

പൊതുപരീക്ഷ
കുടുതൽ ശ്രദ്ധ നൽകേണ്ട
പാഠഭാഗങ്ങൾ

സ്റ്റാൻഡേർഡ് XII



കേരളസർക്കാർ
പൊതുവിദ്യാഭ്യാസവകുപ്പ്

തയ്യാറാക്കിയത്

സംസ്ഥാന വിദ്യാഭ്യാസ ഗവേഷണ പരിശീലന സമിതി
(SCERT), കേരളം
2022

ഭരതം

കോവിഡ് മഹാമാരി കാരണം നമ്മുടെ വിദ്യാർത്ഥികൾക്ക് സ്വാഭാവിക സ്കൂൾ അനുഭവങ്ങളും ക്ലാസ്സ് മുറിപഠനവും ഈ വർഷവും പൂർണ്ണമായും സാധ്യമായിട്ടില്ല. വീഡിയോ ക്ലാസ്സുകളിലൂടെയാണ് നവംബർ വരെ പാഠങ്ങൾ പരിചയപ്പെട്ടിരുന്നത്. നവംബർ മുതൽ വിദ്യാർത്ഥികൾ സ്കൂളിലെത്തി നേരിട്ടുള്ള അധ്യയനം നടത്തുന്നുവെങ്കിലും ആഴ്ചയിൽ പകുതി ദിവസവും ഓരോ ദിവസവും പകുതി അധ്യയന സമയവും മാത്രമേ ലഭ്യമാകുന്നുള്ളൂ. ഈ സാഹചര്യം പരിഗണിച്ച് ആത്മവിശ്വാസത്തോടെ പരീക്ഷ എഴുതാൻ നമുക്ക് അവരെ സജ്ജരാക്കേണ്ടതുണ്ട്. വ്യത്യസ്ത നിലവാരത്തിലുള്ള വിദ്യാർത്ഥികളെ അവരുടെ സാധ്യതകൾക്കനുസരിച്ച് നമുക്ക് സഹായിക്കേണ്ടതുണ്ട്.

കുട്ടികളുടെ അഭിരുചി മേഖലകൾ ഭിന്നമായതിനാൽ അവയെല്ലാം ഉൾക്കൊള്ളുന്നതിനായി പാഠഭാഗങ്ങൾ ഒന്നുതന്നെ ഒഴിവാക്കേണ്ടതില്ല എന്നാണ് തീരുമാനിച്ചിട്ടുള്ളത്. എന്നിരുന്നാലും ക്ലാസ്സും ചർച്ചയ്ക്കും വിശകലനത്തിനുമായി കൂടുതൽ ശ്രദ്ധ നൽകേണ്ട പാഠഭാഗങ്ങളാണ് ഇതോടൊപ്പമുള്ളത്. ഈ പാഠഭാഗങ്ങൾ അർത്ഥപൂർണ്ണമായി സ്വാംശീകരിക്കുന്നതിന് ആവശ്യമായ പഠനപ്രവർത്തനങ്ങളും പഠനപിന്തുണയും നൽകാൻ അധ്യാപകർ പ്രത്യേകം ശ്രദ്ധിക്കേണ്ടതാണ്. ഇങ്ങനെ ചെയ്യുമ്പോൾ മറ്റ് പാഠഭാഗങ്ങളുമായി ബന്ധപ്പെട്ട് ഉയർന്നുവരുന്ന സംശയങ്ങൾക്ക് അതത് സമയം തന്നെ അധ്യാപകർ നിവാരണം വരുത്തേണ്ടതാണ്. വീഡിയോ ക്ലാസ്സിലൂടെയും സ്വയംപഠനത്തിലൂടെയും എത്രമാത്രമാണ് ആശയഗ്രഹണം നടന്നത് എന്ന് വിലയിരുത്തിയാകണം പഠനപ്രവർത്തനങ്ങൾ ആസൂത്രണം ചെയ്യേണ്ടത്.

ഡയറക്ടർ
എസ്.സി.ഇ.ആർ.ടി

കൂടുതൽ ശ്രദ്ധിക്കേണ്ട മേഖലകൾ വിഷയാടിസ്ഥാനത്തിൽ

ഹയർ സെക്കണ്ടറി മലയാളം

നമ്പർ	യൂണിറ്റ്	പാഠങ്ങൾ
1	ഏഴുത്തകം	പ്രവേശകം
		1. കണ്ണാടി കാൺമോളവും
		2. പ്രകാശം ജലം പോലെയാണ്
		3. കിരാതവൃത്തം
		4. അവകാശങ്ങളുടെ പ്രശ്നം
2	തനതിടം	കാക്കാരശ്ശിപ്പാട്ട്
		1. കേശിനീമൊഴി
		2. അഗ്നിവർണ്ണന്റെ കാലുകൾ
		3. പദത്തിന്റെ പഥത്തിൽ
		4. മാപ്പിളപ്പാട്ടിലെ കേരളീയത
3	ദർപ്പണം	1. കൊള്ളിവാക്കല്ലൊതൊന്നും
		2. ഗൗളിജന്മം

ഹയർ സെക്കണ്ടറി മലയാളം

(ഐച്ഛികം)

യൂണിറ്റ്	ക്രമ നമ്പർ	പാഠങ്ങൾ
I കാവ്യപരിവം	1	വിഭീഷണഹിതോപദേശം
	2	മുത്തുമണികൾ
	3	ശാന്തം കരുണം
	4	മലയാളഗദ്യപരിണാമം
II രംഗപരിവം	1	മധുരിക്കും ഓർമ്മകൾ
	2	ഒരു കൂട്ടം ഉറുമ്പുകൾ
	3	ഊരുഭംഗം
	4	തനതു നാടകവേദി
III ആഖ്യാനപരിവം	1	കാലം മാറുന്നു
	2	കാട് വിളിക്കുന്നു

ENGLISH

Lesson	Focus Area
1)	The 3Ls of Empowerment [Speech]
2)	Any Woman [Poem]
3)	Matchbox [Story]
4)	Horegallu [Anecdote]
5)	Mending Wall [Poem]
6)	The Hour of Truth [One Act Play]
7)	A Three Wheeled Revolution [Interview]
8)	Rice [Poem]
9)	Dangers of Drug Abuse [Essay]

എസ്.സി.ഇ.ആർ.ടി കേരളം

HINDI (SECOND LANGUAGE)

യൂണിറ്റ്	പാഠം
ഇकाई 1	1. मातृभूमि 2. बेटी के नाम 3. मेरे भारतवासियो...
इकाई 2	4. सूरीनाम में पहला दिन 5. मेरे लाल 6. दोस्ती
इकाई 3	7. ज़मीन एक स्लेट का नाम है। 8. सपने का भी हक नहीं 9. मुरकी उर्फ बुलाकी

HINDI (OPTIONAL)

യൂണിറ്റ്	പാഠം
इकाई 1	1. अलबम 2. सरोज-स्मृति 3. खोई हुई वस्तु की खोज 4. क्रिया विशेषण (व्याकरण) 5. साहित्य का इतिहास
इकाई 2	6. राजभाषा और राष्ट्रभाषा 7. अनुवाद : कला और कौशल 8. साँप 9. संबंध बोधक (व्याकरण) 10. साहित्य का इतिहास
इकाई 3	11. एक अंतरंग परिचय

ARABIC

(Second Language)

١. خير الله	الوحدة الأولى
٢. عبقرى من أبناء كيرالا	
٣. كيرالا... ونعم الله التي لا تحصى	
١. ناموا ولا تستيقظوا	الوحدة الثانية
٢. شرطي المرور	
٣. كيمياء السعادة	
١. لغة الضاد	الوحدة الثالثة
٣. لآلى لغوية	

എസ്.സി.ഇ.ആർ.ടി കേരളം

ARABIC (OPTIONAL)

Title	Chapter	Unit
لست ابني، أنا لا أعرفك	I	I
أنا لغة الضاد	II	I
زوجة بتفاحة	III	I
الانتظار	IV	I
الأخوة الإنسانية	III	II
هموم دارس	IV	II

روعة لغة القرآن الكريم و الحديث الشريف	I	III
من يعرفه الحل و الحرم	III	III
ندوة أدبية	IV	III
في مكتب السفريات	I	IV
المتردد	V	IV
حضارة الهند و ثقافتها	I	V
ابني بنى لنا بيتا في الجنة	III	V

എസ്.സി.ഇ.ആർ.ടി കേരളം

Sanskrit- Second Language

एककम्		पाठस्य नाम
I आर्द्रता	१. २. ३.	तव विरहे । व्रज हरितम् । भविष्ये तव ।
II मानविकता	४. ५. ६.	चिन्तारतो बालकः । को हेतुः ? दीनदयालुर्भव ।
III चारुता	७.	कालातिवर्तिनी कला ।

Sanskrit- Optional - Sahithya

एककम्		पाठस्य नाम
I आशीर्वादः	१. २. ३.	विचित्ररूपोऽनुग्रहः । सन्तानगोपालम् बृहत्त्रयी ।
II विवेकिता	१. २.	ज्ञാനോदयः । मृच्छकटिकम् ।
III स्वतन्त्रता	१.	महितामृतम् ।

Sanskrit- Optional - Sasthra

एककम्		पाठस्य नाम
I. व्याकरणशास्त्रम्	१. २. ३. ४.	अजन्तपुल्लिङ्गप्रकरणम् । केवलसमासः । अव्ययीभावसमासः । तत्पुरुषसमासः (संख्यात्पूर्वो द्विगुः इति सूत्रपर्याप्तं भागः) ।
II. तर्कशास्त्रम्	१.	തർക്കസംഗ്രഹദീപിക (അനുബന്ധചതുഷ്ടയം, മംഗലവാദഃ, തമോവാദഃ ച) ।
III. दर्शनपरिचयः ।	१.	കുതിപ്പയാ: കേരളീയദാർശനികാ: ।
IV. ज्योतिषशास्त्रम् ।	१.	ജ്യോതിഷാമയനം ചക്ഷു: (ആരംഭദാർഭ്യം സൂര്യോദ്യാ: നവഗ്രഹാ: ഇതി പര്യന്തം പാഠഭാഗഃ) ।

PART - II - TAMIL (SECOND LANGUAGE)

Sl.No	അലകു	പാഠപ്രകൃതി
1	വയലും വാഴ്വരും	<ul style="list-style-type: none"> • ഏതൊരു • നമ്മെ നിലം • പടർ പൂമി
2	കലയും പണപാടും	<ul style="list-style-type: none"> • നാട്യാർ പണപാട്
3	അരിവിയൽ തമിഴ്	<ul style="list-style-type: none"> • പഴുതതമിഴ് • ഇളന്തതമിഴ്
4	എന്നും നലമുടൻ	<ul style="list-style-type: none"> • നലം നാടി • കുവരിനൂന്താൽ
5	കുലകുഴി കീർത്തിനൂന്തം	<ul style="list-style-type: none"> • കുലകുഴി

PART - III - TAMIL (OPTIONAL)

Sl.No	അലകു	കരുത്തലകു
1	ഇയ്യന്തെയും കുറുപ്പുകുറുപ്പും	<ul style="list-style-type: none"> • അയ്യന്തേ അയ്യന്തം • കുറുപ്പന്തേ കുറുപ്പം • വരുന്ന
2	വേർവെട്ടുന്നിടം	<ul style="list-style-type: none"> • ഇന്നുവര
3	മനികുല മേമ്പാട്	<ul style="list-style-type: none"> • അമ്പിൻ വിതകൾ • കഥതർമർ കുറുപ്പന്തകൾ
4	മൊഴിയും കുലകുറുപ്പും	<ul style="list-style-type: none"> • മൊഴി വെർപ്പി • മൊഴിപ് പന്തു
5	അരിവിൻ വായിൽ	<ul style="list-style-type: none"> • വെർപ്പുകൾ

PART - II - KANNADA (SECOND LANGUAGE)

