

## Pakistan International School Jeddah – English Section

## **Academic Year 2024-25**

## Syllabus Outline – For Admission in Y10

(Minimum Age 15, Maximum Age 15.11 years on 1st September, 2024)

Subject	Syllabus
Mathematics	Numbers  Arithmetic (Decimals, Fractions, both) Number Facts (Rational and Irrational Nos.) Sequences Measurements and Bounds Standard Form Ratio and Proportion Foreign Exchange Percentages (% age Increase & Decrease) Interest (Simple, Compound) Speed, Distance and Time  Algebra Directed Numbers Formula Making and Formulas Brackets and Simplifying Linear Equations Problems Solved by Linear Equations Simultaneous Equations (Substitution, Elimination) Problems Solved by Simultaneous Equations Simultaneous Equations Factorization Quadratic Equations and Problems Solved by Quadratic Equations Completing Squares and Solving Equations by Completing Squares  Mensuration Areas of Rectangle, Trapezium, Kite, Parallelogram, Triangle, Circle Regular Polygons Arc Length and Sector Area Chord of a Circle Finding Shaded Areas Volumes of Prisms, Pyramid, Cone, Sphere, Hemisphere Surface Areas of Three -D Shapes (Cylinders, Sphere, Cone, Boxes)  Geometry Fundamental Results Polygons (Interior and Exterior Angles and No. of Sides) Parallel Lines (Alternate, Corresponding, Allied, Vertically Opposite) Pythagoras' Theorem Similarity (Similar Shapes, Areas of Similar Shapes, Volumes of Similar Shapes).

	Motion, Forces and Energy
Physics	<ul> <li>Physical Quantities and measurement techniques</li> <li>Motion - Kinematics</li> <li>Mass Weight and Density</li> <li>Forces</li> <li>Turning Effect of Forces</li> <li>Energy, Work and Power</li> <li>Pressure</li> </ul> Ref: Cambridge IGCSE Physics 0625 syllabus for 2023, 2024 and 2025
Chemistry	Unit 1: States of Matter Unit 2: Elements, Compounds and Mixtures Unit 3: Atomic Structure Unit 4: Ionic, Covalent & Metallic Bonding Unit 5: Chemical Formulae and Equations Unit 6: 6.1 Relative Molecular Mass Unit 12: Acids, Bases and Salts Unit 13: Periodic Table Unit: 20: Experimental Techniques and Chemical Analysis  **Resources: Cambridge IGCSE Chemistry-Marshall Cavendish** 0620 syllabus 2023-2025
Biology	Chapter 1: Characteristics and classification of living organisms Chapter 2: Cells Chapter 3 Movement into and out of cells Chapter 4: Biological molecules Chapter 5: Enzymes Chapter 6: Plant nutrition Chapter 7: Human nutrition Chapter 8: Transport in plants Chapter 19: Human influences on ecosystems 19.1 Human pressures on ecosystem  **Reference:  Cambridge IGCSE Biology 0610- Syllabus for Exams in 2023, 2024 and 2025. Coursebook: Cambridge IGCSE Biology 4th Edition by Mary Jones, Geoff Jones

## **Section 1: Basic Economic Problem** Chapter 1; The Nature of the Economic Problem Chapter 2; Factors of production and Opportunity cost Chapter 3; Opportunity cost. Chapter 4; Production Possibility Curve (PPF) Section 2: The allocation of resources. Chapter 5: Microeconomics and Macroeconomics Chapter 6: The role of market in allocating resources. Chapter 7: Demand Chapter 8: Supply Chapter 9: Price determination Chapter 10: Price changes. Chapter 11: Price elasticity of demand. Chapter 12: Price elasticity of supply Chapter 13: Market Economic System Chapter 14: Market Failure. Chapter 15: Mixed economic system Text Book: Cambridge IGCSE Economics by Paul Hoang (2nd Edition) Section 1: Understanding Business Activity Chapter 1: Business Activity Chapter 2: Classification of Business Chapter 3: Enterprise, Business growth and Size Chapter 4: Types of Business Organization Chapter 5: Business objectives and Stakeholders objectives. Section 2: People in Business Chapter 6: Motivating Employees Chapter 7: Organization and Management Chapter 8: Recruitment, selection and training employees Chapter 9: Internal and external communication Ref: Cambridge IGCSE and O Level Business Studies Coursebook – Revised Third Edition By: Mark Fisher, Medi Huoughton and Veenu Jain Chapter 1: Introduction to Accounting Chapter 2: Double Entry Book-keeping Part A Chapter 3: The Trial Balance Chapter 4: Double Entry Book-keeping Part B Chapter 5 : Petty Cash Book Chapter 6; Business Documents Chapter 7: Books of Prime Entry Chapter 8: Financial Statements Part A (Income Statement) Chapter 9: Financial Statements Part B (Statement of financial position)