIOMECHANICS & SPORTS : Meaning and Importance of Biomechanics in sports,
			4 <sup>th</sup>	Types of movements ( flexion, extension, abduction, adduction), Newton's Law of motion and
				And it's Application in sports, Friction & sports.
September			1 <sup>st</sup>	<b><u>Topic Continued</u></b>
			2 <sup>nd</sup>	Revision
			3 <sup>rd</sup>	Half Yearly Exam
			4 <sup>th</sup>	Half Yearly Exam
	9		5 <sup>th</sup>	PSYCHOLOGY & SPORTS: Introduction, personality, its definition & types - Traits & Types (Sheldon & Jung classification) & Big Five Theory,
October				Motivation, its type and techniques, Exercise Adherence, Reason to Exercise , Benefits of Exercise
				Strategies for Enhancing Adherence to Exercise, Meaning, Concept & Types of Aggression in Sports.
	10		1 <sup>st</sup>	TRAINING IN SPORTS : Introduction, Strength – Definition, types & methods to develop strength – Isometric , Isotonic & Isokinetic,
			2 <sup>nd</sup>	Endurance – Definition ,types & methods to develop endurance – continuous, interval & fartlek training,

			3 <sup>rd</sup>	Speed and Flexibility – types and methods to develop
			4 <sup>th</sup>	Topic continued..... ...Coordination abilities : definition and types,
			5 <sup>th</sup>	Topic continued..... Circuit training – introduction & it's Importance.
November			1 <sup>st</sup>	Revision
				Revision <b><u>Note: Completion Of Syllabus(11<sup>th</sup> Nov)</u></b>
				Revision
				1 <sup>st</sup> Revision Test

**Portion specified for first quarterly examination( 5<sup>th</sup> July) :**

**Chapter No.**

**Name of the Chapter**

- 1,2&3.
2. Sports & Nutrition
3. Yoga & Lifestyle

1. Planning in sports

**Portion specified for Half yearly examination(13<sup>th</sup> to 25<sup>th</sup> September) :**

**Chapter No.**

**Name of the Chapter**

- 1 to 5
2. Sports & Nutrition
3. Yoga & Lifestyle

1. Planning in sports
4. Physical Education and sports for CWSN
5. Children and women in sports

**Portion specified for 1<sup>st</sup>Pre-Board examination (13<sup>th</sup> December):**

**Chapter No.**

**Name of the Chapter**

1 to 10

Entire Syllabus

**Portion specified for 2<sup>nd</sup>Pre-Board examination (4<sup>th</sup> January):**

**Chapter No.**

**Name of the Chapter**

1 to 10

Entire Syllabus

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**M.G.M HIGHER SECONDARY SCHOOL, BOKARO**  
**SYLLABUS BREAKUP FOR THE YEAR : 2022 - 2023**