SL. NO	UNIT	LESSON
1.	I. ಸಿರಿ ಬೆಳಸು	* ಕೆರೆಯ ದಡದಲ್ಲಿ * ಅವರವರ ದಾರಿ
2.	II. ನವಪಲ್ಲವ	* ಅಪ್ಪನೂ ಒಲೆಯುರಿಯೂ * ತಾಯಿ
3.	III. ಸಂಸ್ಕೃತಿ ಸುಮ	* ನಡೆವುದೊಂದೇ ಭೂಮಿ * ಸುಬ್ಬಣ್ಣ
4.	IV. ಬೆಳ್ಳಿತೆರೆ	* ಆಗದು ಎಂದು
5.	V. ನುಡಿಸಿರಿ	* ಸಕ್ಕರೆಗುಪ್ಪಂ ಸರಿಮಾಳ್ಳರೇ * ತರುಣಸೂರ್ಯಂ ಕತ್ತಲೆಯನೆ ಪೊಕ್ಕಂತಾಯ್ತು

PART - III - KANNADA (OPTIONAL)

SL. NO	UNIT	LESSON
1.	I. ಹಳೆಗನ್ನಡ ನುಡಿಬೆಡಗು	* ಸಲಿಸುವೆಂ ನೂರುವರಂ
2.	II. ನಡುಗನ್ನಡ ಕಾವ್ಯ ಸೌರಭ	* ಧರೆಮೆಚ್ಚದಣ್ಣ ಸೋದರರ ಕಾಳಗಕೆ * ಉಲ್ಲಂಘಿಸುವರುಂಟೆ ವಿಧಿಕ್ಯತವನು
3.	III. ಹೊಸಗನ್ನಡ ಗದ್ಯವಿಹಾರ	* ಕಾಡಿಗೆ ಹೊದ್ದಿಸಿದ ಮಂಜಿನನ ಪರದೆ * ಪ್ರಾಚೀನ ತುಳು ಸಾಹಿತ್ಯ
4.	VI. ನಾಟಕರಂಗ	* ಮಂಥರಾ

RUSSIAN

Sl.No	UNIT	LESSON
1	Unit - I - Life	<ul style="list-style-type: none"> Alexander Push Kin Lion and Rat
2	Unit - II - Friendship	<ul style="list-style-type: none"> Birth Day Magical Word
3	Unit - III - Relations	<ul style="list-style-type: none"> Russia My country

LATIN

Sl.No	UNIT	LESSON
1	I. BONITATIS MUNDUS	<ol style="list-style-type: none"> Prex Pro India Samaritanus Bonus Noemi Et Ruth
2	II. AMORIS MUNDUS	<ol style="list-style-type: none"> Caritas Numquam Excidit Adeste Fideles
3	III. CREATIONIS CORONA ET CUSTOS SAPIENS	<ol style="list-style-type: none"> Canus Orbis
4	IV. ROMANI NOBILES	<ol style="list-style-type: none"> Numa Pompilius

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FRENCH

UNITE - I				
LECONS	CONCEPT	TRADUCTION	ASPECTS COMMUNICATIFS	COMPREHENSION
Leçon-1 Un voyage en avion	-Passé Récent -Futur Proche -Présent Progressif	-en anglais -en français	-Répondez aux Questions -Reliez -Expression écrite -Choisissez	Le poème <Déjeuner du Matin> écrit par Jacques Prévert
Leçon-2 Le Courier électronique	Imparfait Adverbe	-en anglais -en français	- Répondez aux Questions -Reliez -Expression écrite -Choisissez	La fable -Boucles d'or et les Trois Ours
UNITE -II				
Leçon -3 Quoi deneuf!	-Pronoms Compléments d'objets directs -Conjonction	-en anglais -en français	- Répondez aux Questions -Reliez -Expression écrite. -Choisissez	---
Leçon -4 Remettez -vous vite!	-Pronoms Complément d'objet indirect - La Négation	-en anglais -en français	-Répondez aux Questions -Reliez -Expression écrite -Choisissez	Un extrait de la pièce de théâtre de Jules Romain- <Knock>
UNITE -III				
Leçon-5 Les Traces françaises en Inde	LesPronoms Relatifs: Qui, Que, Dont Où	-en anglais	-Répondez aux Questions - Reliez -Choisissez	
Leçon-6 Mahé - Paris de Malabar	Le Comparatif	-en anglais	-Répondez aux questions -Reliez -Choisissez	

SYRIAC

Sl.No	UNIT	LESSON
1	Unit - I	Shepherd and the wolf, Number & Gender
2	Unit - II	Stag, Pronominal suffixes added to prepositions
3	Unit - III	Nightingale and the Ass, Add suffixes to the particle 'is' or 'laith'
4	Unit - IV	Good tree, Congugation of verbs (1 st Class strong verbs), Demonstrative pronouns & Adjectives.
5	Unit - VII	Development of Syriac tradition in India

GERMAN

Sl. No	Unit	Title
1	Lektion 1	<ul style="list-style-type: none"> • Fragewörter • Personalpronomen & Verben • Berufe • Adjektive
2	Lektion 2	<ul style="list-style-type: none"> • Essen Trinken • Hobbys • Freizeitaktivitäten
3	Lektion 3	<ul style="list-style-type: none"> • Zahlen 1-100
4	Lektion 4	<ul style="list-style-type: none"> • Grüsse/Wünsche • Fahrzeuge
5	Lektion 6	<ul style="list-style-type: none"> • Körperteile

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URDU

UNIT	LESSONS	NO. of Lessons
1	1. ستاروں سے آگے 2. ہیلن کیلر 3. رابعی-میر انیس	1 2 3
2	4. مغل اعظم فلسطین کا اسم اعظم 6. مرزا غالب	4 6
3	8. وہ تو کوئی اور ہے	8
4	10. آہ! اناں 11. یوزحیٰ کاکی	10 11

URDU (OPTIONAL)

UNIT	LESSONS
1- زندگی بندگی نہیں	1. عجی غلام 2. زندہ رہے تو کیا ہے 3. چمھر 4. کرتے نہیں 5. نصیب نصیب کی بات
2- انسانیت سے بڑھ کر کچھ نہیں	6. الامین 7. غالب کی شخصیت 8. ہر وقت زمانے کا
3- ایک گلستان ہے ہندوستان	11. اتحاد
4- الفت- دنیا سے، دنیا والوں سے	12. ہزاروں خواہشیں

ENGLISH LITERATURE

Poetry <ol style="list-style-type: none"> 1. The Wild Swans at Coole 2. The Unknown Citizen 3. No More Hiroshimas 4. The Journey of the Magi 5. Ecology 6. Bicycle
Short Story <ol style="list-style-type: none"> 1. Doves on the Wing 2. We too are Human Beings 3. My Old Home
Non-Fiction <ol style="list-style-type: none"> 1. Excerpts from the Sixth Sense 2. In Memory of Azores 3. Role Play
Drama Pygmalion

COMMUNICATIVE ENGLISH

Lesson	Focus Area
Unit I	Learning with Technology
Unit II	Make A Difference
Unit III	Say What You Mean
UNIT IV	Talking about People (Writing profile and describing people only)

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MATHEMATICS (Science)

SI No.	Chapter	Focus area
1	RELATIONS AND FUNCTIONS	1.2 Types of Relations
		1.3 Types of Functions
		1.4 Composition of Functions and Invertible Function
2	INVERSE• TRIGONOMETRIC• FUNCTIONS	2.3 Properties of Inverse Trigonometric Functions
3	MATRICES	3.2 Matrix
		3.3 Types of Matrices
		3.4 Operations on Matrices
		3.5 Transpose of a Matrix
		3.6 Symmetric and Skew Symmetric Matrices
4	DETERMINANTS	4.2 Determinant
		4.3 Properties of Determinants
		4.5 Minors and Cofactors
		4.6 Adjoint and Inverse of a Matrix
		4.7 Applications of Determinants and Matrices
5	CONTINUITY AND• DIFFERENTIABILITY	5.2 Continuity
		5.3 Differentiability
		5.6 Derivatives of Functions in Parametric Forms
		5.8 Mean Value Theorem
6	APPLICATION OF• DERIVATIVES	6.2 Rate of Change of Quantities
		6.3 Increasing and Decreasing Functions
		6.4 Tangents and Normals
		6.6 Maxima and Minima
7	INTEGRALS	7.3.1 Integration by substitution
		7.4 Integrals of Some Particular Functions
		7.5 Integration by Partial Fractions
		7.6 Integration by parts and 7.6.1
		7.9 Evaluation of Definite Integrals by Substitution
8	APPLICATION OF• INTEGRALS	7.10 Some Properties of Definite Integrals
		8.2 Area under Simple Curves
9	DIFFERENTIAL• EQUATIONS	9.2 Basic Concepts
		9.4 Formation of a Differential Equation whose General•Solution is given
		9.5.1 Differential equations with variables separable
		9.5.3 Linear differential equations
10	VECTOR•ALGEBRA	10.4 Addition of Vectors
		10.5 Multiplication of a Vector by a Scalar
		10.6 Product of Two Vectors
11	THREE• DIMENSIONAL• GEOMETRY	11.3 Equation of a Line in Space
		11.5.1 Distance between skew lines
		11.6.2 Equation of a plane perpendicular to a given vector•and passing through a given point
		11.6.3 Three point form
12	LINEAR• PROGRAMMING	12.2 Linear Programming Problem and its Mathematical• Formulation
13	PROBABILITY	13.2 Conditional Probability
		13.4 Independent Events
		13.5 Bayes' Theorem

MATHEMATICS (Commerce)

Sl No.	Chapter	Focus area
1	RELATIONS AND FUNCTIONS	1.2 Types of Relations
		1.3 Types of Functions
		1.4 Composition of Functions and Invertible Function
2	INVERSE• TRIGONOMETRIC• FUNCTIONS	2.3 Properties of Inverse Trigonometric Functions
3	MATRICES	3.2 Matrix
		3.3 Types of Matrices
		3.4 Operations on Matrices
		3.5 Transpose of a Matrix
		3.6 Symmetric and Skew Symmetric Matrices
4	DETERMINANTS	4.2 Determinant
		4.4 Area of a Triangle
		4.5 Minors and Cofactors
		4.6 Adjoint and Inverse of a Matrix
		4.7 Applications of Determinants and Matrices
5	CONTINUITY AND• DIFFERENTIABILITY	5.2 Continuity
		5.3 Differentiability
		5.6 Derivatives of Functions in Parametric Forms
		5.8 Mean Value Theorem
6	APPLICATION OF• DERIVATIVES	6.2 Rate of Change of Quantities
		6.3 Increasing and Decreasing Functions
		6.4 Tangents and Normals
7	INTEGRALS	7.3.1 Integration by substitution
		7.4 Integrals of Some Particular Functions
		7.5 Integration by Partial Fractions
		7.6 Integration by parts and 7.6.1
8	APPLICATION OF• INTEGRALS	7.9 Evaluation of Definite Integrals by Substitution
9	DIFFERENTIAL• EQUATIONS	8.2 Area under Simple Curves
		9.2 Basic Concepts
		9.4 Formation of a Differential Equation whose General• Solution is given
10	VECTOR•ALGEBRA	9.5.1 Differential equations with variables separable
		10.4 Addition of Vectors
		10.5 Multiplication of a Vector by a Scalar
11	THREE•DIMENSIONAL• GEOMETRY	10.6 Product of Two Vectors
		11.3 Equation of a Line in Space
		11.5.1 Distance between skew lines
		11.6.2 Equation of a plane perpendicular to a given vector• and passing through a given point
12	LINEAR•PROGRAMMING	11.6.3 Three point form
		12.2 Linear Programming Problem and its Mathematical• Formulation
13	PROBABILITY	13.2 Conditional Probability
		13.4 Independent Events
		13.5 Bayes' Theorem
		13.6 Random Variables and its Probability Distributions

