HOLY CHILD AUXILIUM SCHOOL
FINAL EXAMINATION SYLLABUS (2023-2024)
CLASS: XI

SUBJECT – ENGLISH CORE

Entire Syllabus of the Year. **80 MARKS**

Reading:

Unseen passage to assess comprehension, interpretation and inference. Vocabulary and inference of meaning will also be assessed. The passage may be factual, descriptive or literary. Unseen case-based factual passage with verbal/visual inputs like statistical data, charts etc. Unseen passage for Note Making and Summarizing.

Grammar: Gap filling, Re-ordering/transformation of sentences, editing and omission.

Writing: Posters, Advertisements, Debate, Speech

Literature:

HORNBILL Textbook

P**rose**: The Portrait of a Lady, We're not afraid to die..., Discovering Tut, Silk Road, Adventure.

Poetry: A Photograph, The Laburnum Top, Voice of the Rain, Childhood, Father to Son

SNAPSHOTS textbook: The Summer of the Beautiful White Horse, The Address, Birth, Mother's Day (Play), The Tale of Melon City (Poetry)

SUBJECT- HISTORY (80 MARKS)

CHAPTERS:

1) WRITING AND CITY LIFE.
2) AN EMPIRE ACROSS THREE CONTINENTS.
3) NOMADIC EMPIRES.
4) THE THREE ORDERS.
5) CHANGING CULTURAL TRADITIONS.
6) DISPLACING INDIGENOUS PEOPLES.
7) PATHS TO MODERNISATION.

MAP – WORLD MAP

SUBJECT– POLITICAL SCIENCE (80 MARKS)

Book 1 – Indian Constitution at Work

Chapter 3, 4, 5,6,7,8,9,10

Book 2 – Political Theory

Chapter- 1 Political Theory: An Introduction
Chapter -2 Freedom
Chapter -3 Equality
Chapter -4 Social Justice
Chapter- 5 Rights
Chapter -6 Citizenship
Chapter -7 Nationalism
Chapter -8 Secularism

SUBJECT- SOCIOLOGY (80 MARKS)

Book 1

Chapter 2 – Terms, Concepts and their use in Sociology

Chapter 3 – Understanding Social Institutions

Chapter 4 - Culture and Socialization

Book 2

Chapter 2 – Social Change and Social Order in Rural and Urban Society

Chapter 4 – Introducing Western Sociologists

Chapter 5 – Indian Sociologists

SUBJECT – ECONOMICS (80 MARKS)

Statistics

Diagrammatic Presentation of Data: Bar diagrams and pie diagrams

Measures of Central Tendency- Arithmetic mean, Median and Mode

Correlation – Scatter diagram- Karl Pearson's method- Spearman's rank correlation

Introduction to Index Numbers- Simple Aggregative Method

Micro Economics

Demand- Price elasticity of demand

Producer Behaviour and Supply- Production function, Cost, Revenue, Producer's equilibrium, Supply, Price elasticity of supply Perfect competition, Market equilibrium, Price ceiling, Price floor

SUBJECT- ACCOUNTANCY (80 MARKS)

CHAPTERS:

Ch-8 Journal
Ch-9 Ledger
Ch-10 cash book

Ch-11 subsidiary books
Ch-12 GST
Ch-13 BRS
Ch-14 Trial balance
Ch-15 Depreciation
Ch-16 provisions and reserves
Ch-17 Rectification
Ch-18 Financial statements
Ch-19 Adjustments
Ch-20 Single entry system

SUBJECT- BUSINESS STUDIES (80 MARKS)

CHAPTERS:

Chapter 2: Forms of Business Organisations
Chapter 5: Emerging Modes of Business.

Chapter 6: Social Responsibilities of Business and Business Ethics.

Chapter 7: Formation of a company.

Chapter 8: Sources of Business Finance.

Chapter 9: Small Business and Entrepreneurship.

Chapter 10: Internal Trade.

Chapter 11: International Business.

