

SYLLABUS FOR FINAL EXAMINATION-2022-23

CLASS 11 (A, B,C,D,E)

ENGLISH CORE

Section A- Reading

Reading Comprehension

Note Making and Summary

Section B -Grammar and Writing Skills

Editing,

re-ordering of words and sentences

Notice

Classified Advertisements

Poster

Speech

Debate

Section C -Literature

Hornbill

The Portrait of a Lady

A Photograph

“We’re Not Afraid to Die... if we can be together

Discovering Tut: the Saga Continues

The Laburnum Top

The Voice of the Rain

Childhood

The Adventure

Silk Road

Father to Son

Snapshots

The Summer of the Beautiful White Horse

The Address

Mother’s Day

Birth (Prose)

The Tale of Melon City

HISTORY

1. An Empire across three Continents .
2. Nomadic Empires.
3. The Three Orders.
4. Changing Cultural traditions.
5. Displacing Indigenous peoples.
6. Paths to Modernisation.

Map – World Map
Asia Map

POLITICAL SCIENCE

Book -1 (Indian Constitution at work)

Chapter 3 - Election And Representation

Chapter 4 -Executive

Chapter 5 - Legislature

Chapter 6 - Judiciary

Chapter 7 - Federalism

Chapter 8 - Local Governments

Chapter 9 - Constitution As A Living Document

Chapter 10 - The Philosophy Of The Constitution

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

SOCIOLOGY

Book 1 INTRODUCING SOCIOLOGY

Chapter 2 Terms, concepts and their use in Sociology

Chapter 3 Understanding social institutions

Chapter 4 Culture and socialization

Book 2 UNDERSTANDING SOCIETY

Chapter 2 Social change and social order in rural and urban society

Chapter 4 Introducing western sociologists

Chapter 5 Indian sociologists

ECONOMICS

Diagrammatic Presentation of Data: Geometric forms (bar diagrams and pie diagrams), Frequency diagrams (histogram, polygon and Ogive). Measures of Central Tendency- Arithmetic mean, median and mode. Correlation – scatter diagram; Karl Pearson's method. Introduction to Index Numbers - Simple index numbers, consumer price index.

Demand, movement along and shifts in the demand curve, price elasticity of demand. Meaning of Production Function –Average Product and Marginal Product. Returns to a Factor Cost: Short run costs - total cost, total fixed cost, total variable cost; Average cost; Average fixed cost, average variable cost and marginal cost-meaning and their relationships. Revenue - total, average and marginal revenue - meaning and their relationship. Producer's equilibrium-meaning and its conditions in terms of marginal revenue and marginal cost. - Supply, movements along and shifts in supply curve, price elasticity of supply; measurement of price elasticity of supply. Forms of Market

PHYSICS (042)

CHAPTER 4-- MOTION IN A PLANE

CHAPTER 5-- LAWS OF MOTION

CHAPTER 6-- WORK, ENERGY AND POWER

CHAPTER 7-- ROTATIONAL MOTION

CHAPTER 8-- GRAVITATION

CHAPTER 9-- MECHANICAL PROPERTIES OF SOLID

CHAPTER 10--MECHANICAL PROPERTIES OF FLUIDS

CHAPTER 11--THERMAL PROPERTIES OF MATTER

CHAPTER 12--THERMODYNAMICS

CHAPTER 14--OSCILLATIONS

CHAPTER 15--WAVES

CHEMISTRY

Text book Name : CHEMISTRY TEXTBOOK (Part I and II)

Publication Name : NCERT

Chapter-1: Some basic Concepts of Chemistry

Chapter-2: Structure of an atom

Chapter-3: Classification of elements and periodicity in properties.

Chapter-4: Chemical bonding and Molecular structure

Chapter-6: Chemical Thermodynamics

Chapter-7 : Equilibrium

Chapter-8: Redox reaction

Chapter-12: Organic Chemistry: Some basic principles and techniques.

Chapter-13:Hydrocarbons

BIOLOGY

UNIT I

CH-2 BIOLOGICAL CLASSIFICATION

CH-4 ANIMAL KINGDOM

UNIT II

CH-5 MORPHOLOGY OF FLOWERING PLANTS

CH-6 ANATOMY OF FLOWERING PLANTS

UNIT III

CH-8 CELL: UNIT OF LIFE

CH-9 BIOMOLECULES

CH-10 CELL CYCLE AND CELL DIVISION

UNIT IV

CH-13 PHOTOSYNTHESIS

CH-14 RESPIRATION IN PLANTS

UNIT V

CH- 17 BREATHING AND EXCHANGE OF GASES

CH-18 BODY FLUIDS AND CIRCULATION

CH-19 EXCRETORY PRODUCTS AND THEIR ELIMINATION

CH-20 LOCOMOTION AND MOVEMENT

CH-21 NEURAL CONTROL AND COORDINATION

CH-22 CHEMICAL COORDINATION AND INTEGRATION

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 & interpreter), application software, Operating system (OS): functions of operating system, Boolean logic: NOT, AND, OR, NAND, NOR, XOR, truth table, Number system: Binary, Octal, Decimal and Hexadecimal number system; conversion between number systems.

Unit II: Computational Thinking and Programming

45 Marks

basics of Python programming: Introduction to Python, features of Python, executing a simple "hello world" program, execution modes: interactive mode and script mode, Python character set, Python tokens (keyword, identifier, literal, operator, punctuator), variables, concept of l-value and r-value, use of comments • 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 operator, augmented assignment operators, identity operators(is, is not), membership operators(in, not in) • Expressions, statement, type conversion & input/output: precedence of operators, expression, evaluation of expression,

python statement, type conversion (explicit & implicit conversion), accepting data as input from the console and displaying output • Flow of control: introduction, use of indentation, sequential flow, conditional and iterative flow control • Conditional statements: if, if-else, if-elif-else, flowcharts, • Iterative statements: for loop, range function, while loop, flowcharts, break and continue statements, nested loops, • Strings: introduction, indexing, string operations (concatenation, repetition, membership & slicing), traversing a string using loops, built-in functions: 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 items in 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 softwares and • 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 • Indian Information Technology Act (IT Act)

ACCOUNTANCY

Chapter 5: Accounting Equation

Chapter 12: Accounting of Goods and services tax(GST)

Chapter 15: Depreciation

Chapter 16: Provision and Reserves

Chapter 17: Rectification of Errors

Chapter 18: Financial Statements of Sole Proprietorship

Chapter 19: Adjustments in preparation of financial statements

BUSINESS STUDIES

Chapter 4: Business Services.

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 .

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

25 Marks

Basics of Python programming, 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, for loop Lists: list operations - creating, initializing, traversing and manipulating lists, list methods and built-in functions. Dictionary: concept of key-value pair, creating, initializing, traversing, updating and deleting elements, dictionary methods and built-in functions.

Unit 3: Database concepts and the Structured Query Language Database Concepts: 30 marks

Introduction to Database concepts and its need, Database Management System. Concept of 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.

MATHEMATICS (041)

CHAPTERS: 1. Relations and Functions

2. Trigonometric Functions

3. Linear Inequalities

4. Sequences and Series

5. Straight Lines

6. Conic Sections

7. Introductions to Three-Dimensional Geometry

8. Limits and Derivatives

9. Statistics

10. Probability