PHYSICS

No	Chapter	Focus area
1	ELECTRIC CHARGES AND FIELDS	1.2 ELECTRIC CHARGE 1.5 BASIC PROPERTIES OF CHARGE 1.6 COULOMB'S LAW 1.8 ELECTRIC FIELD 1.9 ELECTRIC FIELD LINES 1.10 ELECTRIC FLUX 1.11 ELECTRIC DIPOLE 1.14 GAUSS'S LAW 1.15 APPLICATIONS OF GAUSS'S LAW
2	ELECTROSTATIC POTENTIAL AND CAPACITANCE	2.2 ELECTROSTATIC POTENTIAL 2.3 POTENTIAL DUE TO A POINT CHARGE 2.6 EQUIPOTENTIAL SURFACES 2.11 CAPACITORS AND CAPACITANCE 2.12 THE PARALLEL PLATE CAPACITOR 2.14 COMBINATION OF CAPACITORS 2.15 ENERGY STORED IN A CAPACITOR
3	CURRENT ELECTRICITY	3.4 OHM'S LAW 3.9 ELECTRICAL ENERGY, POWER 3.10 COMBINATION OF RESISTORS 3.11 CELLS, EMF, INTERNAL RESISTANCE 3.13 KIRCHHOFF'S RULES 3.14 WHEATSTONE BRIDGE 3.15 METER BRIDGE 3.16 POTENTIOMETER
4	MOVING CHARGES AND MAGNETISM	4.2 MAGNETIC FORCE 4.5 MAGNETIC FIELD DUE TO A CURRENT ELEMENT, BIOT – SAVART LAW 4.6 MAGNETIC FIELD ON THE AXIS OF A CIRCULAR CURRENT LOOP 4.7 AMPERE'S CIRCUITAL LAW 4.10.1 TORQUE ON A RECTANGULAR CURRENT LOOP IN A UNIFORM MAGNETIC FIELD 4.11 THE MOVING COIL GALVANOMETER
5	MAGNETISM AND MATTER	5.3 MAGNETISM AND GAUSS'S LAW 5.4 THE EARTH'S MAGNETISM 5.5 MAGNETISATION AND MAGNETIC INTENSITY
6	ELECTROMAGNETIC INDUCTION	6.4 FARADAY'S LAW OF INDUCTION 6.5 LENZ'S LAW AND CONSERVATION OF ENERGY 6.8 EDDY CURRENTS 6.9 INDUCTANCE 6.10 AC GENERATOR

7	ALTERNATING CURRENT	7.2 AC VOLTAGE APPLIED TO A RESISTOR 7.3 REPRESENTATION OF AC CURRENT AND VOLTAGE BY ROTATING VECTORS — PHASORS 7.4 AC VOLTAGE APPLIED TO AN INDUCTOR 7.5 AC VOLTAGE APPLIED TO A CAPACITOR 7.6 AC VOLTAGE APPLIED TO A SERIES LCR CIRCUIT (Analytical Solution not necessary) 7.7 POWER IN AC CIRCUIT: THE POWER FACTOR
8	ELECTROMAGNETIC WAVES	8.2 DISPLACEMENT CURRENT 8.3 ELECTROMAGNETIC WAVES
9	RAY OPTICS AND OPTICAL INSTRUMENTS	9.2 REFLECTION OF LIGHT BY SPHERICAL MIRRORS 9.3 REFRACTION 9.5 REFRACTION AT SPHERICAL SURFACES AND BY LENSES 9.6 REFRACTION THROUGH A PRISM 9.8.1 THE MICROSCOPE
10	WAVE OPTICS	10.2 HUYGENS PRINCIPLE 10.5 INTERFERENCE OF LIGHT WAVE AND YOUNG'S DOUBLE SLIT EXPERIMENT 10.7 POLARISATION
11	DUAL NATURE OF RADIATION AND MATTER	11.3 PHOTOELECTRIC EFFECT 11.6 EINSTEIN'S PHOTOELECTRIC EQUATION: ENERGY QUANTUM OF RADIATION 11.7 PARTICLE NATURE OF LIGHT: THE PHOTON
12	ATOMS	12.4 BOHR MODEL OF THE HYDROGEN ATOM 12.6 DE BROGLIE'S EXPLANATION OF BOHR'S SECOND POSTULATE OF QUANTISATION
13	NUCLEI	13.2 ATOMIC MASSES AND COMPOSITION OF NUCLEUS 13.3 SIZE OF THE NUCLEUS 13.5 NUCLEAR FORCE 13.6 RADIOACTIVITY
14	SEMICONDUCTOR ELECTRONICS: MATERIALS, DEVICES AND SIMPLE CIRCUITS	14.3 INTRINSIC SEMICONDUCTOR 14.4 EXTRINSIC SEMICONDUCTOR 14.7 APPLICATION OF JUNCTION DIODE AS A RECTIFIER 14.9 DIGITAL ELECTRONICS AND LOGIC GATES

CHEMISTRY

Unit no.	Name of unit	Focus area
1	The solid state	1.2 Amorphous and crystalline solids 1.4.1 Primitive and Centred Unit Cells 1.5 Number of atoms in a unit cell 1.9.1 Types of point defects 1.10 Electrical properties 1.11 Magnetic properties
2	Solutions	2.3.2 solubility of gas in liquids 2.4.1 Vapour pressure of liquid-liquid solutions (Raoult's law) 2.5 Ideal and non ideal solutions 2.6 Colligative properties and determination of molar mass
3	Electrochemistry	3.3 Nernst equation 3.4.2. Variation of conductivity and molar conductivity with concentration 3.6.2 Secondary Batteries 3.7 Fuel cells
4	Chemical kinetics	4.2 Factors influencing rate of a reaction 4.3.2 First order reactions and its half life period 4.5 Temperature dependence of the rate of reaction- Arrhenius equation
5	Surface chemistry	5.1.3 Types of Adsorption 5.1.4 Adsorption isotherms 5.2.1 Homogeneous and Heterogeneous Catalysis 5.4 Classification of colloids (5.4.2 and 5.4.3) 5.4.6 Properties of Colloidal Solutions (Tyndall effect, Electrophoresis) 5.5 Emulsions
6	General principles and Process of Isolation of elements	6.2 Concentration of ores 6.3 Extraction of crude metal from concentrated ore (Calcination and Roasting) 6.4.1 Applications –Extraction of copper from cuprous oxide 6.5 Hall Heroult process (Extraction of Al) 6.7 Refining (Electrolytic refining and Vapour phase refining)
7	The P-block elements	7.3 Ammonia 7.5 Nitric acid 7.8 Phosphorus halides 7.17 Sulphuric acid 7.22 Inter halogen compounds
8	The d-and f-block elements	8.3 General properties of Transition Elements (Magnetic properties, formation coloured ions, formation complexes and catalytic property) 8.4 Some important compounds of Transition elements (Potassium dichromate only) 8.5.2 Atomic and ionic sizes 8.7 Some applications of d- and f-block elements
9	Coordination compounds	9.3 Nomenclature of coordination compounds 9.4 Isomerism in coordination compounds

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		9.5.2 Magnetic properties of coordination compounds 9.6 Bonding in metal carbonyls
10	Haloalkanes and haloarenes	10.4.1 Preparation from alcohols 10.4.3 Halogen exchange 10.5 Preparation of haloarenes (By Sandmeyer's reaction) 10.7.1 Reactions of haloalkanes (Nucleophilic substitution) 10.7.2 Reactions of haloarenes (Electrophilic substitution)
11	Alcohols, phenols and ethers	11.4.1 Preparation of alcohols(from carbonyl compounds and Grignard reagent) 11.4.2 Preparation of phenol (from haloarenes and diazonium salts) 11.4.4 Chemical reactions (Lucas test, dehydration, nitration of phenol, Reimer Tiemann reaction) 11.5 Some Commercially important alcohols- ethanol 11.6.1 Preparation of ethers-Williamson synthesis
12	Aldehydes, ketones and carboxylic acids	12.2 Preparation of aldehydes and ketones (By oxidation of alcohols, by dehydrogenation of alcohols, Rosenmund reduction, Etard reaction, Gatterman-Koch reaction, Friedel Craft's reaction) 12.4 Chemical reactions (Reduction, Oxidation, Aldol reaction, Cannizzaro reaction) 12.7 Methods of Preparation of Carboxylic acid (from primary alcohols and aldehydes, from alkyl benzene) 12.9 Chemical reactions (acidity, Reduction, Hell-Volhard Zelinsky reaction, Ring substitution)
13	Amines	13.4 Preparation of amines (Reduction of nitriles, amides, Hoffmann Bromamide reaction) 13.6 Chemical reactions (carbamine reaction, Hinsberg test) 13.9 Chemical reactions of diazonium salts- Sandmaeyer reaction, coupling reaction
14	Biomolecules	14.1.1 Classification of carbohydrates 14.1.2 Monosaccharides (Preparation of glucose from sucrose) 14.1.3 Disaccharides (glycosidic linkage, invert sugar) 14.1.4 Starch, glycogen 14.2.4 Denaturation of protein 14.5.3 Biological functions of nucleic acids
15	Polymers	15.1 Classification of polymers 15.2.1.2 Some important Addition polymers (Polythene, Teflon) 15.5.2.1 Some important condensation polymers (Nylon 6, 6 and Nylon 6) 15.2.4 Rubber (Natural rubber, vulcanisation)
16	Chemistry in Everyday life	16.3.1 Antacid 16.3.3 Neurologically active drugs 16.3.4 Anti microbials antiseptics, disinfectants)

BOTANY

Sl. No	Name of chapter	Focus area
1.	Reproduction in organisms.	1.1. Asexual reproduction, 1.2.1.1. Gametogenesis, 1.2.2. Fertilisation.
2	Sexual reproduction in flowering plants.	2.2.1. Structure of microsporangium, Structure of pollen grain 2.2.2 Megasporangium-structure, megasporogenesis, Female gametophyte 2.2.3 Pollination-Classification based on source of pollen (autogamy, geitonogamy and xenogamy) and agents of pollination.(wind, water and insects -peculiarities with examples) and artificial hybridisation 2.3. Double fertilisation, 2.4.2. Embryo structure 2.4.3. False fruit, True fruit and Parthenocarpic fruit
3	Strategies for enhancement in food production.	9.1.1.1. Dairy farm management, 9.1.2 Animal breeding, 9.1.3. Bee keeping, 9.2 Plant breeding - main steps, 9.2.3. Plant breeding for improved food quality 9.3. S.C.P, 9.4. Tissue culture.
4	Biotechnology- Principles and processes.	11.2. Tools of recombinant DNA technology 11.2.1. Restriction enzymes, Gel electrophoresis. 11.2.2. Cloning vectors, 11.2.3. Competent host. 11.3. Processes of rDNA technology.

		11.3.3. Amplification of gene of interest using PCR, 11.3.5. Obtaining the foreign gene product.
5	Biotechnology and its applications.	12.1. Biotechnological applications in agriculture-Uses GMO's and Bt cotton 12.2.1. Genetically engineered insulin. 12.2.2. Gene therapy, 12.4. Ethical issues.
6	Organisms and Populations.	13.1.3. Adaptations -In organisms of deserts, polar regions and high altitudes. 13.2.1. Population attributes- Age pyramids and population density. 13.2.2. Population growth. (Up to population growth equation) 13.2.4. Population interactions – Parasitism, Commensalism and Mutualism.
7	Ecosystem.	14.2. Productivity 14.3. Decomposition 14.4. Energy flow -Food chain, Food web, Trophic levels and Ecological pyramids. 14.7. Nutrient cycling -Phosphorus cycle.
8	Environmental issues.	16.2. Water pollution and it's control BOD, Algal bloom and eutrophication. 16.6. Greenhouse effect and global warming. 16.7. Ozone depletion in the stratosphere. 16.9. Deforestation.