**CLASS – XII**

**SUBJECT – APPLIED MATHEMATICS**

MONTH	WEEK	UNIT NO.	CHAPTER/TOPIC
<b>MARCH</b>	3 <sup>RD</sup>	1	<b>NUMBERS, QUANTIFICATION AND NUMERICAL APPLICATIONS</b>
	4 <sup>TH</sup>		<ul style="list-style-type: none"> <li>• Modulo Arithmetic</li> <li>• Allegation and Mixture</li> </ul>
<b>APRIL</b>	1 <sup>ST</sup>		<ul style="list-style-type: none"> <li>• Boats and streams</li> <li>• Pipes and Cistern</li> <li>• Races and games</li> </ul>
	2 <sup>ND</sup>	2	<b>ALGEBRA</b>
	3 <sup>RD</sup>		<ul style="list-style-type: none"> <li>• Matrices</li> <li>• Operation of matrices</li> </ul>
	4 <sup>TH</sup>		<ul style="list-style-type: none"> <li>• Determinant</li> <li>• Inverse of a matrix</li> <li>• Solving system of simultaneous equations using matrix method</li> </ul>
	5 <sup>TH</sup>		<ul style="list-style-type: none"> <li>• Cramer's rule and row reduction method.</li> <li>• Simple applications of matrices and determinants</li> </ul>
<b>MAY</b>	1 <sup>ST</sup>	3	<b>CALCULUS</b>
	2 <sup>ND</sup>		<ul style="list-style-type: none"> <li>• Differentiation and its application (Higher order derivative)</li> </ul>
<b>JUNE</b>	3 <sup>RD</sup>		<ul style="list-style-type: none"> <li>• Application of derivative (Rate of change, tangent and Normal )</li> <li>• Marginal cost and marginal revenue using derivatives,</li> <li>• Increasing / Decreasing of functions</li> </ul>
	4 <sup>TH</sup>		<ul style="list-style-type: none"> <li>• Maxima and Minima</li> <li>• Integration And its application (Indefinite integration)</li> </ul>
	5 <sup>TH</sup>		<ul style="list-style-type: none"> <li>• Indefinite integration</li> <li>• Definite integral as area under the curve</li> </ul>
<b>JULY</b>	1 <sup>ST</sup>		<ul style="list-style-type: none"> <li>• Application of Integration</li> </ul>
	2 <sup>ND</sup>		<b>1<sup>ST</sup> PERIODIC TEST</b>
	3 <sup>RD</sup>		<ul style="list-style-type: none"> <li>• Differential equation</li> <li>• Application of Differential equation</li> </ul>
	4 <sup>TH</sup>		
	5 <sup>TH</sup>		
<b>AUGUST</b>	1 <sup>ST</sup>	4	<ul style="list-style-type: none"> <li>• Probability Distribution</li> <li>• Mathematical Expectation</li> <li>• Variance</li> </ul>
	2 <sup>ND</sup>		<ul style="list-style-type: none"> <li>• Binomial Distribution</li> <li>• Poisson Distribution</li> </ul>
	3 <sup>RD</sup>		<ul style="list-style-type: none"> <li>• Normal distribution</li> </ul>
	4 <sup>TH</sup>	5	<b>INFERENCE STATISTICS</b>
	5 <sup>TH</sup>		<ul style="list-style-type: none"> <li>• Population and Sample</li> <li>• Parameter and Statistic and Statistical inferences</li> </ul>
<b>SEPTEMBER</b>	1 <sup>ST</sup>		<b>INFERENCE STATISTICS</b>
	2 <sup>ND</sup>		<ul style="list-style-type: none"> <li>• Hypothesis testing</li> </ul>
	3 <sup>RD</sup>		<p align="center">Revision for H.E</p> <p align="center">Revision for H.E</p>

	4 <sup>TH</sup>		HALF-YEARLY EXAMINATION
	5 <sup>TH</sup>		HALF-YEARLY EXAMINATION
<b>OCTOBER</b>	2 <sup>ND</sup>	6	<b>INDEX NUMBERS AND TIME-BASED DATA</b>
	3 <sup>RD</sup>		
	4 <sup>TH</sup>		<ul style="list-style-type: none"> <li>Time series, component of Time series, Time series analysis for univariant data</li> <li>Secular Trend</li> </ul>
<b>NOVEMBER</b>	1 <sup>ST</sup>	7	<b>FINANCIAL MATHEMATICS</b>
	2 <sup>ND</sup>		<ul style="list-style-type: none"> <li>Perpetuity</li> <li>Sinking funds</li> </ul>
	3 <sup>RD</sup>		<ul style="list-style-type: none"> <li>Calculation of EMI</li> </ul>
	4 <sup>TH</sup>		<ul style="list-style-type: none"> <li>Calculation of returns</li> <li>Nominal rate of return</li> <li>Compound annual growth rate</li> </ul>
	5 <sup>TH</sup>		<ul style="list-style-type: none"> <li>Linear method of depreciation</li> </ul>
<b>DECEMBER</b>	1 <sup>ST</sup>	8	<b>LINEAR PROGRAMMING</b>
	2 <sup>ND</sup>		<ul style="list-style-type: none"> <li>Mathematical formulation of linear programming problems</li> <li>Graphical method of solving L.P.P in two variables.</li> </ul> <p><b>SYLLABUS COMPLETION</b></p>

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**M.G.M HIGHER SECONDARY SCHOOL, BOKARO**  
**SYLLABUS BREAKUP FOR THE YEAR : 2022 - 2023**  
**CLASS – XII**  
**SUBJECT – MATHEMATICS ( 041)**

