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NO.3-21/FBISE/RES/CC/266

14 October 2020

NOTIFICATION

In pursuance of Ministry of Federal Education and Professional Training Notification No.F.4(5)/2015-NCC/RE dated 13 October 2020 reduced syllabus for Classes 11th & 12th for HSSC Annual Examination 2021 is uploaded on FBISE's website <u>www.fbise.edu.pk</u>. However, there will be no change in the format and style of question papers.

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Reduced Syllabus HSSC-I and HSSC-II Examination 2021 under FBISE



National Curriculum Council

Ministry of Federal Education and Professional Training

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REDUCED SYLLABUS ENGLISH COMPULSORY HSSC-I

UNITS INCLUDED

Title

UNITS EXCLUDED

No. Title 6. Mother to Son (poem)

8. Wasteland

- 11. The Importance of Family
- 16. School Vs Education
- 18. A Dream Within A Dream
- 19. Drug Abuse in the Youth of Pakistan

- 1. Responsibilities of the Youth
- 2. His First Flight

No.

- 3 Good Timber (poem)
- 4 From Mother...With Love
- 5 It's Country for Me
- 7 Choice of Career
- 9 The White Lamb
- 10 The World is Too Much with Us (poem)
- 12 The Blanket
- 13 Ozymandias (poem)
- 14 A Long Walk Home
- 15 University Days
- 17 What You Do is What You Are
- 20 How to Take a Job Interview
- 21 The Road Not Taken (poem)
- 22 The Progress

NOTE: The inclusion & exclusion of units encompass the relevant exercises also.

REDUCED SYLLABUS ENGLISH ELECTIVE-XI

NOTE: There will be no change in the following fields:

- 1. Any essay of relatively advance nature
- 2. A passage of fairly advanced prose for comprehension and precis writing
- 3. Grammar Synthesis Idioms

Section "A" Functional English

- 1. Any essay of relatively advanced nature
- 2. A passage of fairly advanced prose followed by:
 - a. A series of comprehension questions
 - b. A precis of all parts of the passage

Section "B" Text

3.	Poetry:	The Magic Casement: Book-II (Poem No.5, 7, 11, 12, 16, 19 and 20 are
		excluded)
4.	Prose:	A new Anthology of Essays (Essay No.3, 5, 8, 11, 12, 13, 19 and 22 are
		excluded)
5.	Grammar:	Synthesis/Idioms

	زمی گیارہ	و لا اعت ا	نصاب ارہ برائے جما			
مصنف	عنوان	شم ار	ىنف	24	۔ نثر: عنوان	حص شر ما
مولوی ذکا اللہ	جھوٹے آدمی	2	سيد احمد	سى	اپنی مدد آپ	ر 1
خديجہ مستور	آنگن	8	ں ٹر سید عبد	≥ر ڈا≥	پاكستاني قوميت كا مسئلہ	4
ابنِ انشا	شیراز اور کنار آب دکنا داده غیره	11	اجہ معین ن	الله الدين	تعليم بالغال	10
(ا)مرزا غالبً (ب)علامہ اقبالؓ	ر <u>ب</u> با وحيرا مكاتيب	14	ں ر احمد بلوچ	بشي	لالچی وزیر (ترجمہ)	13
(.)					به نظم:	حص
شاعر	وان	. عذ	شم ار	باعر	عنوان ش	شر ما
محسنَ کاکورہ ی	د	نعن	2	اہر القادری	حمد ما	ر 1
روی میر انیس حفیظ	مراد (مرثیہ) ف سحر	دُر جلو	5 9	لیرَ اکبر آبادی برَ الہ آبادی	شہر آشوب نظ نصيحت اخلاقي اك	3 8
جب عربی عبد الرحمٰن بابا/مترجم طم	لاص	اخا	ى 13	يد ضمير جعفر	یہ سڑ کیں س	11

حصہ غزل: فقیرانہ آئے صدا کر چلے قتل عاشق کسی معشوق سے کچھ دور نہ تھا -1 میر تقی میرّ خواجہ میر درد -2 ناگہ چمن میں جب وہ گل اندام أ گیا غلام ہمدانی مصحفیّ -3 ہزاروں خواہشیں ایسی کہ ہر خواہش یہ دم نکلے '' مرزا غالب َ آئینہ اپنی نظر سے نہ جدا ہونے دو دائخ دہلوی حذ ا شدہ عنوانات کے مصنفین، شعراء کا تعار اور مشقی سوالات بھی شاملِ نصاب نہیں ہوں گے۔ -4 -5 نوٹ: صنعتوں اور اصناف سخن کی تعریف اور پہچان قواعد و انشا: صنائع: صنعتِّ تَلميح، صنعت مراعاة النظير، صنعت تضاد، صنعت حسن تعليل، صنعتِ تضمين، صنعتِ لف و نشر اصناف سخن: حمد، نعت، مرثيه، شهر آشوب، غزل، نظم اور غزل ميں فرق مضمون، ناول، ڈراما، سفرنامہ، لوک کہانی، مکتوب نگاری، مطلع، مقطع، قافیہ، ردیف، تشبیہ، استعاره، روزمره، محاوره درخواست/خط 3۔ تلخيص -2 ر و داد/مکالمہ -1 حصم انشا يردازي

سبق	نمبر شار
اردونثر پرایک نظر	1
امراؤجانادا	4
خدا کی بستی	5
آ تکن	6
زيوركا ڈبا	7
رشم ورواج	11
ميبل اورميں	14
نظم	نمبرشار
نظم حمد	نمبرشار 2
نظم حمد نعت	نمبرثنار 2 3
نظم حمد نعت شوق ِشهادت	نمبرثنار 2 3
نظم حمر نعت شوق شہادت جاوید کے نام	نمبرشار 2 3 4 7
نظم حمد نعت شوقِ شہادت جاوید کے نام شاہین	نمبرشار 2 3 4 7 8
نظم حمد نعت شوقِ شہادت جاوید کےنام شاہین	نمبرثار 2 3 4 7 8 10
نظم حمد نعت شوق شہادت جاوید کے نام شاہین جوگ زندگی سے ڈرتے ہو؟	نمبر شار 2 3 4 7 8 10 13
نظم حمد نعت شوق شہادت جاوید کے نام جوگی زندگی سےڈرتے ہو؟ قطعات	نمبرثار 2 3 4 7 8 10 13 16
	سبق اردونثر پرایک نظر امراؤجان ادا خدا کیستی آمکن زیورکا ڈبا رسم ورواج میبل اور میں

اد بی مضامین اصناف نظم ونثر: منفرن ، رباعی، قطعه، مرثیه نظم، آزادنظم، قصیده، حمد، نعت ،منقبت ، داستان ، ناول مختصرا فسانه، ڈراما، خاکه، انشائیی، سوانح شخصیت نگاری (خاکه)

- ١٢] يَآلَيُهَا الَّذِينَ الْمَنُواكُتِبَ عَلَيُكُمُ الصِّيَامُ

١٢. ٱلصِّدُقْ يُنْجِى وَ الْكِذُبُ يُهُلِكُ

اسلامیات اختیاری گیارہویں جماعت کے لیے

الف۔ القرآن الحکیم: سورۃ البقرہ ایک سے پانچ رکوع تک ب۔ الحدیث: ایک سے پندرہ احادیث اربعين امام نودي ج۔ سیاسی و ثقافتی تاریخ اسلام، سیرت النبیﷺ، خلافت ر اشدہ فقہ اسلامی (اسلامی د۔ قانون کے ماخد) ضميمہ پرچہ اول الف- القرآن الحكيم (سورة البقره) تعارف، وحى، مكى اور مدنى سورتوں كى خصوصيات 2- سورة البقره ايك سر پانچ رکوع تک ترجمہ و تشریح ب۔ الحدیث حدیث و سنت کا مفہوم، اہمیت ایک سے پندرہ احادیث اربعین -2 امام نودي فقط ترجمه سیاسی و ثقافتی تاریخ اسلام -で سيرت النبيﷺ -2 تبليغ اسلام و مشكلات، بجرت حبشه و مدينه، غزوات، صلح حديبيه، فتح مكه، حجة الوداع، أنحضرت السانيت مصلح اعظم انسانيت خلافتِ ر اشده -3 حضرت ابوبكر صديقٌ: انتخاب خلافت، فتنه ارتداد اور باغيوں كى سركوبى، سیرت و کارہائے نمایاں حضرت عمر فاروقٌ: اشاعت و فروغ اسلام، اصلاحات، سياسي، فوجي، -2 عدالتی اور معاشرتی، سیرت و اخلاق حضرت عثمان غنيٌ: اشاعت و فروغ اسلام، شبادت، سيرت و اخلاق -3 حضرت على عرم الدرجه: نظام حكومت، شهادت، سيرت و اخلاق -4 خلفائے راشدین کے عہد میں اسلام کی ترقی اس کے سیاسی سماجی اقتصادی -5 اور تمدني پېلو خلافت راشده اور انتخاب -6 فقم اسلامي (اسلامي قانون) ماخذ د۔ 2۔ الحدیث قياس القرآن -4 3- اجماع -1