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ZOOLOGY

Revised Weightage to Content (Zoology) (Plus Two)

Sl. No	Name of the chapter	Focus Area
1	Chapter 3 Human reproduction	3.1 Male reproductive system
		3.2 Female reproductive system
		3.3 Spermatogenesis ,Oogenesis, Function of acrosome
		3.4 Menarche, Menopause, LH surge, Ovulation, Corpus Luteum
		3.5 Fertilisation (definition), Cleavage, Morula, structure of blastocyst, fate of the cells in blastocyst
		3.6 Placental hormones, Stem cells, Major features of embryonic development at various months of pregnancy
		3.7 Significance of Colostrum
2	Chapter 4 Reproductive Health	4.2 Various Contraceptive methods
		4.4 Sexually transmitted diseases
		4.5 Assisted Reproductive Technologies
3	Chapter 5 Principles of Inheritance and Variation	5.2.1 Law of Dominance
		5.2.2 Law of Segregation
		5.2.2.1 Incomplete Dominance
		5.2.2.2 Co-dominance and its example
		5.4.1 Sex determination in Humans
		5.6.1 Pedigree analysis (definition) , symbols used in pedigree analysis
		5.6.2 Sickle Cell Anaemia, Haemophilia, Phenylketonuria
		5.6.3 Down's Syndrome, Klinefelter's Syndrome, Turner's Syndrome
4	Chapter 6 Molecular basis of inheritance	6.1 Salient features of DNA double helix,Central Dogma
		6.4 DNA replication is Semiconservative why?
		6.4.2 The Machinery and the Enzymes
		6.5 Transcription (Definition)
		6.5.1 Transcription Unit
		6.6 Genetic code
		6.8 Levels of regulation of gene expression in eukaryotes and prokaryotes
		6.8.1 Lac Operon
		6.9 BAC, YAC
		6.9.1 Salient Features of Human Genome
		6.10 DNA fingerprinting -steps and applications

5	Chapter 7 Evolution	7.3 What are the evidences of evolution?
		7.7 Hardy Weinberg principle
		7.9 Origin and Evolution of man
6	Chapter 8 Human health and disease	8.1 Common diseases in humans
		8.2 Immunity - Structure of Antibody
		8.3 AIDS
		8.4 Cancer
		8.5.3 Effects of Drug/Alcohol abuse
		8.5.4 Prevention and control
7	Chapter 10 Microbes in human welfare	10.1 Microbes in Household Products
		10.2.3 Chemicals enzymes and other bioactive molecules
		10.4 Microbes in Production of Biogas
		10.5 Microbes as biocontrol agents - Bacillus thuringiensis, Trichoderma
		10.6 Microbes as Biofertilisers
8	Chapter 15 Biodiversity and Conservation	15.1 Genetic, Species & Ecological Diversity
		15.1.2 Patterns of Biodiversity
		15.1.4 Causes of biodiversity loss
		5.2.2 In situ conservation, Ex situ conservation

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COMPUTER APPLICATION (COMMERCE)

Chapter	Focus Area
1. Review of C++ Programming	Tokens, Data types, Expressions, Type conversion, Control statements. Simple programs may be asked.
2. Arrays	Syntax to declare array, Accessing of elements, String handling, I/O functions to handle strings. Basic traversal program.
3. Functions	Built in functions (Name, use and output), Types of arguments, Call by value and Call by reference method. <i>(No programs required)</i>
4. Web Technology	Static and Dynamic web pages, Comparison of Client side and Server side scripts, Structure of HTML code, Container tags and empty tags, Common attributes of <BODY> tag, Use of important tags(Headings, , <P>, <HR>, text formatting tags, <MARQUEE>, ,), Only the essential attributes need to be considered.
5. Web Designing using HTML	Lists (Ordered, Unordered, Definition), <A> tag and HREF attribute, Definition of internal and external linking, Table tags, Listing and use of Input controls in Form, Coding questions may focus only on simple lists and simple tables.
6. Client side Scripting using JavaScript	<SCRIPT> tag, Data types, var keyword, Operators, Control structures and Built-in functions – use and outputs.
7. Web Hosting	Types of web hosting, FTP client software, Free hosting
8. Database Management System	Advantages of database, Components of DBMS, Types of users, RDBMS terminologies, Relational operations (Select, Project, Union, Intersection)
9. Structured Query Language	SQL components, SQL data types, Constraints, Use of commands (DDL - CREATE TABLE, DROP TABLE; DML - SELECT, DELETE, UPDATE with essential clauses only). SQL queries based on Create, Select (only WHERE clause) and Delete.
10. Enterprise Resource Planning	Functional units of ERP (listing only), Examples for ERP packages, Benefits of ERP.
11. Trends and Issues in ICT	Mobile communication services, Short note on mobile OS, Cyber crimes against individuals.

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COMPUTER SCIENCE

Chapter	Focus Area
1. Structures and Pointers	Concept of structure, syntax, and creation; Defn. of Pointer, Use of & and * operators, Static V/s dynamic memory allocation, new and delete operators, Memory leak.
2. Concept of Object Oriented Programming	POP V/s OOP, five concepts of OOP
3. Data Structures and Operations	Classification of data structures, Operations on data structures, Concept of stack, queue (linear only) and linked list. Push and Pop operations with algorithms.
4. Web Technology	Static and Dynamic web pages, Comparison of Client side and Server side scripts, Structure of HTML code, Container tags and empty tags, Common attributes of <BODY> tag, Use of important tags (Headings, , <P>, <HR>, text formatting tags, <MARQUEE>, ,), Only the essential attributes need to be considered.
5. Web Designing using HTML	Lists (Ordered, Unordered, Definition), <A> tag and HREF attribute, Definition of internal and external linking, Table tags, Listing and use of Input controls in Form, Coding questions may focus only on simple lists and simple tables.
6. Client side Scripting using JavaScript	<SCRIPT> tag, Data types, var keyword, Operators, Control structures and Built-in functions – use and outputs.
7. Web Hosting	Types of web hosting, FTP client software, Free hosting
8. Database Management System	Advantages of database, Components of DBMS, Types of users, RDBMS terminologies, Relational operations (Select, Project, Union, Intersection)
9. Structured Query Language	SQL components, SQL data types, Constraints, Use of commands (DDL - CREATE TABLE, DROP TABLE; DML - SELECT, DELETE, UPDATE with essential clauses only). SQL queries based on Create, Select (only WHERE clause), Delete.
10. Server side Scripting using PHP	echo() V/s print, PHP data types, Operators and Control structures.
11. Advances in Computing	Serial V/s Parallel computing, Cloud computing and three services, Applications of computational intelligence – listing only
12. ICT and Society	Applications of ICT – Education, Business, Governance (Benefits and challenges of each). Cyber crimes against individuals.

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COMPUTER APPLICATION (HUMANITIES)

Chapter	Focus Area
1.Introduction to Publishing	Publishing through print media(Prepress activities, Printing processes, and Postpress jobs), Types of Electronic publishing
2. Introduction to Word Processors	Features of a word processor, Libre Office Writer IDE Components, Creating-Saving-Closing-Opening a document, Editing a document, Formatting the document, Printing the document, Short-cut keys
3.Creating Professional Documents	Inserting Tables, Converting text to table, Inserting graphics-page borders-watermarks, Splitting text into columns, Table of Contents(TOC), Mail merge
4. Web Technology	Static and Dynamic web pages, Comparison of Client side and Server side scripts, Structure of HTML code, Container tags and empty tags, Common attributes of <BODY> tag, Use of important tags(Headings, , <P>, <HR>, text formatting tags, <MARQUEE>,,), Only the essential attributes need to be considered
5. Web Designing using HTML	Lists (Ordered, Unordered, Definition), <A> tag and HREF attribute, Definition of internal and external linking, Table tags, Listing and use of Input controls in Form, Coding questions may focus only on simple lists and simple tables.
6. Cascading Style Sheet	CSS-need and advantages, Style rules, Ways to add CSS to a web page, Universal, Type, Class, and ID selectors
7. Web Hosting	Types of web hosting, FTP client software, Free hosting
8. Database Management System	Advantages of database, Components of DBMS, Types of users, RDBMS terminologies, Relational operations (Select, Project, Union, Intersection)
9. Structured Query Language	SQL components, SQL data types, Constraints, Use of commands (DDL - CREATE TABLE, DROP TABLE; DML - SELECT, DELETE, UPDATE with essential clauses only). SQL queries based on Create, Select (only WHERE clause) and Delete.
10. Trends and Issues in ICT	Mobile communication services, Short note on mobile OS, Cyber crimes against individuals.

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ELECTRONICS

1 POWER SUPPLIES AND VOLTAGE STABILIZERS

- 1.1 Need for regulated power supply
- 1.2 Block diagram of a regulated power supply
- 1.3 Definitions and expressions of load regulation and line regulation
- 1.4 Block diagrams and examples of series and shunt regulators
- 1.5 Circuit diagram and working of Zener regulator
- 1.6 Limitations of zener regulator
- 1.7 Names and output voltages of positive and negative voltage regulators
- 1.8 Connection diagram of 78XX series
- 1.9 Connection diagram and output expression of LM 317 regulator
- 1.10 Designing a typical power supply

2 WAVE SHAPING CIRCUITS

- 2.1 Circuit diagram and output waveforms of positive clipper
- 2.2 Circuit diagram and output waveforms of negative clipper
- 2.3 Circuit diagrams and output waveforms of positive clamper
- 2.4 Circuit diagrams and output waveforms of negative clamper
- 2.5 Circuit diagrams, output expressions and waveforms of basic differentiating circuit
- 2.6 Circuit diagrams, output expressions and waveforms of basic integrating circuits
- 2.7 Circuit diagrams and working of summing amplifier, subtractor, comparator using op-amp only
- 2.8 LPF, HPF and BPF Circuits only

3 DIGITAL ELECTRONICS

- 3.1 Basic differences between combinational and sequential logic circuits
- 3.2 Definition and explanation of multiplexers
- 3.3 Logic symbol, truth table and circuit implementation of a basic multiplexer
- 3.4 Basic concepts of encoders and decoders
- 3.5 Logic symbol and truth table of a basic encoder circuit
- 3.6 Circuit diagram of a basic comparator
- 3.7 Symbols and truth tables to show the basics of SR and JK flip flops
- 3.8 Symbols and truth tables to show the basics of D and T flip flops

4 RADIO BROADCASTING

- 4.1 Need for modulation
- 4.2 Basic concept of AM
- 4.3 Expression for modulation index of AM
- 4.4 Frequency spectrum and bandwidth of AM
- 4.5 Relation connecting the total and carrier powers of AM signal
- 4.6 Basics of AM generation
- 4.7 Block diagram and working of a TRF receiver
- 4.8 Block diagram and working of a basic superheterodyne receiver
- 4.9 Comparison between AM and FM

5 COMMUNICATION SYSTEMS

- 5.1 Block diagram of a basic communication system
- 5.2 Designations of different frequency bands used for communication
- 5.3 Methods of propagation of waves as Ground waves and sky waves
- 5.4 Definitions of critical frequency and skip distance

6 DATA COMMUNICATION

- 6.1 Block diagram of PCM
- 6.2 Definitions of sampling, quantisation and encoding
- 6.3 Statement and equation of sampling theorem
- 6.4 Definitions of TDM and FDM
- 6.5 Waveforms of ASK, FSK and PSK

7 OPTICAL FIBER AND SATELLITE COMMUNICATION

- 7.1 Block diagram of optical fiber communication
- 7.2 Examples of light sources and detectors
- 7.3 Advantages of optical fiber communication system
- 7.4 Structure of optical fiber
- 7.5 Method of light propagation through OFC (TIR)
- 7.6 Definitions of dispersion and inter symbol interference
- 7.7 Applications of satellites

8 TELEVISION

- 8.1 Aspect ratio
- 8.2 Concept of interlaced scanning
- 8.3 Total channel bandwidth of TV
- 8.4 Block diagram of monochrome TV receiver

9 FUNDAMENTALS OF COMPUTERS

- 9.1 Block diagram of a computer
- 9.2 Definitions and examples of input and output devices
- 9.3 Definitions and examples of primary memory
- 9.4 Definitions and examples of secondary memory
- 9.5 Definition of system software, Language translators-compiler and assembler only
- 9.6 Concepts of machine, assembly and high level languages

10 INTERNET TECHNOLOGY

- 10.1 Definition and advantages of computer networking
- 10.2 Definition and different types of network protocols
- 10.3 Network topologies - Diagrams of bus, star and ring topologies only
- 10.4 Data communication devices - hub, switch and repeater
- 10.5 Definition and functions of MODEM
- 10.6 Concepts of LAN, MAN and WAN

11 BASICS OF TELEPHONE COMMUNICATION

- 11.1 Structure of PSTN
- 11.2 Concept of electronic exchange and its classification
- 11.3 Definition of cells - basic concept of frequency re-use
- 11.4 Basic concept of frequency re-use
- 11.5 Definitions of different types of cells

