# G.D.GOENKA WORLD SCHOOL

# IBDP PREBOARD SYLLABUS

January - 2023 GRADE XII

#### **GROUP 1: LANGUAGE A**

### **ENGLISH A**

SL Paper 1 — Guided textual analysis on unseen text

Paper 2 — Compare-contrast essay on any two literary works that you have studied in class. (Persepolis, The Guide, CODF, A Doll's House)

HL Paper 1 — Guided textual analysis on unseen texts (two essays)

Paper 2 — Compare-contrast essay on any two literary works that you have studied in class. (Persepolis, The Guide, CODF, A Doll's House, Maya Angelou's poems, Beloved)

### **GROUP 2: LANGUAGE B**

### HINDI B- SL /HL

Paper 1- One Writing Task from a choice of three based from a choice of 5 prescribed themes: identities, experiences, human ingenuity, social organization and sharing the planet Paper 2- 3 Reading and Listening Text based from a choice of five prescribed themes: identities, experiences, human ingenuity, social organization and sharing the planet IOP to be conducted as per the requirement of HL/SL Assessment details on prescribed dates according to the communication that will be shared on email (dates-20-28 Jan)

# **ENGLISH B**

Paper 1- One Writing Task from a choice of three based from a choice of 5 prescribed themes: identities, experiences, human ingenuity, social organization and sharing the planet

Paper 2- 3 Reading Text based from a choice of five prescribed themes: identities, experiences, human ingenuity, social organization and sharing the planet

### **FRENCH B**

- Experiénces
- Identités
- Organisation sociale
- Ingéniosité humaine
- Partage de la planète

# **FRENCH AB INITIO**

- Experiénces
- Identités
- Organisation sociale
- Ingéniosité humaine
- Partage de la planète

Unité 1-14

# **SPANISH B**

- Experiencias
- identidades
- Organización social
- ingenuidad humana
- Compartiendo el Planeta

# **SPANISH AB INITIO**

### Unit 1-14 Based on

- Experiencias
- identidades
- Organización social
- ingenuidad humana
- Compartiendo el Planeta

# **GERMAN B**

- Identitäten
- Erfahrugen
- Menschliche Erfindungsgabe
- Soziale Organisation
- Ein Planet für alle

#### **GROUP 3: Humanities**

#### **ECONOMICS HL & SL**

#### **Unit 1: Introduction to economics**

- 1.1 What is economics?
- 1.2 How do economists approach the world?

#### **Unit 2: Microeconomics**

- 2.1 Demand (includes HL only sub-topics)
- 2.2 Supply (includes HL only sub-topics)
- 2.3 Competitive market equilibrium
- 2.4 Critique of the maximizing behaviour of consumers and producers
- 2.5 Elasticity of demand (includes HL only sub-topics)
- 2.6 Elasticity of supply (includes HL only sub-topics)
- 2.7 Role of government in microeconomics (includes HL only calculation)
- 2.8 Market failure—externalities and common pool or common access resources (includes HL only calculation)
  - 2.9 Market failure—public goods
  - 2.10 Market failure—asymmetric information (HL only)
  - 2.11 Market failure—market power (HL only)
  - 2.12 The market's inability to achieve equity (HL only)

#### **Unit 3: Macroeconomics**

- 3.1 Measuring economic activity and illustrating its variations
- 3.2 Variations in economic activity—aggregate demand and aggregate supply
- 3.3 Macroeconomic objectives (includes HL only calculation)
- 3.4 Economics of inequality and poverty (includes HL only calculation)

- 3.5 Demand management (demand side policies)—monetary policy
- 3.6 Demand management—fiscal policy (includes HL only sub-topics)
- 3.7 Supply-side policies

### **Unit 4: The global economy**

- 4.1 Benefits of international trade (includes HL only subtopics and calculations)
- 4.2 Types of trade protection (includes HL only calculations)
- 4.3 Arguments for and against trade control/protection
- 4.4 Economic integration
- 4.5 Exchange rates (includes HL only sub-topic)
- 4.6 Balance of payments (includes HL only sub-topics)
- 4.7 Sustainable development (includes HL only sub-topic)
- 4.8 Measuring development
- 4.9 Barriers to economic growth and/or economic development
- 4.10 Economic growth and/or economic development strategies

### **PSYCHOLOGY**

# Paper 1

### **Biological Approach to Behavior**

Localization

Techniques used to study the brain in relation to behaviour

Hormones and behaviour

Pheromones and behaviour

Neuroplasticity

Neurotransmitters and behavior

Genes and behaviour; genetic similarities

Evolutionary explanations for behaviour

The role of animal research in understanding animal behaviour (Only HL)