REDUCED SYLLABUS ISLAMIC HISTORY-XI

I. Pre-Islamic Arabia

Religious, Social Economic and Political conditions of Pre-Islamic Arabia

II. Early Life of Rasullah (S.A.W.)

- 1. Birth and family background of Rasullah (S.A.W)
- 2. Life before NUBUWAHT
- 3. Life after declaration of NUBUWAHT

III. Spread of Islam at Makkah

- 1. Migration to Habshah
- 2. Journey to Taif and Miraj
- 3. The pledges of Aqaba

IV. Spread of Islam at Madina

- 1. Hijrat and its significance
- 2. Islamic brotherhood
- 3. Misaq-e-Madina
- 4. Battle of Badr, Uhad, Ahzab, Khyber, Hunain and Tabuk
- 5. Baite-Rizwan
- 6. Conquest of Makkah
- 7. HajjatulWidda and the Last Sermon features

V. Seerat-un-Nabi (S.A.W)

Muhammad Rasullah (S.A.W)

- 1. As a Prophet
- 2. As a Statesman

VI. Khalafat-e-Rashdah

- 1. Hazrat Abu Bakar Siddique: Introduction, initial difficulties, its remedies and contribution towards Islam
- 2. HazratUmer Farooq: Introduction, Conquest (Qadsia and Yermook), administrative system, contribution towards Islam and achievements
- 3. Hazrat Usman Ghani: Introduction, contribution towards Islam, martyrdom its causes, events and results
- 4. Hazrat Ali Murtaza: Introduction, difficulties and events
- 5. Achievements of Khalafat-e-Rashdah

REDUCED SYLLABUS HISTORY OF PAKISTAN-XI

I. Difficulties Faced by Pakistan after Independence

- 1. Red Cliff's Award and its injustice
- 2. Accession of Princely States Kashmir
- 3. Refugee's problem
- 4. Administrative issues
- 5. Water dispute

II. Constitutional Developments in Pakistan upto 1962

- 1. Objective Resolution
- 2. Salient features of:
 - a. 1956 Constitution
 - b. 1962 Constitution Salient features

III. Socio-Political Developments in Historical Perspective During 1962 – 1969

- 1. Formation of one Unit
- 2. Imposition of Martial Law
- 3. Industrial and agriculture reforms
- 4. 1965 War in relation to:
 - i. The aggressive and inflexible attitude of Indian governments towards Pakistan

IV. Anatomy of the Happenings from 1969 to 1971

- 1. Fall of Ayub's regime and Yahyah's Marshal Law
- 2. Elections 1970
- 3. Impact of 1970's elections
- 4. Sheikh Mujeb's six points
- 5. Army action and role of political parties
- 6. Causes and lessons learnt from the debacle of Pakistan 1971

V. Pakistan Foreign Policy

- 1. Main features of foreign policy
- 2. Relations bonds with neighbouring countries
- 3. Relations with Saudi Arabia

REDUCED SYLLABUS PHYSICS-XI

01. MEASUREMENTS

- 1.2 Supplementary units (Radian, Steradian)
- 1.8 Precision and accuracy
- 1.9 Dimensions of physical quantities.

02. VECTORS AND EQUILIBRIUM

- 2.6 Addition of vectors by rectangular components.
- 2.7 Product of vectors.
- 2.9 Torque
- 2.10 Equilibrium.
- 2.11 Conditions of equilibrium.

03. FORCES AND MOTION

- 3.8 Linear momentum.
- 3.9 Collisions
- 3.11 Projectile Motion.

04. WORK AND ENERGY

- 4.1 Work done by a constant force, work done by a variable force.
- 4.2 Work done in a gravitational field.
- 4.6 Absolute Potential energy.
- 4.7 Escape velocity.

05. ROTATIONAL AND CIRCULAR MOTION

- 5.1 Angular Motion
- 5.2 Relation between angular and linear quantities.
- 5.3 Centripetal Force and Centripetal Acceleration
- 5.4 Torque and moment of inertia.
- 5.5 Angular momentum and torque.
- 5.6 Conversation of Angular Momentum
- 5.7 K.E of rotation.
- 5.8 Rolling of a Disc and hoop down the inclined plane.

06. FLUID DYNAMICS

- 6.1 Viscous Fluids
- 6.2 Fluid Friction and Stoke's Law
- 6.3 Terminal Velocity
- 6.4 Equation of continuity.

07. OSCILLATIONS

- 7.4 Circular motion and S.H.M.
- 7.5 Simple Pendulum.
- 7.7 Resonance
- 7.9 Phase
- 7.10 Damped Oscillations

08. WAVES

- 8.4 Speed of sound.
- 8.8 Beats
- 8.9 Reflection of Waves and Phase Change
- 8.10 Stationary Waves.
- 8.11 Transverse Stationary waves in a stretched string.
- 8.13 Resonance of air column and organ pipes.
- 8.14 Doppler effect.

09. PHYSICAL OPTICS

- 9.3 Huygen's Principle.
- 9.4 Coherent Sources.
- 9.5 Interference of Light.
- 9.8 Michelson's interferometer.
- 9.9 Diffraction of Light
- 9.10 Diffraction at a Single Slit
- 9.11 Diffraction grating.
- 9.12 Diffraction of x-rays by crystals.
- 9.13 Polarization of light, Applications of polarized light.

10. THERMODYNAMICS

- 10.5 Thermodynamic System.
- 10.6 Reversible and Irreversible Processes
- 10.7 First law of thermodynamics.
- 10.8 Molar specific heat of a gas.
- 10.9 Heat engine.
- 10.10 Second law of thermodynamics.
- 10.11 Carnot heat engine.
- 10.13 Entropy.
- **NOTE:** All MCQs, short questions and problems relevant to the abovementioned topics are included.

REDUCED SYLLABUS BIOLOGY HSSC-I

NOTE:

2.

- 1. Only topic based relevant MCQs, Short and Long Questions are included.
- 2. All information in side boxes is excluded.

1. CELL STRUCTURE AND FUNCTION

- 1.2 Cell Wall and Plasma Membrane The Boundary Wall
- 1.3 Cytoplasm and Organelles
- 1.4 Prokaryotic and Eukaryotic Cells
- **BIOLOGICAL MOLECULES**

2.3 Carbohydrates

- (Examples of Polysaccharides are excluded)
- 2.4 Proteins
 - 2.4.1 Structure of Proteins (Amino Acids and Peptide Linkages)
 - 2.4.2 Classification of Proteins (Globular and Fibrous Proteins)
 - 2.4.3 Role of Proteins
- 2.5 Lipids
 - 2.5.1 Classification (Acylglycerols)
 - 2.5.2 Properties of Fatty acids
 - (Waxes, Terpenes, Steroids, Prostaglandins are excluded)
- 2.6 Nucleic Acids
 - 2.6.1 Chemical Structure of Nucleic Acids
 - 2.6.3 Watson & Crick Model of DNA
 - 2.6.4 Concept of Gene
 - 2.6.5 RNA

3. ENZYMES

- 3.1 Structure of Enzymes
- 3.2 Mechanism of Enzyme Action
- 3.4 Enzyme Inhibition (Competitive and Noncompetitive Inhibitors)

4. **BIOENERGETICS**

- 4.1 Photosynthesis
 - 4.1.1 Role of Light
 - 4.1.2 Role of Photosynthetic Pigments
 - 4.1.3 Absorption Spectrum and Action Spectrum
 - 4.1.4 Arrangements of Pigments
 - 4.1.5 Role of Carbon dioxide
 - 4.1.6 Role of water
 - 4.1.7 Mechanism of Photosynthesis
 - 4.1.8 Light Dependent Phase
 - 4.1.9 Light Independent Phase
- 4.2 Cellular Respiration
 - 4.2.3 Mechanism of AerobicRespiration
 - 4.2.4 Oxidation of Pyruvates
 - 4.2.5 Kreb's Cycle
 - 4.2.6 Electron Transport Chain
 - 4.2.7 Chemiosmosis & Oxidative Phosphorylation

5. ACELLULAR LIFE

- 5.3 Bacteriophage
- 5.3.1 Structure of Bacteriophage
- 5.3.2 Life Cycle of Bacteriophage
- 5.3.3 Infection Process
- 5.3.4 Replication of Bacteriophage
- 5.3.5 Replication of Bacteriophage in Lysogenic cycle

- (Uses of Bacteriophages in Genetic Engineering is excluded)
- 5.4 Human Immuno Deficiency Virus
- 5.4.1 Structure of HIV
- 5.4.2 Life Cycle of HIV

6. **PROKARYOTES**

- 6.2 Archaea
- 6.3 Bacteria; Ecology and Diversity
- 6.4 Structure; Shape and Size of Bacteria
- 6.5 Modes of Nutrition in Bacteria
- 6.6 Growth and Reproduction in Bacteria