HISTORY

SI No	Name of the Themes	Focus Area
1	Bricks, Beads and Bones	<ul style="list-style-type: none"> Subsistence strategies – Agricultural technologies Mohenjodaro- A Planned Urban Centre – Laying out drains – Domestic architecture - The Citadel Tracking Social Differences- Burials - Looking for “luxuries” Finding out about Craft Production – Identifying centres of production Strategies for Procuring Materials - Materials from the subcontinent and beyond - Contact with distant lands Seals, Script and Weights – Seals and sealings - An enigmatic script - Weights The End of the Civilization
2	Kings, Farmers and Towns	<ul style="list-style-type: none"> The earliest states -First amongst Sixteen: Magadha An early Empire -Finding out about the Mauryas, Administering the empire New Notions of Kingship -Chiefs and kings in the south - Divine kings Towns and Trade - New cities-Urban populations: Elites and crafts persons - Trade in the subcontinent and beyond - Coins and king The Limitations of Inscriptional evidence
3	Kinship, Caste and Class	<ul style="list-style-type: none"> The critical edition of the Mahabharatha Handling Texts - Historians and the Mahabharatha – Language and Content A dynamic text
4	Thinkers, Beliefs and Buildings	<ul style="list-style-type: none"> The background : sacrifices and Debates -The sacrificial tradition- New questions - Debates and discussions Mahavira -The Message of Mahavira- The spread of Jainism Buddha - The Buddha and the quest for enlightenment – The teaching of Buddha – The followers of Buddha Stupas - Why were stupas built - How were stupas built -The structure of the stupa The development of Mahayana Buddhism
5	Through The Eyes Of Travellers	<ul style="list-style-type: none"> Al- Biruni - From Khwarizm to the Punjab -The <i>Kitab-ul-Hind</i> - Overcoming barriers to understanding - Al-Biruni’s description of the caste system Ibn Battuta - An early globe-trotter - The coconut and the <i>paan</i> - Ibn Battuta and Indian cities- A unique system of communication Francois Bernier - A doctor with a difference - Comparing “East” and “West” - The question of landownership
6	Bhakti – Sufi Traditions	<ul style="list-style-type: none"> The Virashaiva Tradition in Karnataka The growth of Sufism (<i>Khanqahs and sisilas</i>) New devotional paths – Dialogue and Dissent in North India - Kabir - Baba Guru Nanak and Mirabai

7	An Imperial Capital Vijayanagara	<ul style="list-style-type: none"> The Capital and its environs - Water resources - Fortifications and roads Royal Centre - The <i>mahanavami dibba</i> – Other buildings in the royal centre Sacred Centre - Choosing a capital - <i>Gopurams</i> and <i>mandapas</i>
8	Peasants, Zamindars and The State	<ul style="list-style-type: none"> Peasants and agricultural production - Peasants and their lands (<i>khud-kashta</i> and <i>pahi-kashta</i>) Women in Agrarian society
9	Kings and chronicles	<ul style="list-style-type: none"> The Akbar Nama and The Badshah Nama Capitals and Courts - Capital cities
10	Colonialism and the Countryside	<ul style="list-style-type: none"> The Hoe and the Plough - In the hills of Rajmahal The Santhals: Pioneer settlers
11	Rebels and The Raj	<ul style="list-style-type: none"> Leaders and Followers Rumours and prophecies Images of the revolt -Celebrating the saviours - English women and the honour of Britain - Vengeance and retribution - The performance of terror - No time for clemency - Nationalist imageries
12	Mahatma Gandhi and The Nationalist Movement	<ul style="list-style-type: none"> A leader announces himself The making and unmaking of Non -cooperation -Knitting a popular movement -A people's leader Salt Satyagraha, A case study - Dandi - Dialogues Quit India
13	Understanding Partition	<ul style="list-style-type: none"> Gendering partition - “Recovering” women Oral Testimonies and History
14	Pre Modern Kerala	<ul style="list-style-type: none"> Iron age –Megalithic phase- Burial monuments Forms of Subsistence (<i>Tinai</i>) - Kurinji- Mullai- Palai – Marutam – Neital
15	Kerala : Towards Modernity	<ul style="list-style-type: none"> Early Resistance against Colonialism –The Pazhassi revolt- Velu Thampi and Paliath Achan –Kurichiya revolt - Mapplia outbreaks Social reform – Reformers and movements Struggle for a Democratic Society – Shanar agitation – Vaikom Satyagraha –Gruvayur Satyagraha –Temple entry proclamation – Paliyam Satyagraha

POLITICAL SCIENCE

	POLITICS IN INDIA	SINCE INDEPENDENCE
Sl. No	Chapter	Topics
1	Challenges of Nation-building	a. Three Challenges. b. Partition: displacement and Rehabilitation. c. Integration of Princely states. d. Re-organisation of States.
2	Era of One-party Dominance	a. Challenge of building Democracy. (First General Election: a mammoth exercise?) b. Congress dominance in the first three general elections.
3	Politics of Planned Development	a. Idea of Development, Planning and Five Year Plans in India. b. Key Controversies: <i>Agriculture Vs Industry and Public Vs Private Sector.</i>
4	India's External Relations	a. Three objectives of Nehru's Foreign Policy. b. Peace and Conflict with China. c. Wars and Peace with Pakistan.
5	Challenges to and Restoration of the Congress System	a. Fourth General Elections 1967 b. Split in the Congress.
6	The Crisis of Democratic Order	a. Background to Emergency. b. Declaration of Emergency and Consequences.
7	Rise of Popular Movements	a. Chipko Movement. b. Anti-Arrack Movement. c. Movement for Right to Information.
8	Regional Aspirations	a. Jammu and Kashmir. b. The North-East.
9	Recent Developments in Indian Politics	a. Context of the 1990s. (The five major developments) b. Communalism, Secularism, Democracy.
	CONTEMPORARY	WORLD POLITICS
1	The Cold War Era	a. What is Cold War? b. Challenges to Bipolarity: NAM.
2	The End of Bipolarity	a. Soviet System and its disintegration. b. Shock Therapy and its Consequences.

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3	US Hegemony in World Politics	a. The three different understandings of Hegemony.
4	Alternative Centres of Power	a. The Rise of Chinese Economy.
5	Contemporary South Asia	a. Areas of Co-operation and Differences between India and its South Asian neighbours.
6	International Organisations	a. Reform of the UN Structures and Process and of Jurisdiction. b. India and the UN Reforms.
7	Security in the Contemporary World	a. What is Security? b. New sources of Threats.
8	Environment and Natural Resources	a. 'Global Commons' and 'Common Property Resources'. b. 'Common but differentiated Responsibility'. c. India's stand on Environmental issues.
9	Globalisation	a. Political and Economic Consequences of Globalisation.

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GEOGRAPHY

FUNDAMENTALS OF HUMAN GEOGRAPHY

Chapter No	Name of the Chapter	Focus Area
1	Human Geography-Nature and Scope	Human Geography- Definitions, Environmental Determinism, Possibilism and Neodeterminism
2	The World Population-Distribution, Density and Growth	Density of Population - Definition, Factors influencing the distribution of population, Demographic Transition
3	Population Composition	Sex Ratio- Definition and Formula- Age Sex Pyramid
4	Human Development	Human Development- Definition, The Four Pillars of Human Development
5	Primary Activities	Pastoralism - Transhumance, Commercial Livestock Rearing Primitive Subsistence agriculture, Plantation Agriculture, Mining
6	Secondary Activities	Classification of Manufacturing Industries
7	Tertiary and Quaternary Activities	Tertiary, Quaternary and Quinary Activities - Definitions only
8	Transport and Communication	Modes of Transportation, Advantages of road transport, Trans Siberian Railway, North Atlantic Sea Route, Suez Canal, The Rhine waterway, Advantages of Air Transport
9	International Trade	Balance of Trade, Types of International Trade, Types Ports - On the basis of specialised functions
10	Human Settlements	Rural Settlement Pattern on the basis of forms or shape, Problems of Urban Settlements

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PEOPLE AND ECONOMY

1	Population : Distribution, Density, Growth and Composition	Indian Demographic History - Four Phases of Population growth
2	Migration : Types, Causes and Consequences	Types of Migration - International and Internal Migration, Causes of Migration
3	Human Development	Indicators of Human Development- Economic, Health and Social Indicators
4	Human Settlements	Types of Rural Settlements Types of Urban Settlements - Based on evolution
5	Land Resources and Agriculture	Cropping Seasons, Types of Farming , Problems of Indian Agriculture
6	Water Resources	Watershed Management- Definition, Programmes - Haryali, Neeru-Meeru, Arvary Pani Sansad
7	Mineral and Energy Resources	Classification Minerals, Major Minerals (Their uses and Leading Producers) Advantages of non conventional energy sources with examples
8	Manufacturing Industries	Factors influencing the location of industries, Iron and Steel Industries, Major Industrial Regions (Name and Location Only)
9	Planning and Sustainable	Planning - Definition , Two approaches - Sectoral Planning and Regional Planning Sustainable Development - Definition
10	Transport and Communication	Golden Quadrilateral, Advantages of Water Transport, Advantages of Pipeline Transport, Types of Communication - Personal and Mass communication with examples
11	International Trade	Direction of Trade, Sea Ports
12	Geographical Perspective on Selected Issues and Problems	Types and Sources of Pollution - Air, Water, Land and Noise

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GEOLOGY

1. The world of rocks

Igneous rocks - magma and lava,

Plutons- dyke, sill and batholith

Classification of igneous rocks- plutonic, hypabyssal and volcanic rocks

Textures of igneous rocks-granularity (coarse, medium and fine grained rocks), phaneritic and aphanitic textures, crystallinity-holocrystalline, glassy and frothy textures.

Compositional classification of igneous rocks-felsic, mafic and ultramafic rocks.

Common igneous rocks - granite, gabbro, dolerite, basalt and dunite.

Sedimentary rocks- formation of clastic and non clastic sedimentary rocks.

Textures of sedimentary rocks- terms related to grain size (clay, silt, sand and gravel), rounding and sorting.

Sedimentary structures- bedding/stratification, ripple marks, mudcracks, rain drop marks.

Common sedimentary rocks- Conglomerate, sandstone, shale and limestone.

Metamorphism- Agents of metamorphism

Common metamorphic rocks-slate, schist, gneiss, marble, quartzite and charnockite.

The concept of rock cycle.

2. Economic mineral deposits

Mineral, ore and gangue,

Names of ores of common metals- hematite, magnetite, chalcopyrite, bauxite, galena, pyrolusite, ilmenite and monazite.

Mineral based industries in Kerala.

Uses of major industrial minerals- mica, gypsum, asbestos, graphite and clay.

3. Fossil fuels

Coal, petroleum and natural gas.

Properties of coal- calorific value and fixed carbon

Origin of coal- Coalification process

Types of coal.

Chemical properties and products of petroleum.

6. Geology and environment

Effects of mining- deforestation, landslides, water pollution, lowering of water table, air and sound pollution, damage to habitat and biodiversity,

Impacts of sand mining on environment.

Major sources of contamination of ground water.

Green house effect and global warming- major consequences of global warming.

Resources- natural and artificial resources, renewable and non-renewable resources.

Conservation of natural resources for sustainable development.

7. Earthquakes

Earthquake related terminologies- definition of focus, epicenter, seismology and seismic waves.

Tectonic & Non Tectonic causes of earthquakes.

Seismic waves- Body waves (primary and secondary waves) & surface waves

Difference between seismograph and seismogram.

Magnitude and intensity, Richter and mercalli scales of earthquake (Basics only).

Effects of earthquakes-damage to structures, tsunami, fire, landslides and liquefaction.

8. Geological hazards and disaster management

Basic concepts in disaster management- hazard, disaster, vulnerability, risk and capacity.

Phases of disaster management- preparedness, response, recovery and mitigation (Basics only).

Causes and mitigation of flood hazards.

Types of volcanoes and effects of volcanoes

Causes and mitigation of landslides.

Mitigation of coastal erosion.