# **Cognitive Approach to Behavior**

Models of memory

Schema theory

Thinking and decision-making

Reliability of cognitive processes: reconstructive memory

Biases in thinking and decision-making

Emotion and cognition

Cognitive processing in the digital world (Only HL)

# Socio-Cultural Approach to Behavior

The individual and the group—social cognitive theory

Cultural influences on individual attitudes, identities and behaviour—culture and cultural norms

Cultural origins of behaviour and cognition—cultural dimensions

The individual and the group—social identity theory and stereotyping

The influence of globalization on individual behaviour (Only HL)

### Paper 2

# **Abnormal Psychology**

Normality versus abnormality

Classification systems

Prevalence rates and disorders

Validity and reliability of diagnosis

The role of clinical biases in diagnosis

Explanations for disorders—biological, cognitive and sociocultural explanations for PTSD

Treatment of PSTD: Biological and Psychological

Culture and treatment

# **Psychology of Human Relationships (Only HL)**

Personal relationships

Group dynamics

Prejudice and discrimination

Origins of conflict and conflict resolution

Social responsibility

### Paper 3

#### **Research Methods**

- 2.1 Quantitatve Research Methods
- 2.2 Qualitative Research Methods (Only HL)
- 2.3 Elements of Research: Hypothesis, Variables, Research Designs, Sampling Techniques, Ethics
  - 2.4 Analysing Data: Data presentation, Statistics

- 2.5 Evaluating Research: Reliability, Validity, Norms, Biases
- 2.6 Drawing Conclusions: Correlation and Causation, Generalizability, Transferability, Triangulation

# **BUSINESS MANAGEMENT:**

# Unit 1: Business organization and environment

- 1.1 Introduction to business management
- 1.2 Types of organizations
- 1.3 Organizational objectives
- 1.4 Stakeholders
- 1.5 External environment
- 1.6 Growth and evolution
- 1.7 Organizational planning tools (HL only)

# Unit 2: Human resource management

- 2.1 Functions and evolution of human resource management
- 2.2 Organizational structure
- 2.3 Leadership and management
- 2.4 Motivation
- 2.5 Organizational (corporate) culture (HL only)
- 2.6 Industrial/employee relations (HL only)

#### **Unit 3: Finance and accounts**

- 3.1 Sources of finance
- 3.2 Costs and revenues
- 3.3 Break-even analysis
- 3.4 Final accounts (some HL only)
- 3.5 Profitability and liquidity ratio analysis

- 3.6 Efficiency ratio analysis (HL only)
- 3.7 Cash flow
- 3.8 Investment appraisal (some HL only)
- 3.9 Budgets (HL only)

# **Unit 4: Marketing**

- 4.1 The role of marketing
- 4.2 Marketing planning (including introduction to the four Ps)
- 4.3 Sales forecasting
- 4.4 Market research
- 4.5 The four Ps (product, price, promotion, place)
- 4.6 The extended marketing mix of seven Ps (HL only)
- 4.7 International marketing (HL only)
- 4.8 E-commerce

# **Unit 5: Operations management**

- 5.1 The role of operations management
- 5.2 Production methods
- 5.3 Lean production and quality management (HL only)
- 5.4 Location
- 5.5 Production planning (HL only)
- 5.6 Research and development (HL only)
- 5.7 Crisis management and contingency planning (HL only)

# **HISTORY - HL**

# **Paper 1 - Rights and Protests**

# Case Study 1: Nature and Characteristics of discrimination

- Apartheid
- Defiance Campaign
- Freedom Charter

# Case Study 2: Civil Rights Movement in the Usa

Protests and Action

The Role and significance of key actors

- Nelson Mandela
- ANC/SACP

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# Paper 2 - Authoritarian states -

- Hitler
- Mao
- Stalin

# Cold War - Origin of Cold War [Grand Alliance]

Cuban Missile Crisis

Vietnam War

Korean War

End of Cold War

# Paper 3 -

Case Study

- Germany
- Italy
- Spain

#### **GROUP 4: Sciences**

# **BIOLOGY**

### SL & AHL:

- 1. Unit 1: Cell Biology
- 2. Unit 2: Molecular Biology
- 3. Unit 3:Genetics
- 4. Unit 4: Ecology
- 5. Unit 5: Evolution and Biodiversity
- 6. Unit 6: Human Physiology