7. PROTISTS AND FUNGI

- 7.2 Major groups of Protists (protozoa, algae, myxomycota, oomycota)
- 7.3 General characteristics of Fungi
- 7.4 Diversity among Fungi (Zygomycota, Ascomycota, Basidiomycota)

8. DIVERSITY AMONG PLANTS

- 8.2 Nonvascular Plants (General characteristics)
- 8.3 Seedless Vascular Plants (General characteristics)
 - 8.3.1 Evolution of Leaf
- 8.4 Seed Plants
 - 8.4.2 Gymnosperms (General characteristics)
 - 8.4.3 Angiosperms (General characteristics and Life cycle)

8.4.6 Inflorescence excluded

9. DIVERSITY AMONG ANIMALS

- 9.1 Characteristics of animals
- 9.2 Criteria for animal classification
- 9.3 Diversity in Animals
 - 9.3.1 Invertebrates
 - 9.3.2 Vertebrates
 - (NOTE: Evolutionary adaptations of invertebrate phyla and of vertebrate classes are **excluded**)

Classification of Chordates excluded

10. FORM AND FUNCTIONS IN PLANTS

- 10.3.1 Uptake of Water by Roots and Pathways
- 10.3.2 Ascent of Sap
- 10.3.3 Opening and Closing of Stomata
- 10.3.4 Translocation of Organic Matter
- 10.6 Growth and Development in Plants
 - 10.6.1 Tissues for Growth Apical and Lateral Meristems
 - 10.6.2 Primary and Secondary Growth
 - 10.7.2 Geotropism and Phototropism
 - 10.7.4 Vernalization

11. DIGESTION

- 11.1 Digestive System of Man
 - 11.1.1 Alimentary Canal; Structural and Functional details

12. CIRCULATION

- 12.1 Blood Circulatory System of Man
 - 12.1.1 Heart
 - 12.1.1.1 Structure of Heart
 - 12.1.1.3 Heartbeat and its Control
 - 12.1.2 Blood Vessels (Arteries, Capillaries and Veins)
- 12.3 Lymphatic System of Man

13. IMMUNITY

- 13.1 First Line of Defense (Skin, Digestive Tract, Air Passageway)
- 13.2 Second Line of Defense The Nonspecific Defenses
 - 13.2.1 Killing Cells of Blood
 - 13.2.2 Protective Proteins

- 13.3
- 13.2.3 Inflammatory Response
 Third Line of Defense The Specific Defenses
 13.3.2 Cell mediated and Antibody mediated immunity Activation of T-Cells excluded

REDUCED SYLLABUS CHEMISTRY-XI

1. STOICHIOMETRY

- Introduction
- 1.1 Mole
- 1.2 Avogadro's Number
- 1.3 PercentageComposition
- 1.4 Excess and LimitingReagents
- 1.5 Percentage Yield

2. ATOMICSTRUCTURE

Introduction

- 2.4 Bohr's Atomic Model and its applications
 - 2.4.1 2.4.5 Derivation of Radius, Energy, Frequency, Wave Length, Wave Number
 - 2.4.6 Defects of Bohr's atomic model
 - 2.4.7 Hydrogen Spectrum
- 2.5 Planck's QuantumTheory_
- 2.7 Quantum Numbers and Orbitals
 - 1. Principle QuantumNumber
 - 2. Azimuthal QuantumNumber
 - 3. Magnetic QuantumNumber
 - 4. Spin QuantumNumber
 - 5. Shapes of s, p and dOrbitals
 - 2.7.1 Shells and sub-shells or orbitals
- 2.8 Electronic Configuration
 - 2.8.1 The relative energies of atomic orbital
 - 2.8.2 Rules

3. THEORIESOFCOVALENTBONDINGANDSHAPESOFMOLECULES Introduction

- 3.1 Shapes of molecules
 - 3.1.1 VSEPR
- 3.2 Theories of covalentbonding
 - 3.2.1 VBT andhybridization
 - 3.2.3 MOT

4. GASES

Introduction

- 4.2.3 Effect of change in P on V of gas (Boyle's law)
- 4.2.4 Effect of change in T on V of gas (Charle's law)
- 4.2.5 AbsoluteZero
- 4.3 Avogadro'sLaw
- 4.4 Ideal GasEquation (4.4.1-4.4.3)
- 4.5 Deviation From Ideal GasBehavior

- 4.5.1 Why real gases deviate from gas law?
- 4.6 Van der WaalsEquation
- 4.7 Dalton's law of partial pressure and its application
- 4.8 Graham's Law of Diffusion and Effusion

5. LIQUIDS

Introduction

- 5.2 Intermolecular Forces
 - 5.2.1 Dipole-Dipoleinteraction
 - 5.2.2 LondonForces
 - 5.2.3 Hydrogen Bonding
- 5.3 LiquidCrystals
 - 5.4.4 Liquid crystal and their uses in daily life history
 - 5.4.5 How to differentiate between liquid crystals from pure liquids and crystalline solid.

6. SOLIDS

6.3

Introduction

- 1. Anisotropy
 - 2. Isomorphism
 - 3. Polymorphism
 - 4. Allotropy
 - 5. Transition
 - Temperature
- 6.4 Crystal Lattice
 - 6.4.1 Unit Cell & Shape of NaCl
 - 6.5.2 Lattice energy
- 6.5 Types of Crystalline Solids
 - 6.5.1 Ionic Solids
 - 6.5.2 Covalent Solids
 - 6.5.5 Molecular and metallic Solids

7. CHEMICAL EQUILIBRIUM

Introduction

- 7.1.1 Law of Mass Action
- 7.1.2 Examples of EquilibriumConstant expression
- 7.1.3 Units of equilibrium constant
- 7.1.4 Equilibrium expression including partial pressure, no of moles and mole fraction.
- 7.1.5 Types of equilibrium
- 7.1.7 Applications of equilibrium constant
- 7.2 Factors Affecting Equilibrium (Le-Chatellier Principle)
 - 7.2.1 Effect of Change inConcentration
 - 7.2.2 Effect of Change in Pressure orVolume
 - 7.2.3 Effect of Change inTemperature
- 7.3 Industrial Application of Le-Chatellier Principle (Haber'sProcess)
- 7.5 Common IonEffect

8. ACIDS, BASES ANDSALTS

Introduction

- 8.2 8.2.2 Relative Strength of Acids and Bases
- 8.3 Conjugate Acid-BasePairs
- 8.4 Strength of Acids and Bases
 - 8.4.1 Ionization Equation of Water and calculation of PH and POH in aqueous medium using given Kw values.
 - 8.4.2 Strong and weak acid
 - 8.4.3 Strong and weak base
 - 8.4.4 Relationship of K_a and K_b
- 8.6 Buffer Solutions and their Applications
- 8.7 SaltHydrolysis

9. CHEMICALKINETICS

Introduction

- 9.1 RatesofReactions
 - 9.1.1 Determination of initial rate
 - 9.1.2 Rate law
 - 9.2.3 Order of Reaction and rate equation
- 9.2 Collision Theory, Transition State and ActivationEnergy

10. SOLUTIONS ANDCOLLOIDS

Introduction

- 10.2 ConcentrationUnits
 - 10.2.1 Percent
 - 10.2.2 Molarity
 - 10.2.3 Molality
 - 10.2.4 Molefraction
 - 10.2.5 Parts per million, billion, andtrillion
- 10.3 Raoult'sLaw
 - 10.3.1 Causes of lowering of vapour pressure
- 10.4 Colligative Properties
 - 10.4.1 Lowering of vapour pressure
 - 10.4.2 Elevation of boiling point
 - 10.4.3 Depression in freezing point

11. THERMOCHEMISTRY

- 11.8 Hess's Law: Enthalpy ChangeCalculations
- 11.9 Born HaberCycle

12. ELECTROCHEMISTRY

Introduction

- 12.1 Oxidation-ReductionConcepts
 - 12.1.2 OxidationNumbers
 - 12.1.3 Balancing of equation

- 12.2 Electrode, Electrode Potential and ElectrochemicalSeries
 - 12.2.2 Cell potential
 - 12.2.3 Standard Hydrogen electrode
 - 12.2.4 Determination of cell potential
 - 12.2.5 Electrochemical series
 - 12.2.6 Activity series of metal
- Note: Topic related questions of self-check exercises and end exercise are included. Society, technology and science of all chapters is not included.

It is obvious that questions related to the topics not mentioned above are not included in exam. Paper will be curriculum based not book based.