MONTH	WEEK	UNIT NO.	CHAPTER/TOPIC
MARCH	3 <sup>RD</sup>		<b>RELATION:</b> Types of relations: reflexive, symmetric, transitive.
	4 <sup>TH</sup>		Equivalence relations, Types of relations, Equivalence classes.
APRIL	1 <sup>ST</sup>		<b>FUNCTIONS :</b> Functions Types of functions, Composite functions,
	2 <sup>ND</sup>		<b>INVERSE TRIGONOMETRIC FUNCTIONS:</b> Inverse of a Function, inverse trigonometric functions.
	3 <sup>RD</sup>		<b>INVERSE TRIGONOMETRIC FUNCTIONS:</b> Definition, domain, range,
	4 <sup>TH</sup>		Principal value branch of inverse trigonometric functions, Graphs of inverse trigonometric functions.
	5 <sup>TH</sup>		<b>MATRICES:</b> Types of matrices, Operation on matrices, Addition and multiplication and multiplication with a scalar and Transpose of a matrix, symmetric and skew symmetric matrices .
MAY	1 <sup>ST</sup>		<b>DETERMINANTS :</b> Determinant of a square matrix (up to 3x3 Matrices), minors, Co- factors. Applications of determinants in finding the area of a triangle.
	2 <sup>ND</sup>		<b>MATRICES:</b> Adjoint and inverse of matrix, Solving a system of Linear Equations by Matrix Method
JUNE	3 <sup>RD</sup>		<b>CONTINUITY AND DEPPERENTIABILITY:</b> Continuity of a point, continuous functions.
	4 <sup>TH</sup>		<b>DEFFERENTIATION:</b> Chain rule, Derivatives of inverse trigonometric functions,
	5 <sup>TH</sup>		Derivative of implicit function , Derivatives of logarithmic and exponential functions. Derivatives of function in parametric form, Second order
JULY	1 <sup>ST</sup>		<b>APPLICATION OF DERIVATIVES :</b> Rate of change of bodies, increasing/decreasing functions,
	2 <sup>ND</sup>		<b>APPLICATION OF DERIVATIVES</b> Increasing/decreasing functions
	3 <sup>RD</sup>		<b>APPLICATION OF DERIVATIVES :</b> Maxima & Minima. Simple problems
	4 <sup>TH</sup>		<b>1<sup>ST</sup> PERIODIC TEST</b>
			<b>INDEFINITE INTEGRALS :</b> Integration as inverse process of differentiation, Integration by substitution,
	5 <sup>TH</sup>		Evaluation of integrals of some special functions
AUGUST	1 <sup>ST</sup>		Integration by partial fraction and by parts.
	2 <sup>ND</sup>		<b>DEFINITE INTEGRALS :</b> Basic properties of definite integrals and
	3 <sup>RD</sup>		<b>APPLICATION OF INTEGRALS :</b> Application in finding the area under simple curves, especially lines, circle/parabola /ellipse(in standard form only )
	4 <sup>TH</sup>		Area between any of the two above said curves.
	5 <sup>TH</sup>		<b>DIFFERENTIAL EQUATIONS :</b> Definition, order and degree, general and particular solutions of homogeneous Solution of differential equations, Variable separable method.

<b>SEPTEMBER</b>	1 <sup>ST</sup>		Solutions of homogeneous differential equations of first order and first degree.
	2 <sup>ND</sup>		Solutions of linear differential equation of the type :
	3 <sup>RD</sup>		Revision
	4 <sup>TH</sup>		<b>HALF-YEARLY EXAMINATION</b>
	5 <sup>TH</sup>		<b>VECTOR</b> : Vectors and scalars, magnitude and direction of a vector. Direction cosines and direction ratios of a vector. Types of vectors (equal, unit, zero, parallel and collinear vectors).
<b>OCTOBER</b>	2 <sup>ND</sup>		Position vector of a point, negative of a vector, components of a vector, Addition of vectors, multiplication of a vector by a scalar, position vector of a point dividing a line segment in a given ratio. Definition,
	3 <sup>RD</sup>		Geometrical Interpretation, properties and application of scalar (dot) product of vectors, vector (cross) product of vectors, scalar triple product of vectors.
	4 <sup>TH</sup>		<b>THREE DIMENSIONAL GEOMETRY :</b> Straight line in space (Cartesian equation and vector equation of a line, coplanar and skew lines)
<b>NOVEMBER</b>	1 <sup>ST</sup>		<b>SHORTEST DISTANCE BETWEEN TWO LINES</b> Direction cosines and direction ratios of a line joining two points. Cartesian equation and vector equation of a line, coplanar and skew lines,
	2 <sup>ND</sup>		Shortest distance between two lines. Cartesian and vector equation of a plane.
	3 <sup>RD</sup>		Angle between (i) two lines, (ii) two planes, (iii) a line and a plane. Distance of a point from a plane.
	4 <sup>TH</sup>		<b>LINEAR PROGRAMMING</b> : Introduction, related terminology such as constraints, objective function, optimization, different types of linear programming (L.P.) problems,
	5 <sup>TH</sup>		<b>2<sup>ND</sup> PERIODIC TEST</b>
			Mathematical formulation of L.P. problems, graphical method of solution for problems in two variables, Feasible and infeasible regions (bounded or
<b>DECEMBER</b>	1 <sup>ST</sup>		<b>PROBABILITY</b> : Conditional probability, Multiplication theorem of total probability, Baye's theorem, Random variable and its probability distribution, mean of random variable .
	2 <sup>ND</sup>		<b>SYLLABUS COMPLETION</b>