# **AHL ONLY:**

- 7. Unit 7: Nucleic Acids
- 8. Unit 8: Metabolism, cell respiration and photosynthesis
- 9. Unit 9: Plant Biology
- 10. Unit 10: Genetics and evolution
- 11. Unit 11: Animal physiology

# **OPTION: D Human Physiology (SL&HL)**

# **PHYSICS:**

#### HL & SL:

- 1. Measurements and uncertainties
- 2. Mechanics
- 3. Thermal Physics
- 4. Waves
- 5. Electricity and magnetism
- 6. Circular motion and gravitation
- 7. Atomic, nuclear and particle Physics
- 8. Energy production

# HL only:

- 9. Wave phenomenon
- 10. Fields
- 11. Electromagnetic induction
- 12. Quantum and nuclear physics

# OPTION: D Astrophysics (HL & SL)

# **CHEMISTRY**

# Core

- 1. Stoichiometric relationships
- 2. Atomic structure
- 3. Periodicity
- 4. Chemical bonding and structure
- 5. Energetics/thermochemistry
- 6. Chemical kinetics
- 7. Equilibrium
- 8. Acids and bases
- 9. Redox processes
- 10. Organic chemistry
- 11. Measurement and data processing

# Additional higher level (AHL)

- 12. Atomic structure
- 13. The periodic table—the transition metals
- 14. Chemical bonding and structure
- 15. Energetics/thermochemistry
- 16. Chemical kinetics
- 17. Equilibrium
- 18. Acids and bases
- 19. Redox processes
- 20. Organic chemistry
- 21. Measurement and analysis

# **Option**

- **B.** Biochemistry
- C. Energy

### **ENVIRONMENTAL SYSTEMS AND SOCIETIES**

- Unit 1 Foundations of Environmental systems and societies
- Unit 2: Ecosystems and ecology
- Unit 3: Biodiversity and conservation
- Unit 4: Water, food production system and society
- Unit 5: Soil system and society
- Unit 6: Atmospheric systems and society
- Unit 7: Climate change and energy production
- Unit 8: Human system and resource use

### **COMPUTER SCIENCE**

# Paper 1(HL & SL)

- Topic 1: System fundamentals
- Topic 2: Computer organization
- Topic 3: Networks
- Topic 4: Computational thinking, problem-solving and programming

# Paper 1(HL)

- Topic 5: Abstract data structures
- Topic 6: Resource management
- Topic 7: Control

# Paper 2(HL & SL)

A1 Complete

A2.1 to A2.9

A3 Complete

#### **Paper**

# **GROUP 5: MATHEMATICS**

# **MATHEMATICS AA SL**

Unit-1: Number and Algebra

Unit-2: Functions

Unit-3: Geometry and Trigonometry

Unit-4: Statistics and Probability

Unit-5 : Calculus

### **MATHEMATICS AA HL**

Unit-1: Number and Algebra

Unit-2: Functions

Unit-3: Geometry and Trigonometry

Unit-4: Statistics and Probability

Unit-5: Calculus

# **MATHEMATICS AI HL**

Unit-1: Number and Algebra

Unit-2: Functions

Unit-3: Geometry and Trigonometry

Unit-4: Statistics and Probability

Unit-5 : Calculus

### **MATHEMATICS AISL**

# **UNIT 1: NUMBER & ALGEBRA**

- Sequences and series
- Approximation and error
- Loans and Annuities
- Exponential and logarithms
- Surds and exponents
- Equations

### **UNIT 2: FUNCTIONS**

- Straight Lines
- Functions
- Quadratics Functions
- Modelling
- Direct and Inverse variation

### **UNIT 3: GEOMETRY AND TRIGONOMETRY**

- Trigonometric Functions.
- Voronoi Diagrams
- Measurement
- Right Angled Triangle trigonometry
- Non- Right Angled Triangle Trigonometry.
- Points in Space

### **UNIT 4: STATISTICS AND PROBABILITY**

- Sampling and Data
- Statistics
- Bivariate Statistics
- Probability
- Sets and Venn Diagram
- Discrete Random variable
- The Normal Distribution
- Hypothesis Testing

# **UNIT 5 : CALCULUS**

- Differentiation
- Properties of curves
- Application of Differentiation
- Integration.

# **Group 6 Visual Arts (HL & SL)**

### VISUAL ARTS HL

Submission:

Comparative Study (Final Draft) 15-20 screens

Process Portfolio (Final Draft) 13-25 screens

Exhibition (Final Draft) 8-11 Artworks with curatorial rationale and exhibition texts.