REDUCED SYLLABUS MATHEMATICS-XI

Chapter 1	Number Systems
Exercise 1.1	Q1; Q3(iii, v, vi); Q4; Q5; Q6
Exercise 1.2	Q3; Q4; Q5; Q6; Q7; Q8; Q9; Q10; Q11; Q12; Q13; Q14(i, ii); Q15(ii, iii); Q16
Exercise 1.3	Q1(ii, iv, viii); Q2(i, iii); Q3(ii); Q4; Q5; Q6; Q7
Page 03	Example 2
Page 20	Example 1(iii, iv)
Page 21	Theorem (i, iii, v, vi)
Page 24	Example 2
Chapter 2	Sets, Functions and Groups
Exercise 2.1	Q1(iv, vii, xi); Q2(iv, v, vi, xii); Q9(ii, iii, iv)
Exercise 2.2	Q1(i, iv); Q2(i); Q5(i, ii, iii); Q6
Exercise 2.3	Q3; Q5; Q8; Q9
Exercise 2.4	Q1; Q2; Q3; Q4; Q5
Exercise 2.5	Q1; Q2; Q3; Q4
Exercise 2.6	Q1; Q3; Q4
Exercise 2.7	Q2; Q4; Q7
Exercise 2.8	Q2; Q4; Q5; Q6; Q7; Q8; Q10
Page 77	Theorem
Page 78	Theorem
Chapter 3	Matrices and Determinants
Exercise 3.1	Q2; Q8; Q10; Q11; Q12; Q13; Q14
Exercise 3.2	Q3(i, ii); Q5(i); Q7; Q9(i)
Exercise 3.3	Q1(iv, v, vi); Q2; Q3; Q4; Q5; Q6; Q8; Q9; Q10; Q11; Q12(i, ii); Q13; Q14; Q15; Q16; Q17

Exercise 3.4	Q1; Q2; Q3; Q4; Q5; Q6; Q7; Q8; Q9(i, ii); Q10(i, ii)
Exercise 3.5	Q1(i, ii); Q2(ii, iii); Q3; Q4(i, ii); Q5(i); Q6
Chapter4	Quadratic Equations
Exercise 4.1	Q5; Q8; Q12; Q19; Q20
Exercise 4.2	Q2; Q3; Q5; Q7; Q8; Q9; Q10; Q12; Q13; Q14; Q16; Q17; Q18; Q19; Q20; Q22
Exercise 4.3	Q2; Q3; Q5; Q6; Q7; Q8; Q9; Q10; Q12
Exercise 4.4	Q1; Q2(iii, v); Q3; Q4; Q6; Q7; Q8
Exercise 4.5	Q10; Q14; Q15; Q16
Exercise 4.6	Q3; Q5; Q7; Q8; Q9
Exercise 4.7	Q3; Q4(i, iii); Q7; Q8
Exercise 4.8	Q4; Q7; Q8; Q9; Q10
Exercise 4.9	Q3; Q6; Q7; Q8; Q9; Q10
Exercise 4.10	Q7; Q9; Q11; Q14; Q15; Q17; Q19
Page 143	Example 1
Page 174	Example 2

Chapter 5	Partial Fractions
Exercise 5.1	Q4; Q5; Q8; Q9; Q11
Exercise 5.2	Q2; Q6; Q9; Q10; Q12
Exercise 5.3	Q3; Q4; Q6; Q8; Q9; Q10
Exercise 5.4	Q1; Q2; Q3

Chapter 6	Sequences and Series
Exercise 6.2	Q2; Q3; Q5; Q7; Q8; Q9; Q11; Q12; Q13; Q14
Exercise 6.3	Q2; Q3; Q4; Q7; Q8
Exercise 6.4	Q1; Q2(i, iv, vi); Q3(ii); Q4(ii); Q5; Q7; Q8; Q9; Q12; Q13; Q14; Q15; Q16; Q17; Q18

Exercise 6.5	Q2; Q3; Q5; Q6; Q9
Exercise 6.6	Q2; Q4; Q5; Q6; Q7(i, iii); Q8; Q10; Q11; Q12; Q13; Q14
Exercise 6.7	Q3; Q4; Q5; Q6; Q7; Q8
Exercise 6.8	Q2(i); Q3(ii); Q4; Q5(iii, v); Q6(i, iii, vi); Q7; Q9; Q10; Q11; Q12; Q14
Exercise 6.9	Q2; Q3; Q4
Exercise 6.10	Q2; Q3; Q5; Q6; Q9; Q11; Q13; Q14(i); Q15(ii); Q17; Q18
Page 201	Example 2, Example 3
Page 214	Example 6

Chapter 7	Permutation, Combination and Probability
Exercise 7.1	Q1(v, vii, ix, x)
Exercise 7.2	Q2; Q3; Q5; Q7; Q8; Q9; Q10; Q11; Q12; Q13; Q14
Exercise 7.3	Q3; Q5; Q6; Q7; Q8; Q9; Q10; Q12
Exercise 7.4	Q2; Q3; Q4; Q5; Q6; Q7; Q9; Q10
Exercise 7.5	Q5; Q7; Q10
Exercise 7.6	Q3
Exercise 7.7	Q1; Q3; Q4; Q5; Q6; Q7; Q8
Exercise 7.8	Q2; Q4; Q6; Q8; Q9; Q10

Chapter 8	Mathematical Induction
Exercise 8.1	Q2; Q5; Q7; Q9; Q13; Q15; Q18; Q20; Q21(ii, iv); Q23; Q24; Q27; Q28; Q34; Q36; Q37
Exercise 8.2	Q1(iii, iv, v, vi); Q3(ii, iii, iv); Q4(i, ii); Q5(i); Q6(ii, iii, iv); Q7; Q8; Q9(i, iii); Q10; Q11; Q12; Q13; Q14
Exercise 8.3	Q1(iii, v, vii, viii, x); Q3(ii, iv, v); Q4(ii, iii, iv, v, vi, vii); Q5(i); Q6; Q7; Q9(i, ii); Q10; Q11; Q12; Q13

Chapter 9	Fundamentals of Trigonometry	
Exercise 9.1	Q4; Q5; Q7; Q9; Q10; Q12; Q13; Q15; Q16	

Exercise 9.2	Q4; Q5; Q6; Q7; Q8
Exercise 9.3	Q4; Q5; Q6
Exercise 9.4	Q1; Q4; Q6; Q9; Q11; Q13; Q14; Q15; Q16; Q17; Q18; Q19; Q22; Q23; Q24

Chapter 10	Trigonometric Identities	
Exercise 10.1	Q3(ii, iii); Q4; Q5	
Exercise 10.2	Q3(i); Q4(iii, iv, v); Q5; Q6; Q7; Q8; Q9; Q10; Q11; Q12; Q13; Q14(i, iv, vi)	
Exercise 10.3	Q1; Q5; Q6; Q7; Q9; Q10; Q12; Q13; Q14	
Exercise 10.4	Q1(iii, vi, viii); Q2(iii, vi); Q3; Q4; Q5	
Page 314	Article 10.1.2	

Chapter 11	Trigonometric Functions and their Graphs
Exercise 11.1	Q1; Q4; Q9; Q11; Q12; Q15
Exercise 11.2	Q1(i, iii, vi); Q2
Page 339	Theorem 11.1
Page 340	Theorem 11.2

Chapter 12	Applications of Trigonometry			
Exercise 12.3	Q9; Q10; Q11; Q13; Q15			
Exercise 12.4	Q4; Q5			
Exercise 12.5	Q3; Q4; Q5; Q8; Q9; Q11; Q12			
Exercise 12.6	Q2; Q4; Q6; Q7; Q8; Q10			
Exercise 12.7	Q1(ii); Q2(i); Q3(ii); Q4; Q5; Q6			
Exercise 12.8	2.8 Q1(ii); Q2; Q3; Q4; Q5; Q6; Q7(ii); Q8; Q9; Q10; Q11; Q12			
Page 377	Article 12.9			

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Exercise 13.1	Q1(iii, iv, vii, viii, ix); Q2(i, ii); Q3(i, iii, iv, v, viii)
Exercise 13.2 Q	Q1; Q2; Q3; Q4; Q5; Q6; Q8; Q9; Q10; Q11; Q12; Q13; Q14; Q15; Q16; Q17; Q18; Q19

Chapter 14	Solutions of Trigonometric Equations
Exercise 14	Q2; Q3; Q7; Q8; Q9; Q10; Q11; Q12; Q13; Q15; Q17; Q20
Page 406	Example 5

REDUCED SYLLABUS STATISTICS-XI

1. Introduction to Statistics: Collection (1/8) and Presentation of Data

Content	Scope
Nature and Importance of the Science of	Define Statistics, give importance of
Statistics, Statistical Data, Population and	measurements and different fields of science
sample. Brief revision of classification,	where measurements are useful. Explain
tabulation and frequency distributions and their	different types of raw data in the fields of
graphic representation	Science and Humanities, mainly in Medicine,
	in Agriculture, in Chemistry and Psychology.
	Explain the difference between a population
	and a sample, use sketches for showing
	population. Explain the importance of the
	sample. Demonstrate types of frequency
	distributions like symmetrical and non-
	symmetrical Cumulative and relative frequency
	distributions be explained by the use of
	sketches, Explain bar charts in different forms
	namely; divided bar charts, compound bar
	charts. Give an explanation for expressing data
	in rectangles an pie chart.