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### **PORTION FOR PERIODIC TEST-1**

Matrices, Determinants, Relations and Functions, Inverse Trigonometric functions

### **PORTION FOR HALF YEAR EXAM**

Matrices, Determinants, Relations and Functions, Inverse Trigonometric functions. Continuity and Differentiability, Application of Derivative, Integrals (Indefinite and definite). Properties of Integrals.

### **PORTION FOR PRE-BOARD EXAM**

Application of Integrals, Differential Equations, Vectors, Three-dimensional geometry, linear programming, Probability and whole portion of Midyear Exam.

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**M.G.M HIGHER SECONDARY SCHOOL, BOKARO**  
**SYLLABUS BREAKUP FOR THE YEAR: 2022 - 2023**

**Class – 12**  
**Subject – Sociology**

Month –	Week –	Chapter No. / Chapter Name–	Topics –
March	3rd and 4th	2) The Demographic Structure of Indian Society.	A) Theories and Concepts, Rural and Urban Linkage and Divisions, Population Policy in India.
April	2nd and 3rd	3) Social Institutions: Continuity and Change.	B) Caste and Caste System, Tribal Communications, Family and Kinship.
April	4 <sup>th</sup> and 5th	4) The Market as a Social Institution	C) Sociological perspectives on Market and Economy, Understanding Capitalism as a Social System, Globalization.
May	2 <sup>nd</sup> and 3rd	5) Patterns of Social Inequality and Exclusion	D) Social Inequality and Social Exclusion, Systems justifying and Perpetuating, Inequality and Struggles.
<b>FIRST PERIODIC TEST</b>			
June	3 <sup>rd</sup> and 4th	6) The Challenges of Cultural Diversity and Project work	E) Cultural Communities and the nation State, Regionalism in the Indian Context, The Nation State and Religion related issues and Identities, Communalism, State and Civil Society.
July	1 <sup>st</sup> and 2nd	8) Structural Change	F) Understanding Colonialism, Industrialization, Urbanization.
August	1 <sup>st</sup> and 2 <sup>nd</sup>	9) Cultural Change	G) Social Reform Movements, Different Kinds of social change.
August	3 <sup>rd</sup> and 4 <sup>th</sup>	10) The Story of Indian Democracy	H) The Constitution as an Instrument of Social Change, Challenges of Social Transformation, Political Parties, Pressure Groups and Democratic Politics.
<b>HALF YEARLY EXAM</b>			
September	1 <sup>st</sup> and 2 <sup>nd</sup>	11) Change and Development in Rural Society	I) Agrarian Structure, Land Reforms, Green Revolution and its Social Consequences, Circulation of Labour, Globalization, Liberalization and Rural Society
October	2 <sup>nd</sup>	12) Change and Development in Industrial Society	J) Planned Industrialization to Liberalization, work Process.
(P.T.O)			

SECOND PERIODIC TEST			
October and November	3 <sup>rd</sup> , 1 <sup>st</sup> and 2 <sup>nd</sup>	13) Globalization and Social Change	K) Understanding Globalization, Dimensions of Globalization , Economic, Political and Cultural.
November	3 <sup>rd</sup>	14) Mass Media and Communication	L) Types, Changing Nature of Mass Media
December	1 <sup>st</sup> and 2 <sup>nd</sup>	15) Social Movements	M) Concept of Social Movements, Theories and Classification of social Movements, Class-Based Movements, Caste- Based, Tribal Movements and Women Movement in Independent India.
December		Completion Of Syllabus	

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