STATISTICS

1. Correlation Analysis

Meaning of Correlation, Types of Correlation - Positive, Negative, Zero. Methods of studying Correlation – Scatter diagram, coefficient of correlation, Karl Pearson's coefficient of correlation, Spearman's Rank correlation (non repeated only).

2. Regression Analysis

Concept of Regression, Regression Lines, Equation of Regression lines, Properties of regression coefficients.

3. Elementary Calculus

First derivative and Second derivative of simple linear functions. Integration of simple functions. Definite integrals.

4. Random Variables

Random Variables- Discrete and Continuous. Discrete Random Variables -Probability mass function (pmf), Cumulative Distribution Function (cdf). Mean, Variance and their properties. Continuous Random Variables - Probability density function (pdf), properties of pdf.

5. Discrete Probability Distributions

Binomial Distribution-pmf, mean and variance. Poisson Distribution-pmf, mean and variance.

6. Normal distribution

Normal Probability Density function, Mean and Variance, Normal curve and its properties. Standard Normal Distribution, Z – transformation and Z – score, Standard Normal Tables, simple problems based on Standard Normal Tables.

7. Sampling Distributions

Parameter and Statistic, Sampling Distribution, Determination mean of sample mean (SRSWOR).

8. Estimation of parameters.

Statistical inference, Estimation of Parameters, Point Estimation, Properties of a Good Estimator -Unbiasedness, Consistency, Sufficiency and Efficiency.

9. Testing of Hypothesis

Statistical Hypothesis, Test statistic and Critical Region, Type I and Type II Errors, Level of Significance and Power of Test, Test for significance of Single Mean (large sample only).

10. Analysis of Variance

Causes of variations, Assumptions underlying ANOVA, One way classification by using ANOVA Table.

11. Statistical Quality Control

Meaning of Quality, Causes of variations, Variable Control Charts (\bar{x} chart only)

12. Time Series Analysis

Components of Time series, Trend analysis- Method of semi averages, moving averages.

13. Index Numbers

Types of Index numbers- Simple Index Number (Simple AM), Simple Aggregate Method, Weighted Index number (Laspeyre's, Paasche's, Fisher's Index Numbers). Uses of Index Numbers.

ACCOUNTANCY WITH ANALYSIS OF FINANCIAL STATEMENTS

Part I ACCOUNTANCY

No.	Name of unit and Focus Areas
1	Accounting for Not-for-Profit Organisation Meaning and Characteristics of Not-for-Profit Organisation Accounting Records of Not-for-Profit Organisations Receipts and Payments Account – Salient Features Preparation of Receipts and Payments account Preparation of Income and Expenditure Account Distinction between Income & Expenditure Account and Receipts and Payments Account Treatment of Peculier items - Subscriptions and Special Funds
2	Accounting for Partnership – Basic Concepts Nature of partnership Partnership deed and its contents Provisions of Partnership Act relevant for Accounting Maintenance of Capital Accounts of Partners Distinction between Fixed and Fluctuating Capital Accounts Profit & Loss Appropriation Account Calculation of Interest on drawings
3	Reconstitution of Partnership – Admission of a Partner Modes of Reconstitution of a Partnership Firm Admission of a New Partner New profit sharing ratio & Sacrificing ratio Goodwill – Factors Affecting the value of goodwill Methods of valuation of goodwill (Average Profit & Super profit Methods) Treatment of goodwill (When the new Partner brings goodwill in cash.) Adjustment for Accumulated Profits and Losses Revaluation of Assets and Reassessment of Liabilities Preparation of Revaluation account, Partners Capital Account & Balance sheet
4	Reconstitution of Partnership -Retirement & Death of a partner New profit sharing ratio & Gaining ratio Adjustment for Revaluation of Assets and Liabilities Adjustment of Accumulated Profits and Losses Disposal of Amount due to Retiring Partner Preparation of Partner's Loan Account
5	Dissolution of Partnership Firm Dissolution of Partnership Dissolution of a Firm – Modes of dissolution Distinction between Dissolution of partnership and dissolution of firm Preparation of Realisation A/c

Part II

COMPANY ACCOUNTS AND ANALYSIS OF FINANCIAL STATEMENTS

No. Name of unit and Focus Areas

1 Accounting for share capital

Features and types of companies
Share capital and its categories
Nature and classes of shares
Issue of shares – basic journal entries
Calls in arrears and calls in advance
Issue of shares at par and at premium
Over subscription
Under subscription
Forfeiture of shares

2 Issue and redemption of debentures

Meaning and types of debentures
Difference between shares and debentures
Issue of debentures for cash
Redemption of debentures – Different ways (Theory only)

3 Financial statements of a company

Meaning and types of Financial Statements
Objectives of Financial Statements
Limitations of Financial Statements

4 Analysis of financial statements

Objectives of Analysis of Financial Statements
Tools of Analysis of Financial Statements
Comparative statements
Common size statements
Limitation of Analysis of Financial Statements

5 Accounting Ratios

Meaning, advantages and limitations of ratio analysis
Liquidity ratio (Current ratio and Liquid ratio)
Solvency ratio (Debt equity ratio and Proprietary ratio)
Activity ratio (Inventory turnover and Working capital turnover ratio)
Profitability ratio (Gross Profit Ratio, Net Profit Ratio)

6 Cash flow statements

Meaning of Cash flow statements
Classification of activities for preparation of Cash flow statements
Limitation of Cash flow statements

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ACCOUNTANCY WITH COMPUTERISED ACCOUNTING

Part I ACCOUNTANCY

No.	Name of unit and Focus Areas
1	Accounting for Not-for-Profit Organisation Meaning and Characteristics of Not-for-Profit Organisation Accounting Records of Not-for-Profit Organisations Receipts and Payments Account – Salient Features Preparation of Receipts and Payments account Preparation of Income and Expenditure Account Distinction between Income & Expenditure Account and Receipts and Payments Account Treatment of Peculier items - Subscriptions and Special Funds
2	Accounting for Partnership – Basic Concepts Nature of partnership Partnership deed and its contents Provisions of Partnership Act relevant for Accounting Maintenance of Capital Accounts of Partners Distinction between Fixed and Fluctuating Capital Accounts Profit & Loss Appropriation Account Calculation of Interest on drawings
3	Reconstitution of Partnership – Admission of a Partner Modes of Reconstitution of a Partnership Firm Admission of a New Partner New profit sharing ratio & Sacrificing ratio Goodwill – Factors Affecting the value of goodwill Methods of valuation of goodwill (Average Profit & Super profit Methods) Treatment of goodwill (When the new Partner brings goodwill in cash.) Adjustment for Accumulated Profits and Losses Revaluation of Assets and Reassessment of Liabilities Preparation of Revaluation account, Partners Capital Account & Balance sheet
4	Reconstitution of Partnership -Retirement & Death of a partner New profit sharing ratio & Gaining ratio Adjustment for Revaluation of Assets and Liabilities Adjustment of Accumulated Profits and Losses Disposal of Amount due to Retiring Partner Preparation of Partner's Loan Account
5	Dissolution of Partnership Firm Dissolution of Partnership Dissolution of a Firm – Modes of dissolution Distinction between Dissolution of partnership and dissolution of firm Preparation of Realisation A/C

Part II COMPUTERISED ACCOUNTING

No. Name of unit and Focused Areas

1 Overview of Computerised accounting system

Computerised Accounting system – Meaning
Features of computerised accounting system
Components of computerised accounting system
Codification of Accounts – Types of codes
Merits and Demerits of computerised accounting system

2 Spread Sheet

Features of LibreOffice Calc
Components of LibreOffice Calc
Spread Sheet Operations
Cell references
Functions (Date and Time, Statistical, Logical and Mathematical)

3 Use of spreadsheet in Business Applications

Payroll Accounting
Asset Accounting

4 Graphs and Charts for Business Data

Column chart, Bar chart, Pie Chart
Elements of a Graph/Chart
Advantages of Graphs and Charts

5 Accounting Software Packge - GNUKhata

Creation of organisation
Ledger Creation
System generated ledger accounts
Types of vouchers and Voucher entry

6 Database Management System

Database – Meaning
Database Management System – Meaning
Creating Table in design view

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BUSINESS STUDIES

No. Name of unit and Focused Areas

1 Nature and significance of Management

Meaning and characteristics of management
Objectives of Management
Nature of management – Art, Science and Profession
Levels of management
Co-ordination – the essence of management
Importance of Co-ordination

2 Principles of management

Taylor's Scientific Management
Techniques of Scientific Management
Fayol's Principles of Management

3 Business Environment

Meaning of Business Environment
Importance of Business Environment
Dimensions of Business Environment
Economic environment in India - Liberalisation, Privatisation, Globalisation

4 Planning

Planning – Features
Importance of Planning
Planning Process
Types of Plans

5 Organising

Organising – Meaning
Organisational structure and its types
Formal and Informal organisation - Differences
Delegation and Elements of delegation

6 Staffing

Staffing – Meaning
Staffing process
Sources of Recruitment
Important tests used for Selection of Employees
Training Methods

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7 Directing

Directing – Meaning

Elements of directing – Supervision, Motivation, Leadership, Communication

Maslow's Need Hierarchy Theory

Leadership – Qualities of a good leader

Elements of Communication Process

Formal and Informal communication (Meaning)

8 Controlling

Controlling – Meaning

Controlling process

Techniques of managerial control – Traditional Techniques

9 Financial Management

Financial Management

Financial decisions – Investment decision - Financing decision – Dividend decision (Meaning only)

Capital structure - Meaning

Factors affecting the choice of capital structure

Fixed capital and Working capital (Meaning)

10 Financial Markets

Concept of Financial market

Money market - instruments

Capital market (Meaning)

Distinction between money market and capital market

Stock exchange – Functions

11 Marketing

Marketing and selling

Functions of marketing

Marketing mix – Elements of marketing mix

Pricing – Factors affecting price determination

Advertising – Merits and Limitations

Sales promotion – Commonly used sales promotion activities

12 Consumer Protection

Consumer protection Act

Consumer Rights

Redressal agencies under the Consumer Protection Act

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ECONOMICS

Part. 1 - INTRODUCTORY MICROECONOMICS

Chapter	Focus Area
Chapter 1 Introduction	1.1 A SIMPLE ECONOMY 1.2 CENTRAL PROBLEMS OF AN ECONOMY 1.3 ORGANISATION OF ECONOMIC ACTIVITIES 1.3.1 The Centrally Planned Economy 1.3.2 The Market Economy 1.5 MICROECONOMICS AND MACROECONOMICS
Chapter 2 Theory of consumer Behaviour	2.1 UTILITY 2.1.1 Cardinal Utility Analysis 2.1.2 Ordinal Utility Analysis 2.2 THE CONSUMER'S BUDGET 2.2.1 Budget Set and Budget Line 2.3 OPTIMAL CHOICE OF THE CONSUMER 2.4 DEMAND 2.4.1 Demand Curve and the Law of Demand 2.4.3 Normal and Inferior Goods 2.4.4 Substitutes and Complements 2.4.5 Shifts in the Demand Curve 2.4.6 Movements along the Demand Curve and Shifts in the Demand Curve 2.5 MARKET DEMAND
Chapter 3 Production and costs	3.1 PRODUCTION FUNCTION 3.2 THE SHORT RUN AND THE LONG RUN 3.3 TOTAL PRODUCT, AVERAGE PRODUCT AND MARGINAL PRODUCT 3.4 THE LAW OF DIMINISHING MARGINAL PRODUCT AND THE LAW OF VARIABLE PROPORTIONS 3.7 COSTS 3.7.1 Short Run Costs

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Chapter 4 The Theory of the Firm under Perfect Competition	4.1 PERFECT COMPETITION: DEFINING FEATURES 4.2 REVENUE 4.3 PROFIT MAXIMISATION 4.3.1 Condition 1 4.3.2 Condition 2 4.3.3 Condition 3 4.3.4 The Profit Maximisation Problem: Graphical Representation 4.4 SUPPLY CURVE OF A FIRM 4.4.1 Short Run Supply Curve of a Firm 4.4.2 Long Run Supply Curve of a Firm 4.4.3 The Shut Down Point 4.4.4 The Normal Profit and Break-even Point
Chapter 5 Market Equilibrium	5.1 EQUILIBRIUM, EXCESS DEMAND, EXCESS SUPPLY 5.2 APPLICATIONS
Chapter 6 Non-competitive Markets	6.1 SIMPLE MONOPOLY IN THE COMMODITY MARKET 6.1.1 Market Demand Curve is the Average Revenue Curve 6.1.2 Total, Average and Marginal Revenues