2. Measure of Location and Dispersion. (2/8)

Contents	Scope
Arithmetic mean, Geometric mean. Median,	Explain arithmetic mean and variance of raw
Mode, Range, Mean Deviation, Variance,	data from a frequency table, using mid points
Standard deviation, Difference between	and also by change of origin and scale and
Absolute and Relative Measures of Dispersion.	their properties. To explain geometric mean,
Skewness.	use ungrouped data as well as grouped data.
	Explain the method of direct calculation using
	root and also by using logarithms. To explain
	median and quantiles graphical method be
	explained as well. Mathematical proofs are not
	required.

3. Index Number (1/8)

Content	Scope
Introduction to Index numbers concept of price	Explain the index numbers as a useful
index numbers steps involved in the	statistical technique to assess the growth or fall
construction of price index numbers	of a certain item or economic series with
"Unweighted price index numbers (fixed based	respect to time or any other unit. Price index
and chain based method)" weighted price index	numbers by simple relative and link relative

numbers (Laspeyer'spaasche's	and	fisher's)	methods be explained. Price index and its
consumer price index number.			constructions must be given as examples.
			Fixed base and chain base methods for price
			indices be explained. The concept of weights
			be explained with reference to the arithmetic
			means in grouped data. Laspeyr's and Fisher's
			indices be explained by applying the standard
			results on a number of exercises. Consumer
			price index number be explained in general and
			with reference to Pakistan. Similarly whole-
			sale price index numbers to be also explained
			in a similar way.

4. Simple Linear Regression and Correlation (1/8)

Contents	Scope
Bivariable data (non-random versus random	Explain "Bivariate data", by giving sketches of
variable) scatter diagram; estimation of	scatter diagrams when one variable is specified
regression parameters by least squares method,	and several values of response variable are
properties of the regression line; interpretation	assumed given at each non random variable
and applications of the regression line.	similarly the sketches when both variable are
Bivariate data, (random versus random	random be also drawn and explained. Least
variable) scatter diagram; point estimation of	square method be explained, normal equation
population correlation co-efficient; properties	be formed and estimation of regression
of the sample correlation co-efficient;	parameters be given in terms of $\sum X$, $\sum Y$, \sum
interpretation and application.	XY, $\sum Y^2$, and $\sum X^2$. Both the regression lines
	be explained by considering an example in
	which few values of the two variables are
	given the properties to be included are :
	i. Sum up squares of deviation from
	regression line is minimum.
	11. The point of intersection of
	regression lines at (X, Y).
	Interpret by explaining the use of line of
	regression for forecasting and for
	independent variable
	Explain the correlation of officient by
	explain the correlation co-efficient by
	variables are random the calculation of
	correlation co efficient be explained by
	considering examples. The properties of
	correlations co-efficient be explained by
	considering.
	$i_{\rm ry} = t_{\rm ry}$
	ii. r lying between -1 and $+1$.

iii. the value of correlation co-efficient does not change by the change of origin and scale and correlation can be obtained by geometric mean of the regression co-
efficient.

5. Analysis of time series (1/8)

Contents	Scope
Introduction to the concept of time series;	Explain the time series as a series in which one
nature of fluctuations, signal and noise,	variable is time occurring at specified intervals
components of a time series, measurement of	(non random and the other variable is random).
secular, semi averages, moving averages and	Examples be given from Economics, Public
least squares (linear), advantages and	Administration, Business administration, Trade
limitations of these methods.	and Commerce. Fluctuation in the time series
	be explained in terms of trend which is given
	in terms of components of a time series and
	random fluctuations as noise. Linear and
	quadratic forms of time series be considered.
	The linear and quadratic time series be
	compared with trend obtained by free hand,
	semi averages and moving averages method.

REDUCED SYLLABUS ECONOMICS-XI

I. Nature and Scope of Economics

A. Introduction

- 1. Wants and satisfaction
- 2. Goods and services
- 3. Utility and scarcity
- 4. Economic problems and its nature.
- 5. Definition by:
 - a) Adam Smith
 - b) Alfred Marshall
 - c) Lionel Robbins.

II. Consumer's Behaviour and its Analysis

- 1. Definition
- 2. Meaning
- 3. Rationale
- 4. The law of diminishing marginal utility with table and graph.
- 5. The law of equimarginal utility or law of substitution with formula and diagram.
- 6. Indifference curve.
- 7. Definitions and Characteristics (graphical presentation).

III. Basic Tools of Statistics and Mathematics in Economics

i.) Variables:

Continuous discontinuous, independent dependent.

- ii.) Liner equation with group.
- iii.) Quadratic equation.
- iv.) Simultaneous equations.

IV. Demand

- 1. Definition.
- 2. Law of demand.
- 3. Demand function and functional equation of demand.
- 4. Movement along the demand curve and shift in demand curve.
- 5. Price elasticity of demand (Arc & point) and methods of measurement.
- 6. Concepts of income elasticity and cross-elasticity of demand.
- 7. Factors influencing the elasticity of demand.
- 8. Practical uses of the concept of elasticity of demand.

V. Supply

- 1. Definitions stock and supply.
- 2. Law of supply.
- 3. Supply functional equation of supply.
- 4. Movement along the supply curve and shift in supply curve.
- 5. Elasticity of supply and its measurement.

- 6. Factors influencing the elasticity of supply.
- 7. Practical uses of the concepts.

VI. Equilibrium

- 1. Concept of equilibrium.
- 2. Equilibrium of demand and supply.
- 3. Equilibrium in price and equilibrium in output.
- 4. The effects on equilibrium in price and output due to change in demand and supply.

IX. Cost of Production

- 1. Definition, classification, Fixed and variable.
- 2. Total, average and marginal cost.
- 3. Relationship between total average and marginal cost.

X. Revenue Analysis

- 1. Definition.
- 2. Total marginal and average revenue under perfect competition and monopoly.
- 3. Price and output determination and short and long run under perfect competition and monopoly.

XI. Market

Meaning and significance of market.

- 1. Perfect competition and monopoly.
- 2. Short run and long run in perfect competition and monopoly.

REDUCED SYLLABUS COMPUTER SCIENCE-XI

1. OVERVIEW OF COMPUTER SYSTEM

- 1.1 Introduction to Computer
- 1.2 Computer Software

2. COMPUTER MEMORY

- 2.1 Introduction
- 2.2 Main Memory

3. CENTRAL PROCESSING UNIT

- 3.1 Inside CPU
- 3.2 CPU Operations

5. NETWORK COMMUNICATION AND PROTOCOLS

- 5.1 Introduction
- 5.2 Data Communication standards
- 5.3 TCP/IP

6. WIRELESS COMMUNICATIONS

6.1 Introduction

7. DATABASE FUNDAMENTALS

- 7.1 Introduction
- 7.2 Basic Database Terminologies
- 7.3 Planning a Database
- 7.4 Data Modeling and Entity Relationship Diagram
- 7.5 Relational Schema

8. DATABASE DEVELOPMENT

- 8.1 Introduction
 - (i) Identify various relational database management systems (MS Access, Open Office Base, SQL Server)
 - (ii) Select any suitable DBMS as an application for creating and maintaining databases
 - (iii) Explain the steps involved to create and save a database (For Practical only)
 - (iv) Explain the following in Database Environment:
 - Database Toolbar
 - Database Window
 - o Objects
 - Tables
 - Queries
 - Forms
 - Reports

- 8.2 Working with Tables
 - (i) Explain different ways of creating, saving and editing a table in database. (For Practical only)
 - (ii) Identify various available data types
 - (iii) Create a primary key and foreign key in the tables. (For Practical only)
 - (iv) Create and edit relationship among tables. (For Practical only)
 - (v) Use navigation buttons to navigate through records in a table. (For **Practical only**)
 - (vi) Add, modify and delete records from a table. (For Practical only)
- 8.3 Working with Forms
 - (i) Explain different ways of crating, saving and editing a form in a database.(For Practical only)
 - (ii) Know different Form views
 - (iii) Use the navigation buttons to navigate through records displayed in a Form. (For Practical only)
 - (iv) Add, modify and delete records. (For Practical only)
 - (v) Use Form controls. (For Practical only)
- 8.4 Working with queries and commands
 - (i) Explain different ways of creating, saving and editing a query in a database. (For Practical only)
 - (ii) Use following queries on database
 - SELECT (Where, Group by, Order by)
 - UPDATE
 - DELETE
 - o INSERT
 - ALTER
- 8.5 Generating Reports
 - (i) use the report wizard to generate a report. (For Practical only)
 - (ii) se various report layouts/styles to produce reports
 - (iii) Set the sort order of records that will appear on the report
 - (iv) Customized reports using queries (macros and arithmetic expressions) (For Practical only)
 - (v) Save, view and print the report. (For Practical only)