SUBJECT - MATHEMATICS (80 MARKS)

CHAPTERS: 1. Relations and Functions

2. Trigonometric Functions
3. Linear Inequations
4. Permutations and Combinations
5. Straight Lines
6. Conic Sections
7. Introductions to Three-Dimensional Geometry
8. Limits and Derivatives
9. Statistics
10. Probability

SUBJECT- PHYSICS (70 MARKS)

CHAPTERS:

CHAPTER 3-- MOTION IN A PLANE

CHAPTER 4-- LAWS OF MOTION

CHAPTER 5-- WORK, ENERGY AND POWER

CHAPTER 6-- ROTATIONAL MOTION

CHAPTER 7-- GRAVITATION

CHAPTER 8-- MECHANICAL PROPERTIES OF SOLID

CHAPTER 9- MECHANICAL PROPERTIES OF FLUIDS

CHAPTER 10--THERMAL PROPERTIES OF MATTER

CHAPTER 11--THERMODYNAMICS

CHAPTER 13--OSCILLATIONS

CHAPTER 14--WAVES

PRACTICAL: **30 MARKS**

SUBJECT- BIOLOGY (80 MARKS)

CHAPTERS:

Chapter 8 Cell: The Unit Of Life

Chapter 9 Biomolecules

Chapter 10 Cell Cycle & Cell Division

Chapter 13 Photosynthesis In Higher Points

Chapter 14 Respiration In Plants

Chapter 15 Plant Growth & Development ; Plant Growth Regulators

Chapter 17 Breathing & Exchange Of Gases

Chapter 18 Body Fluids & Circulation

Chapter 19 Excretory Products & Elimination

Chapter 20 Locomotion & Movement

Chapter 21 Neural Control & Coordination

Chapter 22 Chemical Control & Coordination

Practical **30 Marks**

SUBJECT – CHEMISTRY (70 MARKS)

CHAPTERS:

1) Ch.1 - Basics of Chemistry- Molarity, Molality and mole fraction
2) Ch.2 - Structure of atom -de Broglie relationship, Heisenberg uncertainty principle, limitations of Bohr theory, Quantum mechanical model of an atom.
3) Ch 3- Periodic Classification of elements and periodicity of properties,
4) Ch. 4- Chemical Bonding and Molecular structure
5) Ch. 6- Chemical Equilibrium
6) Ch. 8- Basics of Organic Chemistry
7) Ch.9- Hydrocarbons

Practical : **30 Marks**

SUBJECT– COMPUTER SCIENCE (083)

Unit I: Computer Systems and Organisation **10 Marks**

● Basic computer organisation: Introduction to Computer System, hardware, software, input device, output device, CPU, memory (primary, cache and secondary), units of memory (bit, byte, KB, MB, GB, TB, PB)

● Types of software: System software (Operating systems, system utilities, device drivers), programming tools and language translators (assembler, compiler, and interpreter), application software

● Operating System (OS): functions of the operating system, OS user interface

● Boolean logic: NOT, AND, OR, NAND, NOR, XOR, NOT, truth tables, Logic circuits

● Number System: Binary, Octal, Decimal and Hexadecimal number system; conversion between number systems

Unit II: Computational Thinking and Programming – 1 **45 Marks**

● Familiarization with the basics of Python programming: Introduction to Python, Features of Python, execution modes: interactive mode and script mode, Python character set, Python tokens(keyword, identifier, literal, operator, punctuator), variables

● Knowledge of data types: Number (integer, floating point, complex), boolean, sequence(string, list, tuple), None, Mapping(dictionary), mutable and immutable data types.

● Operators: arithmetic operators, relational operators, logical operators, assignment operators, augmented assignment operators, identity operators (is, is not), membership operators (in not in)

● Expressions, statement, type conversion, and input/output: precedence of operators, expression, evaluation of an expression, type-conversion (explicit and implicit conversion), accepting data as input from the console and displaying output.

● Conditional statements: if, if-else, if-elif-else, flowcharts, simple programs: e.g.: absolute value, sort 3 numbers and divisibility of a number.