Part .2 -INTRODUCTORY MACROECONOMICS

Chapter	Focus Area
Chapter 1 Introduction	1.1 EMERGENCE OF MACROECONOMICS
Chapter 2 National Income accounting	2.1 SOME BASIC CONCEPTS OF MACROECONOMICS 2.2.1 The Product or Value Added Method 2.2.2 Expenditure Method 2.2.3 Income Method 2.2.4 Factor Cost, Basic Prices and Market Prices 2.2 CIRCULAR FLOW OF INCOME AND METHODS OF CALCULATING NATIONAL INCOME 2.4 NOMINAL AND REAL GDP
Chapter 3 Money and Banking	3.1 FUNCTIONS OF MONEY 3.2 DEMAND FOR MONEY AND SUPPLY OF MONEY 3.2.1. Demand for Money 3.2.2. Supply of Money

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<p>Chapter. 4 Determination of Income and Employment</p>	<p>4.1 AGGREGATE DEMAND AND ITS COMPONENTS 4.1.1. Consumption 4.1.2. Investment 4.2 DETERMINATION OF INCOME IN TWO-SECTOR MODEL 4.3 DETERMINATION OF EQUILIBRIUM INCOME IN THE SHORT RUN 4.3.1 Macroeconomic Equilibrium with Price Level Fixed 4.3.2 Effect of an Autonomous Change in Aggregate Demand on Income and Output 4.3.3 The Multiplier Mechanism</p>
<p>Chapter 5 Government Budget and the Economy</p>	<p>5.1 GOVERNMENT BUDGET — MEANING AND ITS COMPONENTS 5.1.1 Objectives of Government Budget 5.1.2 Classification of Receipts 5.1.3. Classification of Expenditure 5.2 BALANCED, SURPLUS AND DEFICIT BUDGET</p>
<p>Chapter 6 Open Economy Macroeconomics</p>	<p>6.1 THE BALANCE OF PAYMENTS 6.1.1 Current Account 6.1.2 Capital Account 6.2 THE FOREIGN EXCHANGE MARKET 6.2.1 Foreign Exchange Rate 6.2.2 Determination of the Exchange Rate</p>

MUSIC

Sl. No	UNIT	FOCUS AREA
1	CLASSIFICATION OF JANYA RAGAS	1.1 Introduction 1.2 Varjya ragas 1.3 Shadava, Audava and Svarantara ragas 1.4 Vakra ragas 1.6 Upanga ragas and Bhashanga ragas 1.8 Ghana-Naya-Desya ragas
2	MUSICAL FORMS	2.2 Varnam 2.2.1 Tanavarnam 2.3 Kirtana 2.4 Kriti
3	MUSIC OF KERALA	3.2 SopanaSangita 3.2.1 Ragas employed in Sopana Sangeetha 3.2.2 Theme 3.2.3 Tala 3.2.4 Prominent Musicians 3.6 Folk Music Of Kerala 3.6.1 Songs belonging to the rustic variety 3.7 Ceremonial Songs 3.8 Tiruvathira or KaikottikkaliPattu 3.11 MargamkaliPattu 3.12 MappilaPattu
4	MUSICAL INSTRUMENTS	4.1 Introduction 4.2 Stringed instruments 4.3 Wind instruments
5	MUSIC CONCERTS	5.2 Vocal concert 5.3 Instrumental concert
6	COMPOSERS-TRINITY	6.1 Introduction 6.4 Compositions Of Tyagaraja 6.2.1 Introduction 6.2.3 Dikshitar's Last Days 6.2.4 Dikshitar's Contributions 6.2.7 Group Kritis of Dikshitar 6.3.1 Introduction 6.3.2 Early life of SyamaSasthri 6.3.4 Syama Sasthri's contributions 6.3.7 Syama Sasthri's style 6.3.8 Navaratnamalika
7	RAGALAKSHNA	7.1 Mayamalavagaula 7.4 Mohanam 7.6 Bilahari

GANDHIAN STUDIES

No.	Chapter Name	Focus Points
1	Hind Swaraj or Indian Home Rule	Historical Background. Influences. Contents. Gandhi's concept of Swaraj and Parliamentary Democracy. Gandhi's views on Civilisation. Characteristics of True Civilisation. Gandhi's critique of Modern Civilisation. Machinery
2	Educational Philosophy of Mahatma Gandhi	Gandhi's New Scheme of Education and definition. Wardha Scheme of Education. Aims of Gandhian Education. Features of Wardha Scheme of Education. Content of Basic Education. Merits of Basic Education. Influences of Gandhi on Education Commissions.
3	Gandhian Vision of Peace	Violence and its various forms. Concept of Peace, negative peace and positive peace. Gandhian notion of peace. Conflict. Types of conflict. Conflict resolution and various methods of conflict Resolution. Gandhian method of conflict resolution.
4	Non-violent Social Movements and Social Change	Social movements and different types. Concept and definition of social change. Gandhi's views and methods of social change. Gandhian Social action in India
5	Rural Reconstruction	Concept, objective, elements and dimensions of rural development. Gandhiji's views and strategies of rural reconstruction. MGNREGA and Kudumbasree
6	Rural Administration	Gandhian vision of Panchayati Raj. Balwantrai Mehta Committee, Ashok Mehta committee, P K Thungon Committee. 73 rd Amendment Act and its features. Gram Sabha
7	Gandhian vision of Development	Development in Crisis, Displacement and Marginalisation. Sustainable development. Gandhian model of development.
8	Mahatma Gandhi and Environment	Environmental Crisis. Depletion of Natural Resources, Consumerism. Environmental Pollution- Air, Water and Soil. Environmental Movements in India – Chipko, Navadhanya and NBA. Appropriate Technology. Relevance of Gandhi's Environmental Thought

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JOURNALISM

No.	Unit	Focus Area
1	Writing for Magazines	Difference between newspaper and magazine General interest magazines & Special interest magazines , Cover Story Structure of a feature Types of features
2	Magazine Editing and Production	Principles of magazine Editing Principles of magazine design, Elements of magazine design Functions of layout
3	Writing and Production for Radio	Broadcast technologies Types of radio broadcasting News Bulletin Types of Radio Programmes, Digital recording Qualities of a good radio presenter Radio news reader Radio Jockey
4	Television news And video Production	1.Television in India 2.Making of a television or video programme (Stages of Production) 3.Writing for television news cast.
5	Film Appreciation	Famous personalities behind the film such as Eadweard Muybridge, Lumiere Brothers, David W.Griffith ,Charlie Chaplin The grammar of Cinema.
6	New Media Concepts And Applications	Characteristics of Online journalism User generated content
7	Basics of Technical Writing	Definition of Technical Writing Structure of a user manual
8	Advertising	Functions of advertising Dysfunctions of advertising Types of advertisements Components of a display advertisement
9	Public Relations and Corporate Communication	The role of public relations officer Tools for communication Corporate Communication Definitions of corporate communication Functions of corporate communication New media tools

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SOCIOLOGY

UNIT	FOCUS AREA
1. INTRODUCING INDIAN SOCIETY	Advantages and disadvantages of prior knowledge in sociology- learn to unlearn-Self reflexivity- Social map- commonsense knowledge - commonsense Map-
2.THE DEMOGRAPHIC STRUCTURE OF THE INDIAN SOCIETY	Demography- formal and social – Theories of demography- Common concepts and indicators-
3. SOCIAL INSTITUTIONS: CONTINUITY AND CHANGE	Caste in the past- caste in the present- Classification of Tribal Societies -National development versus Tribal development- Family Types of family.
4. THE MARKET AS A SOCIAL INSTITUTION	Commoditisation and Consumption- Globalisation of Market – Virtual market- Debate on Liberalisation (Market versus State)
5. PATTERNS OF SOCIAL INEQUALITY AND EXCLUSION	Social Inequality and Exclusion- Untouchability – O B C- Adivasi Struggle- Struggle for women's equality and rights - the struggles of the Disabled.
6.THE CHALLENGES OF CULTURAL DIVERSITY.	Nation and Nation States- Cultural diversity and India- Communalism - Secularism and the Nation State.
7. STRUCTURAL CHANGES.	Urbanisation and Industrialisation in colonial experience- Urbanisation and Industrialisation in Independent India.
8.CULTURAL CHANGES.	Sanskritisation, Westernisation, Modernisation and Secularisation.
9.THE STORY OF INDIAN DEMOCRACY.	Ideals of Panchayat Raj – Powers and Responsibilities of panjayat- Panchayat Raj in tribal area- Political parties , pressure groups and Democratic politics.
10.CHANGE AND DEVELOPMENT IN RURAL SOCIETY	The Impact of land reforms during colonial period- Green revolution and its consequences. Circulation of labour.
11.CHANGE AND DEVELOPMENT IN INDUSTRIAL SOCIETY.	Globalisation, Liberalisation, and Changes in Indian Industry.-Home based work- Strikes and Unions.
12. GLOBALISATION AND COMMUNICATION	Different Dimensions of Globalisation -Globalisation of culture- Gender and Culture- Culture of Consumption.
13.MASS MEDIA AND COMMUNICATION.	Globalisation and the media : Print media, Television , Radio
14.SOCIAL MOVEMENTS	Features of social movement -Sociology and social movements- Types of Social Movements : Reformative, Redemptive, Revolutionary.- The Dalit movement -The tribal movements.

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SOCIAL WORK

Unit No	Unit Name	Focus Area
1	Social work -Primary Methods	1.1 Social case work - Meaning, , objectives, principles, relationship in social case work, Components of social case work, process in social case work 1.2 Social Group work – Meaning, objectives, process, Group Behavior and Group dynamics 1.3 Community organization – Meaning, Process of Community Organization.
2	Social work-Secondary Methods	2.1 Social Action – definition, Strategies, Social Action Groups. 2.2 Social welfare Administration-Process and functions of Social Welfare Administration Organogram 2.3 Social work research – Meaning
3	Leadership and Communication	3.1 Leadership – definition, qualities of leader, Types of leadership. 3.2 Communication- Process of Communication, Barriers of communication.
4	Development and Resource Mobilization	4.1 Development – meaning, Dimension of development 4.2 Community development Meaning- Community Development Programme- MGNREGP 4.4 Participatory Rural Appraisal(PRA) - Resource Map 4.5 Methods of Resource mobilization.
5	Health	5.1 Health – definition of health, Indicators of health. 5.3 Wellness
6	Hygiene and Health Care Services	6.1 Hygiene Meaning 6.2 Pollution Meaning , Prevention and control of Pollution. 6.7 National Health Programmes –National AIDS Control Programme
7	Guidance and Counselling	7.3 Counselling – meaning Counselling Skills.
8	Family Life Education	8.1 Family Life Education –Objectives of Family Life Education 8.2 Sex education – Meaning 8.5 Sexually Transmitted Diseases(STD) 8.8 Gender Equality and Equity
9	International Social Work	9.4 Global Organization in Social work –UNICEF, WHO.

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ISLAMIC HISTORY AND CULTURE

- Unit 1.** The Abbasid Khilafat the cosmopolitan Empire.
- Unit 2.** Muslim khilafath in the Afro- Asian continents.
- Unit 3.** The legacy of Islamic Spain.
- Unit 4.** Muslim World under the Ottomans.
- Unit 7.** Muslim Rule in India- State, Society and Culture.