نصاب عربی گیارہویں جماعت کے لیے

نصاب فارسی گیارہویں جماعت کے لیے

ا۔ ترجمهٔ سورهٔ الحمد (نظم) ۲_ نعت ۳۔ کلامِخدا ۳_ کتاب (منظومه) سيّدعلى هجويريّ _0 خُلفا ي راشدين امام غزاليَّ _4 نامه به سُلطان شجر سلحوقي سَديدُ الدّين مُحْمَد عو في _9 جوامع الحكايات مولا ناجلال الدّين روميٌّ _11 (نظم) موسى وشبان ۲۱₋ حسن سنجری دہلوئ لتحنان خواجه نظام الدّين اوليًّا ۱^۳ - ضياءالدين خشي مُر داريدهايي ازسِلكُ السُّلوك ۵۱۔ خواجه حافظ سیراز گ غَزّ لہای حافظٌ (غزل) مولاناجاميَّ _14 گُزیدہ اِی از بہارستان حفزت تتخچّل سرمت _1A ۲۰_ درکلاس (مكالمه) ۲۲_ فاطمه جناح ٢٣ علّامة محمّد اقبالُّ (منظومه) محاوره مابين خداوا نسان ۲۴۔ داستانِ پرواز

۲۷۔ نامہ[ی بہ پسرم ۲۸۔ راشد منہاس، نشانِ حیدر ۲۹۔ ارزشِ ورزش ۲۰۰۰ در کتا بخانہ

(مكالمه)

REDUCED SYLLABUS HEALTH AND PHYSICAL EDUCATION-XI

A. Physical Education

- 1. Physical Education and its importance
- 3. Scope of activities:
 - b. Recreational
 - d. Rules and fundamental skill of games:
 - i. Boys: Volleyball
 - ii. Girls: Volleyball
 - e. Rules and fundamental skill of Athletics:
 - i. Boys: Short put: 4x100 meters relay
 - ii. Girls: Short put: 4x100 meters relay

B. Health Education

- 1. Definition of health, its relationship to physical education
- 2. Human organism and how it works; functioning of the following systems (in detail):
 - b. Respiratory

3. First Aid:

- a. Treatment of athletics injuries like sprain, strain, pulled muscle, sore muscle and cramp
- b. Fractures: Types and treatment

REDUCED SYLLABUS PHILOSOPHY-XI

ELEMENTS OF PHILOSOPHY

1. Introduction

- a. What is Philosophy?
- b. What are the specific philosophical questions?
- c. Philosophical Approaches Criticism/Speculation

2. Philosophy and Religion

- a. Questions asked in Philosophy and Religion
- b. Their treatment
- c. Difference
- d. Allama Muhammad Iqbal's Educational Philosophy

3. Philosophy and Science

- a. What does science try to understand?
- b. How is it different from philosophy?
- c. What role does philosophy play in the growth of science?
 - i. Interprets
 - ii. Criticizes
 - iii. Resolves conflicts
 - iv. Justifies

4. Knowledge

- a. Definition of knowledge
- b. Sources of knowledge:
 - i. Rationalism
 - ii. Empiricism
 - iii. Intuition and Revelation
 - iv. Authority
 - Introduction of basic philosophy of Imam Ghazali

5. Metaphysics

- a. Monism
- b. Dualism
- c. Pluralism
- d. School's of Idealism and Materialism

6. Ethics

- b. Ethical theories:
 - i. Golden Mean
 - ii. Utilitarianism
 - iii. Good will
- c. Islamic theory of Ethics

REDUCED SYLLABUS GEOGRAPHY-XI

I. Understanding Geography

- 1. The Nature of Geography
- 2. Scope
- 3. Relationship with other Sciences

II. The Earth Basic Concerns

3. The Earth's structure and composition

III. Rocks

1. Formation classification and characteristics of rocks

IV. Major Land Forms

1. Mountains Plateaus and plains

V. Denudation

- 1. Weathering
- 2. Erosion

VII. The Atmosphere

- 1. Introduction
- 2. Weather and Climate
- 3. Distribution of Atmosphere and Pressure
- 4. Winds
- 5. Precipitation

VIII. Oceans and Seas

- 1. The Oceans and Seas
- 3. Ocean currents

REDUCED SYLLABUS EDUCATION-XI

I. Education

- 1. Importance and description of Education
- 2. Role and Scope of Education as a subject/discipline Teachers, Students, Content areas, Milieu, Environment Culture
- 3. Function of Education
- 4. Model of Education, Formal, informal and non-formal
 - Conversation
 - Transmission
 - Reformation

II. Aims of Education

- 1. Spiritual and Moral aims
- 2. Intellectual aims
- 3. Economic/ Vocational aims
- 4. Citizenship (Socio-cultural) aims

III. Foundations of Education

- 1. Introduction
- 2. Islamic foundation of Education
- 3. Importance of Education in Islam
- 4. Sources of knowledge Philosophical foundations
- 5. What is Philosophy, Philosophical foundation?
 - Ideology, Religious, Customs, norms & students

IV. Human Development

- 1. Explanation of the concepts of Human Development and Growth
- 2. Difference between growth and development with examples
- 3. Individual differences and teaching learning process

V. Learning

- 1. Meaning and definitions
- 2. Trail and error, imitation, insight (arising from intellectual rigour, learning by doing
- 3. Law of readiness
- 4. Law of Exercise
- 5. Law of Effective
- 6. Readiness, motivation, interest Attention, meaningful/relevant, attitude

VI. Society Community and Education

- 1. Society and community (meaning and definition)
- 2. Explain the Interrelationship of society and Education

VII. Guidance and Counseling

- 1. Guidance and counseling (meaning and definition)
- 2. Needs & role of guidance and counseling in school
- 3. Forms of guidance (Education and Career)
- 4. Need and importance of counseling in schools

VIII. Curriculum, Syllabus and Textbook

- 1. Meaning and definition of curriculum
- 2. Differences between curriculum, syllabus and textbooks
- 3. Components of curriculum
- 4. Importance of Assessment and evaluation

REDUCED SYLLABUS OUTLINES OF HOME ECONOMICS-XI

Home Management:

- 1. Values and goals & standards as related to management in the home; discussion of some values and goal as observed by Pakistani families; importance of developing goals as a means of realizing values
- 2. Resources: human and materials:
 - b. Energy management-ways of avoiding fatigue
 - c. Simplifications
- 3. a. Types of income
 - b. Budgeting and its advantages
 - c. Account keeping
- 5. Family Housing:

b.

- a. First Aid elementary
 - i. Storage of summer and winter clotes and house hold equipment
 - ii. Storage of food stuff (perishable and non-perishable foods)
 - iii. Storage of books, shoes and extra furniture and other house hold equipment

Child Development:

- 6. Basic human needs, physical and psychological
 - a. Principles of growth and development from birth to 5 years
 - c. Understanding and guiding children: Characteristics of the toddler and the preschool age child (development tasks), understanding and dealing with children problems such as fear, anger, jealousy, bed wetting and thumb sucking

REDUCED SYLLABUS FINE ARTS HSSC-I

With General Outline

Chapters	Points to be discussed Generally	Contents to be focused on:	
Prehistoric Art	 General introduction to Term "Prehistoric" initial phase of diverse cultures. Concept of B.C.E and C.E. Paleolithic age, Mesolithic age, Neolithic age Share the world map with the students indicating the primitive art; cave paintings, sculpture and structures. Give special reference of Potohar and Baluchistan in Pakistan. 	 ✓ Hall of Bulls (painting) ✓ Venus of Willendorf (sculpture) ✓ Stone Henge (Architecture) (discuss in detail time line, Area, tools used, material and technique of above mentioned) 	
Egyptian civilization	 Introduction to Egyptian Civilization Timeline, Geographical conditions, economic conditions, social set up, religious beliefs Burial system (Mastaba and Pyramids) Hieroglyphs and murals in tombs Book of death with reference to the religious and artistic practices, a brief introduction. 	 Great Pyramid of Khufu Rameses II (seated sculpture of Rameses at temple of Abu Simbel) Narmer palette 3000 B.C. Fowling scene from the tomb of Nebamun, Thebes, Egypt (discuss the time line, area, plan, influences, symbolism, material and technique with special reference to the decorative aspect of the above mentioned) 	
Indus Valley Art 4000-1800 B.C. Mohenjo-Daro & Harappa	 Mehrgarh, the pre-Indus period Introduction to Indus valley civilization. Important cities; Mohenjo- Daro and Harappa Timeline, Geographical conditions, economic conditions, social set up, religious beliefs, Trade links with Mesopotamia and Egypt Exploring, establishing and identifying the relationship of the Indus art and present 	 ✓ Great Bath ✓ Seals ➢ Unicorn seal ➢ Bull seal ➢ Yogi seal ✓ King Priest ✓ Dancing Girl (discuss in detail time line, area, plan, influences, symbolism, material and technique and decorative aspects of the above mentioned) 	

