

**CREDENCE HIGH SCHOOL, DUBAI
SYLLABUS**

PRE BOARD 2 - GRADE 12 -2024-2025

INDEX

<u>SUBJECT</u>	<u>PAGE NO.</u>
<u>ENGLISH</u>	<u>1</u>
<u>MATHEMATICS</u>	<u>2</u>
<u>APPLIED MATHEMATICS</u>	<u>3</u>
<u>PHYSICS</u>	<u>4</u>
<u>CHEMISTRY</u>	<u>5</u>
<u>BIOLOGY</u>	<u>6</u>
<u>ACCOUNTANCY</u>	<u>7</u>
<u>BUSINESS STUDIES</u>	<u>8</u>
<u>ECONOMICS</u>	<u>9</u>
<u>INFORMATICS PRACTICES</u>	<u>10</u>
<u>COMPUTER SCIENCE</u>	<u>12</u>
<u>PSYCHOLOGY</u>	<u>15</u>
<u>PAINTING</u>	<u>16</u>
<u>PHYSICAL EDUCATION</u>	<u>18</u>

CREDENCE HIGH SCHOOL, DUBAI
SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025
ENGLISH

UNIT NO	UNIT NAME	CHAPTER NUMBER AND CHAPTER NAME	WEIGHTAGE
1.	READING	READING PASSAGE Factual/ descriptive Case-based	12 10
2.	WRITING	NOTICE WRITING INVITATION LETTER & REPLIES FORMAL LETTER(Letter to the Editor, Job Application letter) ARTICLE WRITING REPORT WRITING	4 4 5 5 5
3.	LITERATURE	FLAMINGO <ol style="list-style-type: none"> 1. The last Lesson 2. Lost Spring 3. Deep Water 4. The Rattrap 5. Indigo 6. Poets and Pancakes 7. The Interview 8. Going places POEMS <ol style="list-style-type: none"> 1. My Mother at Sixty Six 2. Keeping Quiet 3. A Thing of Beauty 4. A Roadside stand 5. Aunt jennifer's Tigers VISTAS <ol style="list-style-type: none"> 1. The Third Level 2. The Tiger King 3. Journey to the End of the Earth 4. The Enemy 5. On the Face of It 6. Memories of Childhood 	27 13
TOTAL			80

CREDENCE HIGH SCHOOL, DUBAI
SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

MATHEMATICS

UNIT NO	UNIT NAME	CHAPTER NUMBER AND CHAPTER NAME	WEIGHTAGE
I	Relations and Functions	1.Relation and Function 2.Inverse trigonometry	08
II	Algebra	3. Matrices 4.Determinants	10
III	Calculus	5.Continuity and Differentiability 6.Applications of Derivatives 7.Integrals 8.Applications of the Integrals 9.Differential Equations	35
IV	Vectors and Three-Dimensional Geometry	10.Vectors 11.Three - dimensional Geometry	14
V	Linear Programming	12.Linear Programming	05
VI	Probability	13.Probability	08
TOTAL			80

CREDENCE HIGH SCHOOL, DUBAI
SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

APPLIED MATHEMATICS			
UNIT NO	UNIT NAME	CHAPTER NUMBER AND CHAPTER NAME	WEIGHTAGE
1	Numbers, Quantification and Numerical Applications	Numbers, Quantification and Numerical Applications	11
II	Algebra	Matrix Determinant	10
III	Calculus	Application of Derivative Integration and its Application Differential Equation	15
IV	Probability Distributions	Probability Distributions	10
V	Inferential Statistics	Inferential Statistics	5
VI	Index Numbers and Time-based data	Index Numbers and Time-based data	6
VII	Financial Mathematics	Financial Mathematics	15
VIII	Linear Programming		8
TOTAL			80

CREDENCE HIGH SCHOOL, DUBAI
SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

PHYSICS

UNIT NO	UNIT NAME	CHAPTER NUMBER AND CHAPTER NAME	WEIGHTAGE
1	Electrostatics	Chapter–1: Electric Charges and Fields Chapter–2: Electrostatic Potential and Capacitance	16
2	Current Electricity	Chapter–3: Current Electricity	
3	Magnetic Effects of Current and Magnetism	Chapter–4: Moving Charges and Magnetism Chapter–5: Magnetism and Matter	17
4	Electromagnetic Induction and Alternating Currents	Chapter–6: Electromagnetic Induction Chapter–7: Alternating Current	
5	Electromagnetic Waves	Chapter–8: Electromagnetic Waves	18
6	Optics	Chapter–9: Ray Optics and Optical Instruments Chapter–10: Wave Optics	
7	Dual Nature of Radiation and Matter	Chapter–11: Dual Nature of Radiation and Matter	12
8	Atoms and Nuclei	Chapter–12: Atoms Chapter–13: Nuclei	
9	Electronic Devices	Chapter–14: Semiconductor Electronics: Materials, Devices and Simple Circuits	7
TOTAL			70