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PHILOSOPHY

Chapter 1

Philosophising

Doing philosophy

Characteristics of philosophic concepts

Skills to master philosophy

Norms of learning philosophy

Uses of learning philosophy

Chapter 2

Philosophy of Prasthanatraya

Vedas

Upanishads

- Brahman
- Atman
- Brahman-Atman relation
- Mahavakyas

Bhagavat Gita

- Concept of Yoga and Nishkamakarma
- Stitaprajna

Brahma Sutra

Chapter 3

Darsanas

Schools of Indian philosophy (Astika and Nastika Darsanas)

Orthodox schools

- Nyaya Darsana- theory of knowledge, 4 pramanas
- Vaisesika Darsana - The concept of Categories
- Samkhya Darsana - The EvolutionTheory.
- Yoga Darsana - Astanga yoga
- Purva Mimamsa – 6 pramanas
- Uttara Mimamsa:
 - Advaita - levels of existence, concept of Maya
 - Visistadvaita
 - Dvaita - Panchabhedas

Heterodox schools

- Buddhism- Aryasatyas, Astangamarga
- Jainism – Syadvada (7 forms of judgement), Jaina ethics

Chapter 4

Contemporary Indian Thinkers

Characteristics of Modern Indian philosophy

- Swami Vivekananda - Universal Religion
- Mahatma Gandhi – Sarvodaya, Basic tenants of education
- Sri Aurobindo - Integral Yoga
- Sir Mohammad Iqbal - Nature of the Self
- Thinkers in Kerala

Chapter 5

Greek Philosophy

Thales

Heraclitus

Socrates – Dialectical method

Plato – Theory of Ideas

Aristotle – Form and Matter

Chapter 6

Modern Western Philosophy

Characteristics of Modern Western Philosophy

Rationalism

- Rene Descartes - Cogito ergo sum

Empiricism

- John Locke - Rejection of innate ideas, theory of knowledge.

Idealism - definition

Materialism - definition

Chapter 7

Recent Trends in Philosophy

Existentialism

- Characteristics of Existentialism
- Two camps of Existentialism.
- Important concepts discussed by Kierkegaard.

Pragmatism- definition

Chapter 8

Ethics

Definition of ethics.

Plato's Cardinal Virtues

Theories of Punishment

Chapter 9

Applied Ethics

Definition of Applied Ethics

Professional Ethics – Definition

- Teacher and student Ethics

Cyber Ethics

Environmental Ethics

- Role of an environmental Philosopher

The problem of E- waste

Chapter 10

Philosophy of Religion

Religion: Meaning and Definition

Nature and scope of Philosophy of Religion

Theories of Religion

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HOME SCIENCE

Chapter 1 – BASIC NUTRITION

1. Definition and Dimensions of health
2. Optimum and malnutrition
3. Classifications of
 - a. Carbohydrate
 - b. Protein
 - c. Lipids
 - d. Minerals
 - e. Vitamins
4. Functions of
 - a. Carbohydrates
 - b. Proteins
 - c. Vitamin A
 - d. Calcium
 - e. Iron
5. Deficiency diseases
 - a. PEM
 - b. Vitamin A
 - c. Vitamin C
 - d. Ca/ Vitamin D
 - e. Iron
6. Significance of dietary fibre

Chapter 2 - A GUIDE TO HEALTHY LIVING

1. Classification of Food
2. Objectives of Cooking Food
3. Methods of Cooking
 - Steaming
 - Pressure cooking
 - Electromagnetic waves
4. Conservation of nutrients
5. Junk foods
6. Advantages of
 - Germination
 - Fermentation
 - Fortification

Chapter 3 – NUTRITION FOR SELF AND FAMILY

1. Importance of Meal Planning
2. Principles of Meal Planning
3. Factors affecting Meal Planning
4. Expand RDA, ICMR, RDI
5. Reference Man, Reference Woman
6. RDA for:
 - a. Adult Man moderate work

- b. Adult Woman moderate work
- c. Pregnant Woman
- d. Lactating Woman 0-6 months
- 7. Factors affecting RDA

Chapter 4 – Diet Therapy

- 1. Definition of Diet Therapy.
- 2. General Objectives of diet therapy
- 3. Modification of Therapeutic diets.
 - a. Qualitative modification (without examples)
 - b. Quantitative modification (without examples)
- 4. Diet in Common diseases
 - Causes and Types of Diarrhoea
 - Types of Fever
- 5. Diet in Nutrition Related Problems
 - a. Obesity - Causes
 - b. Anaemia – Classification
 - i) Morphological classification
 - ii) Aetiological classification

Chapter 5 – FOOD PRESERVATION

- 1. Definition of Food spoilage and Food Preservation
- 2. Meaning of Food spoilage
- 3. Causes of Food spoilage
- 4. Principles of Food preservation
- 5. Methods of Food preservation
 - a. Bacteriostatic methods
 - b. Bactericidal methods

Chapter 6 – INTRODUCTION TO FIBRE SCIENCE

- 1. Classification of fibres
- 2. Fibre Identification
- 3. Properties of Natural fibres.

Chapter 7 – YARN – PRODUCTION AND PROPERTIES

- 1. Types of Yarns
- 2. Conventional spinning
- 3. Chemical spinning
- 4. Yarn properties

Chapter 8 – FABRIC CONSTRUCTION

- 1. Parts of looms
- 2. Characteristics of woven fabrics
- 3. Basic weaves
 - Plain weave
 - Twill weave
 - Satin weave
- 4. Classification of Non-woven fabrics
 - Felts
 - Bonded fabrics
- 5. Other methods of Fabric Construction

- Braided fabrics
- Laces
- Nets
- Stitch bonded fabrics

Chapter 9 – FABRIC FINISHING

1. Importance of finishes
2. Classification of Finishes
3. Common fabric finishes
 - Bleaching
 - Mercerization
 - Singeing
 - Parchmentization
 - Sizing
 - Calendaring

Chapter 10 – FINISHING WITH COLOUR

1. Stages of Dyeing
2. Designing using Dyeing and Printing

Chapter 11 – INTRODUCTION TO EXTENSION EDUCATION

1. Definition Extension education
2. Objectives of Extension education
3. Principles of Extension education
4. Difference between formal and extension education
5. Extension teaching methods
6. Characteristics of Home science extension

Chapter 12 – COMMUNICATION

1. Objectives of communication
2. Elements of communication
3. Types of communication
4. Cone of experience

PSYCHOLOGY

Unit no.	Name of unit	Focus area
1	Variations in Psychological Attributes	<ul style="list-style-type: none"> • Define Intelligence • Theories of intelligence <ul style="list-style-type: none"> ➤ Theory of primary mental abilities ➤ Triarchic theory of intelligence ➤ Theory of multiple intelligence • Assessment of Intelligence <ul style="list-style-type: none"> ➤ Concept of MA, CA and IQ ➤ IQ Calculation ➤ Intellectual giftedness • Types of intelligence tests <ul style="list-style-type: none"> ➤ Individual or group tests ➤ Verbal , Nonverbal or Performance tests ➤ Culture fair or culture biased tests • Intelligence in the Indian tradition
2	Self and Personality	<ul style="list-style-type: none"> • Type approaches to Personality <ul style="list-style-type: none"> ➤ Sheldon, Jung, Friedman and Rosenman • Trait approaches to Personality <ul style="list-style-type: none"> ➤ Allport's Trait theory. ➤ Eysenck's personality theory • Psychodynamic approach <ul style="list-style-type: none"> ➤ Levels of Consciousness ➤ Structure of personality: Id, Ego, Superego. • Assessment of personality <ul style="list-style-type: none"> ➤ Self report measures : MMPI, EPQ ➤ Projective techniques : TAT, Rorschach inkblot test, Draw-a- person test ➤ Behavioural Analysis : Interview, Observation
3	Meeting life challenges	<ul style="list-style-type: none"> • Stress, Eustress, Distress • Types of stress <ul style="list-style-type: none"> ➤ Physical and Environmental stress ➤ Psychological stress ➤ Social stress • Sources of stress : Life events, Flassles, Traumatic events • General Adaptation Syndrome • Psychoneuroimmunology • Stress management techniques <ul style="list-style-type: none"> ➤ Exercise ➤ Biofeedback ➤ Relaxation techniques ➤ Meditation procedures ➤ Creative visualisation

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4	Psychological disorders	<ul style="list-style-type: none"> • Classification of Psychological disorders • Major Psychological disorders <ul style="list-style-type: none"> ➤ Anxiety disorders ➤ Obsessive-Compulsive and related disorders ➤ Post Traumatic stress disorder(PTSD) ➤ Schizophrenia and symptoms of Schizophrenia ➤ Neuro developmental disorders ➤ Feeding and eating disorders
5	Therapeutic Approaches	<ul style="list-style-type: none"> • Behavioural Techniques <ul style="list-style-type: none"> ➤ Aversive Conditioning ➤ Token Economy- Systematic desensitisation • Cognitive Therapy <ul style="list-style-type: none"> ➤ Rational Emotive Therapy ➤ Cognitive Behaviour Therapy (CBT) ➤ Becks's Cognitive Therapy • Ethics in Psychotherapy
6	Attitude and social cognition	<ul style="list-style-type: none"> • Nature and components of Attitude <ul style="list-style-type: none"> ➤ The A-B-C components of Attitude Affective, Behavioural and Cognitive components
7	Social influence and group process	<ul style="list-style-type: none"> • Types of groups <ul style="list-style-type: none"> ➤ Primary and secondary groups ➤ Formal and informal groups ➤ Ingroup and Out Groups • Why do people join groups? <ul style="list-style-type: none"> ➤ Security, status, self-esteem, goal achievement, satisfaction of one's psychological and social needs, provide knowledge and information
8	Psychology and Life	<ul style="list-style-type: none"> • Promoting pro-environmental behaviour • Impact of Television on Behaviour
9	Developing Psychological Skills	<ul style="list-style-type: none"> • Observational skills <ul style="list-style-type: none"> ➤ Naturalistic Observation ➤ Participant Observation • Advantages and disadvantages of observation

ANTHROPOLOGY

Unit 1 Anthropological Research Methods and Techniques
<p>Scientific Research in Anthropology</p> <ul style="list-style-type: none"> • Science and Scientific Method • Characteristic of Scientific Method • Steps of Scientific Method • Subjectivity and Objectivity <p>Method, Methodology, Approach and Perspectives</p> <ul style="list-style-type: none"> • Approaches of Anthropological Research • Anthropological Data <p>Methods in Anthropology</p> <ul style="list-style-type: none"> • Observation as a method • Case Study method • Geneological Method • Survey Method <p>Tools and Techniques of Anthropological Research</p> <ul style="list-style-type: none"> • Questionnaire • Interview • Schedule
Unit 2 Anthropological Theories of Culture
<p>Cultural Evolutionism</p> <ul style="list-style-type: none"> • Classical Evolutionism-British , American And German • Neo Evolutionism- British and American <p>Diffusionism</p> <ul style="list-style-type: none"> • British, German and American <p>Functionalism</p> <p>StructuralFunctionalism</p> <p>Structuralism</p> <p>Culture and Personality School of Thought</p>
Unit 3 Civilisational and Village Studies in Anthropology
<p>Civilisational School in Anthropology</p> <ul style="list-style-type: none"> • Folk Society • Peasant Society • Folk -Urban Continuum <p>Tradition</p> <ul style="list-style-type: none"> • Great Tradition and Little Tradition • Universalisation and Parochialisation <p>Dynamics of Village life</p> <ul style="list-style-type: none"> • Culture of Poverty • Rural Cosmopolitan • Dominant Caste • Sanskritisation • Westernisation • Sacred Complex • Jajmani System

Unit 4 Medical Anthropology
Meaning and scope of Medical Anthropology <ul style="list-style-type: none"> • Concept of Health illness and disease • Relation Among Culture Health and Disease Medical Pluralism in India <ul style="list-style-type: none"> • Traditional and Modern Medical Systems • Ethnomedicine
Unit 5 Ecological Anthropology
Meaning and scope of Ecological Anthropology <ul style="list-style-type: none"> • Population ecology, Cultural ecology and Ethno ecology • Environmental Determinism and Environmental Possibilism. Adaptation <ul style="list-style-type: none"> • Types of Adaptation • Stages of Eco -cultural Adaptation • Environmental movements
Unit 8 Tribes and Marginalised people
<ul style="list-style-type: none"> • Concept of Tribe • Scheduled tribe • Features of Tribal life • PVTGs • Tribes of kerala • Concept of Scheduled Caste