● Iterative Statement: for loop, range(), while loop, flowcharts, break and continue statements, nested loops,

● Strings: introduction, string operations (concatenation, repetition, membership and slicing), traversing a string using loops, built-in functions/methods–len(), capitalize(), title(), lower(), upper(), count(), find(), index(), endswith(), startswith(), isalnum(), isalpha(), isdigit(), islower(), isupper(), isspace(),lstrip(), rstrip(), strip(), replace(), join(), partition(), split()
● Lists: introduction, indexing, list operations (concatenation, repetition, membership & slicing), traversing a list using loops, built-in functions: len(), list(), append(), extend(), insert(), count(), index(), remove(), pop(), reverse(), sort(), sorted(), min(), max(), sum(); nested lists.
● Tuples: introduction, indexing, tuple operations (concatenation, repetition, membership & slicing), built-in functions: len(), tuple(), count(), index(), sorted(), min(), max(), sum(); tuple assignment, nested tuple.
● Dictionary: introduction, accessing itemsin a dictionary using keys, mutability of dictionary (adding a new item, modifying an existing item), traversing a dictionary, built-in functions: len(), dict(), keys(), values(), items(), get(), update(), del, clear(), fromkeys(), copy(), pop(), popitem(), setdefault(), max(), min(), count(), sorted(), copy();
● Introduction to Python modules: Importing module using 'import ' and using from statement, Importing math module (pi, e,sqrt, ceil, floor, pow, fabs, sin, cos, tan); random module (random, randint, randrange), statistics module (mean, median, mode)

Unit III: Society, Law and Ethics **15 Marks**

● Digital Footprints
● Digital society and Netizen: net etiquettes, communication etiquettes, social media etiquettes
● Data protection: Intellectual Property Right (copyright, patent, trademark), violation of IPR (plagiarism, copyright infringement, trademark infringement), open source software and licensing (Creative Commons, GPL and Apache)
● Cyber-crime: definition, hacking, eavesdropping, phishing and fraud emails, ransomware, preventing cyber crime
● Cyber safety: safely browsing the web, identity protection, confidentiality, cyber trolls and bullying.
● Safely accessing web sites: malware, viruses, Trojans, adware
● E-waste management: proper disposal of used electronic gadgets
● Indian Information Technology Act (IT Act)
● Technology & Society: Gender and disability issues while teaching and using computers

Practical: **30 Marks**

SUBJECT – INFORMATICS PRACTICES (065)

Unit 1: Introduction to Computer System **10 Marks**

Introduction to computer and computing: evolution of computing devices, components of a computer system and their interconnections, Input/output devices. Computer Memory: Units of memory, types of memory – primary and secondary, data deletion, its recovery and related security concerns. Software: purpose and types – system and application software, generic and specific purpose software.

Unit 2: Introduction to Python Basics of Python programming **25 Marks**

Python interpreter - interactive and script mode, the structure of a program, indentation, identifiers, keywords, constants, variables, types of operators, precedence of operators, data types, mutable and immutable data types, statements, expressions, evaluation and comments, input and output statements, data type conversion, debugging.

Control Statements: if-else, if-elif-else, while loop, for loop

Lists: list operations - creating, initializing, traversing and manipulating lists, list methods and built-in functions – len(),list(),append(),insert(), count(),index(),remove(), pop(), reverse(), sort(), min(),max(),sum()

Dictionary: concept of key-value pair, creating, initializing, traversing, updating and deleting elements, dictionary methods and built-in functions – dict(), len(), keys(), values(), items(), update(), del(), clear()

Unit 3: Database concepts and the Structured Query Language 30 Marks

Database Concepts: Introduction to database concepts and its need, Database Management System. Relational data model: Concept of domain, tuple, relation, candidate key, primary key, alternate key Advantages of using Structured Query Language, Data Definition Language, Data Query Language and Data Manipulation Language, Introduction to MySQL, creating a database using MySQL, Data Types Data Definition: CREATE TABLE Data Query: SELECT, FROM, WHERE. Data Manipulation: INSERT

Unit 4: Introduction to the Emerging Trends 5 Marks

Artificial Intelligence, Machine Learning, Natural Language Processing, Immersive experience (AR, VR), Robotics, Big data and its characteristics, Internet of Things (IoT), Sensors, Smart cities, Cloud Computing and Cloud Services (SaaS, IaaS, PaaS); Grid Computing, Block chain technology

Practical: 30 Marks

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