CREDENCE HIGH SCHOOL, DUBAI
SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

CHEMISTRY

UNIT NO	UNIT NAME	CHAPTER NUMBER AND CHAPTER NAME	WEIGHTAGE
1	Solutions	1. Solutions	7
2	Electrochemistry	2. Electrochemistry	9
3	Chemical Kinetics	3. Chemical Kinetics	7
4	d -and f -Block Elements	4. d -and f -Block Elements	7
5	Coordination Compounds	5. Coordination Compounds	7
6	Haloalkanes and Haloarenes	6. Haloalkanes and Haloarenes	6
7	Alcohols, Phenols and Ethers	7. Alcohols, Phenols and Ethers	6
8	Aldehydes, Ketones, and Carboxylic Acids	8. Aldehydes, Ketones, and Carboxylic Acids	8
9	Amines	9. Amines	6
10	Biomolecules	10. Biomolecules	7
TOTAL			70

CREDENCE HIGH SCHOOL, DUBAI
SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

BIOLOGY

UNIT NO	UNIT NAME	CHAPTER NUMBER AND CHAPTER NAME	WEIGHTAGE
VI	Reproduction	Chapter-2: Sexual Reproduction in Flowering Plants Chapter-3: Human Reproduction Chapter-4: Reproductive Health	16
VII	Genetics and Evolution	Chapter-5: Principles of Inheritance and Variation Chapter-6: Molecular Basis of Inheritance Chapter-7: Evolution	20
VIII	Biology and Human Welfare	Chapter-8: Human Health and Diseases Chapter-10: Microbes in Human Welfare	12
IX	Biotechnology and its Applications	Chapter-11: Biotechnology - Principles and Processes Chapter-12: Biotechnology and its Applications	12
X	Ecology and Environment	Chapter-13: Organisms and Populations Chapter-14: Ecosystem Chapter-15: Biodiversity and its Conservation	10
TOTAL			70

CREDENCE HIGH SCHOOL, DUBAI
SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

ACCOUNTANCY

UNIT NO	UNIT NAME	CHAPTER NUMBER AND CHAPTER NAME	WEIGHTAGE
Unit-1	Accounting for Partnership Firms	<p><u>Part A- Accounting for Partnership Firms and Companies</u></p> <p>Chapter-1- Accounting for Partnership Firms- Fundamentals</p> <p>Chapter 2- Goodwill: Nature and Valuation.</p> <p>Chapter 3- Change in the Profit-Sharing Ratio</p> <p>Chapter 4- Admission of a partner.</p> <p>Chapter 5- Retirement and death of a partner</p> <p>Chapter 6- Dissolution of a partnership firm</p>	36
Unit 2.	Accounting for Companies	<p>Chapter 7- Accounting for Share Capital</p> <p>Chapter 8- Accounting for Debentures</p>	24
Unit 3	Analysis of Financial Statements	<p><u>Part B: Financial Statement Analysis</u></p> <p>Chapter 1- Financial Statements of a Company:</p> <p>Chapter 2- Financial Statement Analysis:</p> <p>Chapter 3- Comparative statements, common size statements,</p> <p>Chapter 4- Accounting Ratios:</p>	12
Unit 4.	Cash Flow Statement	Chapter 5- Cash Flow Statement	8
TOTAL			80

CREDENCE HIGH SCHOOL, DUBAI
SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

BUSINESS STUDIES

UNIT NO	UNIT NAME	CHAPTER NUMBER AND CHAPTER NAME	WEIGHTAGE
1.	Principles and Functions of Management	<u>Part A :Principles and Functions of Management</u>	50
		Chapter 1-Nature and Significance of Management,Chapter 2-Principles of Management and Chapter 3-Business Environment	16
		Chapter 4-Planning and Chapter 5-Organising	14
		Chapter 6-Staffing,Chapter 7-Directing and Chapter 8-Controlling	20
2	Business Finance and Marketing	<u>Part B:Business Finance and Marketing</u>	30
		Chapter 9-Financial Management and Chapter 10-Financial Markets	15
		Chapter 11-Marketing Management and Chapter 12-Consumer Protection	15
TOTAL			80