	practices.	
Buddhist Art	 Introduction to Mauryan Empire 321-233 B.C. Difference in treatment of Buddha's image in Hinayana and Mahayana sects Significance of Ajanta Caves Comprehension of the symbolism of Bodhisattva, Buddha, Mudras, Stupa and Ashokan Pillars 	 ✓ The great stupa of Sanchi 3rd Century B.C.E ✓ Takht-e- Bahi MonasteryGandhara and Kushan schools 1st -3rd century A.D. ✓ Ajanta Caves ➢ Buddha with Blue Lotus ➢ Composition with White elephant (discuss in detail time line, Area, plan, influences, symbolism, subject matter, materials, techniques, and decorative aspects of the above mentioned)
CLASSICAL ART		
Greek Civilization	 Introduction to Greek civilization General outline of architectural achievements of Greeks Knowledge of the standardized proportions established in Greek period in art and architecture Timeline, Geographical conditions, economic conditions, social set up, religious beliefs 	 Disco bolos byMyron (Roman copy) Parthenon (also introduce Greek orders) Theater (Epidaurus, Greece) (discuss in detail time line, Area, plan, influences, symbolism, subject matter, materials, techniques and decorative aspects of the above mentioned)
Roman Civilization	 Introduction to Roman civilization Architectural achievements of Romans. Timeline, Geographical condition, geological condition, social set up, religious beliefs 	 ✓ Portrait of Augustus as general from Primaporta, Italy; early 1st century of a bronze original of 20 BCE, marble, Rome. ✓ Colosseum, Rome, Italy, 70-80 BCE (also introduce roman order of architecture) (discuss in detail time line, Area, plan, influences, symbolism, subject matter, materials, techniques and decorative aspects of the above mentioned)

FINE ARTS I STUDIO WORK:

Details of Portfolio (End of Year's work) Ma 2D FINE ARTS	ax Marks: 50
Drawing / Painting	
• Still Life	6
• Landscape	4
Nature Study	3
Technique: as Per requirement	
Medium: paper, lead and Colour pencil, Markers, colours, Poster Colours, Gouache Time line	Pen and Ink, water
Colour Wheel (12 divisions) 1	
Gradation Chart 1	
Art of Lettering (Calligraphy)	
• English	1 in any style
• Urdu	1 in any Style
Technique: Exploring the Nib Medium: Pen and Ink	
Letter Head and Logo/ monogram	
Letter Head	1
• Logo	1
Technique: as Per requirement	
Medium: As per choice	
Repeat Pattern	
Repeat patterns	12
Technique: as Per requirement	
Medium: Poster Colour, Gouache	
Surface Embellishment	
Surface Embellishment	2
(on any surface e.g. Pots, Book jackets	
etc.)	
Medium: paper, lead and Colour pencil, Markers,	Pen and Ink, collage
Computer Arts	
• Computer Arts* (Posters, Cards,	2 (Size A4, Hard
Illustrations)	copy)
*Clipart and other soft wares for	
compositional awareness	
Technique: Computer Arts	

Medium: Computer

Photography

(Images collected for the compositional awareness and study of various light modes)

Technique: Any available camera 2 (minimum size: postcard)

3D APPLIED ARTS

Paper Sculpture

Origami 1
Papier Mache 1
Technique: Constructive/ Additive; paper Folding, Paper moulding Material: Paper

The sculptures should not be smaller than 6 square inches

Note:

- It is desired that student selects the best work for the portfolio and exhibit in presentable manner.
- The works be duly signed, dated and stamped by the Art teacher.
- The works reflect the knowledge and understanding of elements of Visual Art and principles of design.
- **Plagiarism should be vigilantly checked by the Art teacher.** No copied work shall be accepted as part of Portfolio.

REVISED SYLLABUS PSYCHOLOGY-XI

I. Introduction to Psychology

- 1. Introduction Meaning and Definition of psychology as science of Behavior and mental processes
- 2. Goals of psychology
- 3. Clinical psychology
- 5. Educational Psychology
- 6. Environmental psychology
- 8. Business Psychology

II. Methods of Research

- 1. Meaning and significance of research
- 2. Types of Research:
 - i. Observation Method
 - ii. Experimental Method
 - iv. Case study Method. Advantages

III. Nervous System and Behaviour

- 1. Meaning & relationship with behaviour
- 2. Neuron
- 3. Structure and Function of main parts of Brain

IV. Sensation and Perception

- 1. Brief introduction of sensation
- 2. Anatomy of the Eye
- 3. Anatomy of Ear

Gestalt laws of perceptual organization.

- 1. Depth & Distance.
- 2. Movement. Monocular cues for depth (only 3 cues Inter position, Linear perspective, Shadow) perception Binocular Cues for depth (only 2 cues) perception. Definition. Kinds of Illusion.

V. Learning and Remembering

i.

3.

5.

- 1. Definition of learning
- 2. Basic Principles of learning
 - Conditioning ii. Classical iii. Operant
- 4. Definition of Memory
 - mory Memory ii. Short-term Memory
 - i. Sensory, Memory
 - iii. Long-term Memory
 - Measuring Memory
 - i. Recognitions Method
 - ii. Recall Method
 - iii. Saving Method
 - iv. Method of Rearrangement

VI. Motivational Behaviour

- 1. Definition
- 2. How they direct our Behavior
- 3. Primary motives (unlearned/ Physiological)
- 4. Hunger, thirst, temperature, Sex, Maternal
- 11. Elements affecting Motivation

VII. Personality

- 1. Definition
 - i. Introvert, Extrovert & Ambivert
 - ii. Freudian theory
- 3. Objective types:
 - i. Questionnaire, Interview
 - ii. MMPI
 - iii. Projective techniques
 - vi. TAT, Rorschach Inkblot

VIII. Emotional Behaviour

- 1. Meaning and definition
- 3. James-Lange theory (Feelings are physical)
- 4. Cannon bard theory (Feelings are cognitive)
- 5. Role of Learning and Environment in emotion

IX. Higher Cognitive Process

- 1. Meaning & definition of cognition
- 2. Intelligence, General or specific Abilities
- 4. Stanford-Binate intelligence Scale, WAIS, WISE Army Alpha and Beta Intelligence
- 6. Cognitive operations in problem solving
 - i. Discussion ii. Brain Storming
 - iii. Cooperative Learning

REDUCED SYLLABUS CIVICS-XI

I. Civics – what is it?

- Definition 1.
- 2. Nature
- 3. Significance
- Utility 4.

II. **Civics – The Basic Concern**

- The harmonic relationship between the members of society e.g. child hold, 1. socialization, gender, religion.
- 2. Individual as a member of state.
- 3. Family a basic social institution.
- Nature & Significance of community 4.
- 5. Society
- 6. Nation and Nationality & Muslim Ummah

III. State

1. Definition

- Elements
- Distinction of state from 4. Government Society Nation
- 5. Conceptual basis of state in Islam.
- 6. Welfare State and equity issues with reference to gender, religion, are & social classes.

2.

IV. **Sovereignty**

- Definition 1.
- 2. Salient features
- 3. Forms Manifestation of Sovereignty
- Basic principles of Sovereignty in Islam. 4.

V. Government

6.

8.

- 1. Meeting
- 3. Parliamentary
- Presidential 4.

2.

Executive 7.

Democracy

- Definition 9
- The role of Good Governance in Islamic Democratic Government 10.

VI. Law and Related Matters

- Meetings Law 2. 1. Kinds
- 3. 5. Sources

Legislature

Judiciary

- Sources
- 4. Meaning
- 6. Objectives Meaning of Law

VII. Citizen and Citizenship

1. Definition

- 2. Qualities of good citizenship
- 3. How citizenship acquired and lost? 4. Definition
- 5. Rights and responsibilities of a citizen in Islamic perspective

VIII. Constitution

- 1. Definition of constitution
- 2. Kinds of constitutions
- 3. Characteristics of a good constitution

IX. Political Dynamics

- 1. Neeting
- 2. Formulation
- 3. Agencies
- 4. Conditions for sounds public opinion

REDUCED SYLLABUS SOCIOLOGY-XI

I. Introduction of Sociology

- 1. Definition
- 2. Subject matter
- 5. What Science is!
- 6. Sociology as a Science
- 8. Role of Sociologists in the society

II. Social Action and Social Interaction

- 1. Definition of Social Action
- 2. Essentials of Social Action
- 3. Importance of studying Social Action
- 4. Definition of Social Interaction
- 5. Essentials of Social interaction
- 6. Importance of Studying Social Interaction
- 7. Distinction between social action and social interaction

III. Social Group and Social Processes

- 1. Definition
- 2. Significance
- 3. Types as below:
 - i. Primary and Secondary Groups,
 - ii. Formal and Informal Groups,
- 4. Definition and forms of social processes:
 - Cooperation
 - Competition,
 - Conflict,
 - Accommodation,
 - Assimilation

IV. Social Stratification

- 1. Meaning
- 2. Determinants
- 5. Merits and demerits
- 6. Meaning
- 7. Class economic distribution
- 9. Horizontal and vertical Social Mobility

V. Social Norms Status and Role

- 1. Meaning
- 2. Significance
- 3. Folk Ways
- 4. Mores
- 5. Laws

- 8. Meaning of Status and Role
- 9. Types of Status achieved and ascribed

VI. Values and Belief

1. Definition of values and belief

VII. Society

- 1. Definition
- 2. Elements
- 3. Significance
- 4. Rural and Urban Society

VIII. Culture and Civilization

- 1. Meaning of culture and civilization
- 2. Significance of culture and civilization
- 3. Uniformities and variabilities of culture

IX. Social Institution

- 1. Meaning
- 2. Significance
- 3. Family
- 4. Education
- 5. Religion
- 6. Polity
- 7. Economy
- 8. Recreation

REDUCED SYLLABUS LIBRARY SCIENCE-XI

History of the Book and Libraries

- 1. Definition and history of Libraries Ancient time
- 2. Role of Modern libraries in:
 - a. Education and research
 - b. Science and Industry
- 3. Purpose and functions of various kinds of libraries
 - a. Academic (School and College Libraries)
 - b. National
 - c. Public
 - d. Special (govt. Industry and special subject libraries)
- 4. Art of book-binding:

5.