CREDENCE HIGH SCHOOL, DUBAI

SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

ECONOMICS

UNIT NO	UNIT NAME	CHAPTER NUMBER AND CHAPTER NAME	WEIGHTAGE
	PART A INTRODUCTORY MACROECONOMICS	Chapter number and chapter name as per NCERT Textbook	
1	National Income and Related Aggregates	Chapter 1: Introduction Chapter 2: National Income Accounting	10
2	Money and Banking	Chapter 3: Money and Banking	6
3	Determination of Income and Employment	Chapter 4: Determination of Income and Employment	12
4	Government Budget and the Economy	Chapter 5: Government Budget and the Economy	6
5	Balance of Payments	Chapter 6: Open Economy Macroeconomics	6
	PART B INDIAN ECONOMIC DEVELOPMENT		
6	Development Experience (1947-90) and Economic Reforms since 1991	Chapter 1: Indian Economy On The Eve of Independence Chapter 2: Indian Economy 1950–1990 Chapter 3: Economic Reforms Since 1991	12
7	Current challenges facing Indian Economy	Chapter 4: Human Capital Formation in India Chapter 5: Rural Development Chapter 6: Employment: Growth, Informalisation and other Issues Chapter 7: Environment and Sustainable development	20
8	Development Experience of India:	Chapter 8: Development Experiences Of India: A Comparison with Neighbours Chapter 9: Development Experiences Of India: A Comparison with neighbours	8
TOTAL			80

CREDENCE HIGH SCHOOL, DUBAI

SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

INFORMATICS PRACTICES

UNIT NO	UNIT NAME	CHAPTER NUMBER AND CHAPTER NAME	WEIGHTAGE
1	Data Handling using Pandas and Matplotlib	<ol style="list-style-type: none"> 1. Introduction to Python libraries- Pandas, Matplotlib. Data structures in Pandas - Series and Data Frames. 2. Series: Creation of Series from – ndarray, dictionary, scalar value; mathematical operations; Head and Tail functions; 3. Selection, Indexing and Slicing. 4. Data Frames: creation - from dictionary of Series, list of dictionaries, Text/CSV files; display; iteration; 5. Operations on rows and columns: add, select, delete, rename; Head and Tail functions; Indexing using Labels, Boolean Indexing; Importing/Exporting Data between CSV files and Data Frames. 6. Data Visualization Purpose of plotting; drawing and saving following types of plots using Matplotlib – line plot, bar graph, histogram Customizing plots: adding label, title, and legend in plots. 	25
2	Database Query using SQL	<ol style="list-style-type: none"> 1. Revision of database concepts and SQL commands covered in class XI 2. Math functions: POWER (), ROUND (), MOD (). 3. Text functions: UCASE ()/ UPPER (), LCASE ()/ LOWER (), MID ()/ SUBSTRING () /SUBSTR (), LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM (). 4. Date Functions: NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (), DAYNAME (). 5. Aggregate Functions: MAX (), MIN (), AVG (), SUM (), COUNT (); using COUNT (*). 	25

CREDENCE HIGH SCHOOL, DUBAI

SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

		6. Querying and manipulating data using Group by, Having, Order by. Working with two tables using equi-join	
3	Introduction to Computer Networks	<ol style="list-style-type: none"> 1. Introduction to networks, Types of network: PAN, LAN, MAN, WAN. 2. Network Devices: modem, hub, switch, repeater, router, gateway 3. Network Topologies: Star, Bus, Tree, Mesh 4. Introduction to Internet, URL, W W W, and its applications- Web, email, Chat, VoIP. 5. Website: Introduction, difference between a website and webpage, static vs dynamic web page, web server and hosting of a website. 6. Web Browsers: Introduction, commonly used browsers, browser settings, add-ons and plug-ins, cookies. 	10
4	Societal Impacts	<ol style="list-style-type: none"> 1. Digital footprint, net and communication etiquettes, data protection, intellectual property rights (IPR), plagiarism, licensing and copyright, free and open source software (FOSS) 2. Cybercrime and cyber laws, hacking, phishing, cyber bullying, overview of Indian IT Act. E-waste: hazards and management. Awareness about health concerns related to the usage of technology. 	10
TOTAL			70

CREDENCE HIGH SCHOOL, DUBAI

SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

COMPUTER SCIENCE

UNIT NO	UNIT NAME	CHAPTER NUMBER AND CHAPTER NAME	WEIGHTAGE
1	Computational thinking and programming - 2	<p>Chapter1:Revision of Python topics covered in Class XI.</p> <p>Chapter2:Functions: types of function (built-in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters,default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope)</p> <p>Chapter3:ExceptionHandling: Introduction, handling exceptions using try-except-finally blocks</p> <p>Chapter 4: File handling: - Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths.</p> <p>Text file: opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause, writing/append data to a text file using write() and writelines(), reading from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of data in a text file</p> <ul style="list-style-type: none"> ● Binary file: basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file ● CSV file: import csv module, open / close csv file, write into a csv file using writer(),writerow(),writerows() and read from a csv file using reader() <p>Chapter 5:Data Structure: Stack, operations on stack (push & pop), implementation of stack using list.</p>	40
2	Computer Networks	Chapter 6: Evolution of networking: Introduction to computer networks, evolution of networking	10