- c. Chemicals used for the preservation of library materials
- Documentation of library materials
 - a. Books:
 - i. Cataloguing
 - ii. Indexing
 - iii. Bibliography
 - b. Non-Book Materials:
 - i. Journals
 - ii. Newspapers
 - iii. Maps and charts
 - iv. Microfilms, Microfish, Microcards etc
 - v. Tapes, discs etc
- 6. Use of books and libraries and reader services:
 - a. Formation of materials i.e. title paging, contents, foot notes, references, indexes and bibliography
 - c. Compilation of Bibliography and indexing

REDUCED SYLLABUS CIVICS (For Non-Muslims)

(In lieu of Islamic Education)

The outline of course contains the following major themes and their contents:

I. Man and Society

- a. Sociability of man
- b. Survival and development
- c. Impact of social environment on man
- d. Process of socialization
- e. Nature of Associations, their kinds (Voluntary/Compulsory) and functions
- f. Concept of Family, Nation, Millat and State
- g. Interdependence of the Individual and Society

II. Individual and State

- a. Meaning of State and its elements (Population, Territory, Government and Sovereignty)
- b. Islamic concept of State
- c. Functions of State (Defence, Law and Order, Welfare etc)
- d. Organs of government Legislature, Executive and Judiciary
- e. Forms of Government
- f. Law, Liberty and Equality

IV. Citizenship

- d. Qualities of good citizenship
- e. Rights and Duties of citizen in a State
- f. Fundamental Human Rights

V. Rights and Duties of a Citizen in Pakistan

- a. Rights and Duties of citizen in Islamic State with special reference to Khutba-e-Hujjat-ul-Wida
- c. Rights and Duties of non-Muslims in Pakistan under the constitution

REDUCED SYLLABUS PAKISTAN CULTURE-XI

I. Culture

- A. Meaning, elements and scope
- B. Concept of Islamic Culture

II. Pakistan: The land and the people

A: The Land

The Mountainous Zone:External Security and Cultural inflow; NorthernRangesand Southern MountainsArid Zones:Pastoral and Nomadic Life: The Plateaus and the

Pastoral and Nomadic Life: The Plateaus and the Deserts, the Coastline: Maritime Links

B: The People

Racial Mix-Regional Traits, The Tribal System, Religious Groups, Occupational Groups, Urban-Rural Communities

III. The Making of Pakistan

- B. The Arab Period: Foundation of Islamic Society
- D. Socio-Political Decline: Socio-Economic Set-backs
- E. The Beginning of Muslim Resurgence: Steps towards Socio-Economic Uplift, Struggle for Homeland, Sayyid Ahmad Khan, Muhammad Ali Jinnah (Quaid-i-Azam), The Birth of Pakistan

IV. Pakistan Culture

- A. Ideological Moorings (Islam): The Holy Quran and the Prophet Oneness of Allah- Tuahid, Prophethood-Risalat Knowledge-Ilm, Deeds-Amal, the Hereafter-Akhrat
- B. Social Patterns: Tribal, Feudal, Rural and Urban
- C. Education

V. Emerging Trends

New Orientations, Islamization, Education, Literature, Socio-Economic Trends

REDUCED SYLLABUS PRINCIPLES OF ACCOUNTING

- 1. Definition, basic concepts, Double Entry System of Book? Deeping, its objectives and advantages
- 2. Accounting Cycle: Accounting equation Journal, Ledger and Trial Balance
- 3. Cash Book
- 4. Banking Transactions: Kinds of bank accounts and procedure of recording of banking transactions; cheques; cheque register; bank reconciliation statement, its objectives and preparation (Exclude revised cash book and double column cash book)
- 7. Rectification of Errors: Kinds of error-correction of errors after and before closing the books of accounts
- 8. Financial Statement: Trading and profit and loss account income statement and balance sheet-form and its preparation
- Adjustments and Closing Process: Prepaid and outstanding expenses; Accrued and unearned income; provision for Bad Doubtful Debt; Provisions for Discount; Depreciation, interest on capital and drawing

LIST OF EQUIPMENT, LAB-REQUIREMENTS

Book Keeping machines, Overhead Projectors, Slide Projector, Scientific electric calculators, Amount perforator on Cheque, Bank Draft, Business film though T.V.

REDUCED SYLLABUS PRINCIPLES OF ECONOMICS

MICRO ECONOMICS

What is Economics about?

a. The nature, (Definitions) and Methods of Economic Analysis

1. Demand and Supply:

- a. Law of demand, Changes in demand, Elasticity of demand, Measurement of elasticity of demand (outlay method)
- b. Supply vs Stock, Law of supply
- c. Equilibrium between demand and supply
- d. Effects of changes in demand and/or supply on market equilibrium

2. Consumer Demand Theory:

Law of Diminishing Marginal utility (cardinal approach)

3. The Cost and Revenue of a Firm:

Classification of cost: Fixed Cost, Variable Cost, Total Average Cost, Marginal Cost (Concepts and Graphical Representation) Total Revenue, Marginal and Average Revenue (Concepts and Graphical Representation)

4. Laws of Returns: (Law of Variable Proportions)

5. **Price and Output Determination:**

Concept of Perfect Competition, Price and Output determination under-Perfect Competition

6. **Resource Pricing:**

- b. Factors of Production (brief introduction)
 - (i) Land and its Characteristics
 - (ii) Labour and its Characteristics
 - (iii) Capital and its Importance
 - (iv) Organization and its Forms (introduction)

MACRO ECONOMICS

1. National Income

Measurement of National Income:

- a. National Income at factor Price
- b. National Income at Market Price
- c. Expenditure approach to income measurement
- d. Concept of National Income
 - i. GNP = Gross National Product
 - ii. GDP = Gross Domestic Product
 - iii. NNP = Net National Product
 - iv. NI = National Income
 - v. PI = Personal Income
 - vi. DPI = Disposable Personal Income
 - vii. PCI = Per-Capita Income

2. Money

- a. Money (Definition)
- b. Functions of money
- c. Inflation and its effects

3. Business Cycle

a. Phases of Business Cycle

4. International Trade

- a. Introduction to International Trade
- b. Balance of Trade and Balance of Payment

5. Public Finance

- a. Cannons of Taxation
- b. Zakat and Ushr

REDUCED SYLLABUS PRINCIPLES OF COMMERCE

1. Introduction

Definition of Commerce, its importance and scope. Branches of commerce, Trade, Insurance, Finance, Marketing, Warehousing and Industry, Essentials of establishing a business house and qualities of a good businessman

2. Types of Commercial Organizations

- a. Sole Proprietorship: Definition, Features, merits and demerits
- b. Partnership: Formation Features, Partnership Agreement/Deed Advantages, Disadvantages and Dissolution
- c. Joint Stock Company/Corporation: Special Feature, Kinds, Formation; Memorandum of Association, Articles of Association, Certificate of Registration, Prospectus, Certificate of Commencement of Business, management: share holders, Directors and Managing Director, Winding up
- d. Cooperative Society: Features, kinds, advantages and disadvantages; Basic concepts of Musharqa, Mudarba

4. Trade

Kinds:

a. Home Trade: Whole sale, Retails, Middlemen
b. Foreign Trade *Import:* Import procedure, documents used *Export:* Export procedure, documents used and role of Export Promotion Bureau

REDUCED SYLLABUS BUSINESS MATHEMATICS

- 1. Business Arithmetic:
 - a. Ratios and Proportion
 - b. Percentage
 - c. Discount
 - d. Commission
 - e. Profit and Loss

2. Interest

- a. Simple Interest
- b. Compound Interest
- 3. Equations
 - a. Linear Equations
 - b. Quadratic Equations (Factorization and quadratic formula)
 - c. Simultaneous Equations

> Equations reducible to quadratic equations are excluded.

4. Matrices and Determinants