CREDENCE HIGH SCHOOL, DUBAI

SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

		<p>(ARPANET, NSFNET, INTERNET)</p> <p>Chapter 7:Data communication terminologies: concept of communication, components of data communication (sender,receiver, message, communication media, protocols), measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuit switching, Packet switching)</p> <ul style="list-style-type: none"> ● Transmission media: Wired communication media (Twisted pair cable, Co-axial cable, Fiber-optic cable), Wireless media (Radio waves, Micro waves, Infrared waves) ● Network devices (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card) ● Network topologies and Network types: types of networks (PAN, LAN, MAN, WAN), networking topologies (Bus, Star, Tree) ● Network protocol: HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP ● Introduction to web services: WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting 	
3	Database Management	<p>Chapter 8: Database concepts: introduction to database concepts and its need.</p> <ul style="list-style-type: none"> ● Relational data model: relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key) <p>Chapter 9:Structured Query Language: Introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database, show tables, create table, describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical), aliasing, distinct</p>	20

CREDENCE HIGH SCHOOL, DUBAI

SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

		<p>clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command, aggregate functions (max, min, avg, sum, count), group by, having clause, joins: cartesian product on two tables, equi-join and natural join.</p> <p>Chapter10:Interface of python with an SQL database: connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using connect(), cursor(), execute(), commit(), fetchone(), fetchall(), rowcount, creating database connectivity applications, use of %s format specifier or format() to perform queries.</p>	
TOTAL			70

CREDENCE HIGH SCHOOL, DUBAI
SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

PSYCHOLOGY

UNIT NO	UNIT NAME	CHAPTER NUMBER AND CHAPTER NAME	WEIGHTAGE
I	Variations in Psychological Attributes	1. Variations in Psychological Attributes	13
II	Self and Personality	2. Self and Personality	13
III	Meeting Life Challenges	3. Meeting Life Challenges	9
IV	Psychological Disorders	4. Psychological Disorders	12
V	Therapeutic Approaches	5. Therapeutic Approaches	9
VI	Attitude and Social Cognition	6. Attitude and Social Cognition	8
VII	Social Influence and Group Processes	7. Social Influence and Group Processes	6
TOTAL			70

CREDENCE HIGH SCHOOL, DUBAI

SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

PAINTING

UNIT NO	UNIT NAME	CHAPTER NUMBER AND CHAPTER NAME	WEIGHTAGE
1	The Rajasthani and Pahari Schools of Miniature Painting	1. Origin and Development 2. Sub-Schools-Mewar, Bundi, Jodhpur, Bikaner, Kishangarh and Jaipur 3. Main features of the Rajasthani School 4. Appreciation of the following Rajasthani paintings	10
2	The Mughal and Deccan Schools of Miniature Painting	<u>The Mughal and Deccan School</u> 1. Origin and development 2. Main features of the Mughal School 3. Appreciation of the Mughal Paintings:	10
3	The Bengal School of Painting and the Modern Trends in Indian Art	National Flag of India and the Symbolic significance of its forms and the colours. Introduction to the Bengal School of Painting (i) Origin and development of the Bengal School of Painting (ii) Main features of the Bengal School of Painting <p style="text-align: center;">The Modern Trends in Indian Art</p> Appreciation of the following contemporary (Modern) Indian Art	10
		TOTAL	30

CREDENCE HIGH SCHOOL, DUBAI

SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

1	Nature and Object Study	Studies on five objects and two draperies (in different colours) for background and foreground. Exercises in pencil with light and shade and in full colour from a fixed point of view.	25
2	Painting Composition	Imaginative painting based on subjects from Life and Nature in water and poster colours with colour values.	25
3	Portfolio Assessment	Record of the entire year's performance from sketch to the finished product.	20
TOTAL			70

CREDENCE HIGH SCHOOL, DUBAI

SYLLABUS - PRE BOARD 2 - GRADE 12 - 2024-2025

PHYSICAL EDUCATION

UNIT NO	UNIT NAME	CHAPTER NUMBER AND CHAPTER NAME	WEIGHTAGE
1	Management of Sporting Events	1. Management of Sporting Events	9
2	Children and Women in Sports	2. Children and Women in Sports	7
3	Yoga as Preventive measure for Lifestyle Disease	3. Yoga as Preventive measure for Lifestyle Disease	7
4	Physical Education & Sports for (CWSN)	4. Physical Education & Sports for (CWSN)	8
5	Sports & Nutrition	5. Sports & Nutrition	7
6	Test and Measurement in Sports	6. Test and Measurement in Sports	8
7	Physiology & Injuries in Sport	7. Physiology & Injuries in Sport	8
8	Biomechanics and Sports	8. Biomechanics and Sports	10
9	Psychology and Sports	9. Psychology and Sports	7
10	Training in Sports	10. Training in Sports	9
TOTAL			70