

BCECE Exam Pattern

- PCM- Physics, Chemistry, Mathematics
- PCB- Physics, Chemistry, Biology
- PCMB- Physics, Chemistry, Mathematics, Biology
- CBA- Chemistry, Biology, Agriculture

Subjects	Maximum marks	Duration
Physics	400	1 ½ hour
Chemistry	400	1 ½ hour
Mathematics	400	1 ½ hour
Biology	400	1 ½ hour
Agriculture	400	1 ½ hour

BCECE Subject Wise Exam Pattern

Subject Paper-Papers with separate subjects.	Number of Questions
Physics	100
Chemistry	100
Mathematics	100
Biology	100
Agricultural Science	100

BCECE Stage 1 Exam Pattern

Sections	No. of Questions	Maximum marks
Physics	50	200
Chemistry	50	200
Mathematics	50	200
Biology	50	200

BCECE Stage 2 Exam Pattern

Sections	No. of Questions	Maximum marks
Physics	100	400
Chemistry	100	400
Mathematics	100	400
Biology	100	400

BCECE Physics Syllabus

- Physical world and measurement
- kinematics
- Laws of Motion
- Work, Energy & Power
- The motion of System of Particles and Rigid body
- Gravitation
- Properties of Bulk Matter
- Heat and Thermodynamics
- Behavior of Perfect Gas and Kinetic Theory
- Oscillations and Waves
- Electrostatics
- Current Electricity
- Magnetic effects of current & Magnetism
- Electromagnetic induction and Alternating Currents
- Electromagnetic Waves
- Optics
- Dual Nature of Matter and Radiation
- Atoms and Nuclei
- Electronic Devices
- Communication Systems

BCECE Chemistry Syllabus

1. Some basic concepts of Chemistry
2. Structure of Atom
3. Classification of Elements and Periodicity in Properties

4. Chemical Bonding and Molecular Structure
5. States of Matter: Gases and Liquids
6. Thermodynamics
7. Equilibrium
8. Redox Reactions
9. Hydrogen
10. S-Block Elements (Alkali and Alkaline earth metals)
 1. Group 1 and Group 2 elements:
 2. Preparation and properties of some important compounds
11. Some P-Block Elements:
 1. General Introduction of P-Block Element
 2. Group 3 elements
 3. Group 4 elements
12. Organic Chemistry:
 1. Some Basic Principles and Techniques
13. Hydrocarbons:
 1. Classification of hydrocarbons
14. Environmental Chemistry:
 1. Environmental pollution
 2. Solid state
 3. Solutions
15. Electrochemistry
16. Chemical Kinetics
17. Surface Chemistry
18. General Principles and Processes of Isolation of Elements
19. P-Block Elements
20. D- and F-Block Elements
21. Haloalkanes and Haloarenes
22. Alcohols, Phenols & Ethers
23. Aldehydes, Ketones and Carboxylic acids
24. Organic compounds containing Nitrogen
25. Biomolecules
26. Polymers
27. Chemistry in Everyday life

BCECE Mathematics Syllabus

SETS AND FUNCTIONS

- Sets
- Relation & Functions
- Trigonometric Functions

ALGEBRA

- Permutation & Combination
- Binomial Theorem
- The principle of Mathematical induction
- Complex Numbers and Quadratic Equations
- Linear inequalities
- Sequence & Series

CO-ORDINATE GEOMETRY(I)

- Straight Lines
- Conic Section
- Introduction to ThreeDimensional Geometry

CALCULUS (I)

- Limits and Derivatives

MATHEMATICAL REASONING

- Mathematical Reasoning

STATISTICS & PROBABILITY (I)

- Statistics
- Probability

RELATIONS AND FUNCTIONS

- Relations and Functions

- Inverse Trigonometric Functions

ALGEBRA (II)

- Matrices
- Determinants

CALCULUS (II)

- Continuity and Differentiability
- Applications of Derivatives
- Integrals
- Applications of the Integrals
- Differential Equations

VECTORS AND THREE DIMENSIONAL GEOMETRY

- Vectors
- Three – dimensional Geometry

LINEAR PROGRAMMING

- Linear Programming

PROBABILITY (II)

- Probability

BCECE Biology Human Physiology Syllabus

- Sexual Reproduction
- Genetics And Evolution
- Plant Physiology
- Biotechnology And Its Applications
- Ecology & Environment
- Biology And Human Welfare
- Diversity In Living World

- Structural Organisation In Animals And Plants
- Cell:Structure And Function

Agriculture

- Agricultural Engineering
- Crop protection
- Introductory Agriculture and Agrometeorology
- Soil as a medium of plant growth
- Plant breeding and genetics.
- Animal Husbandry, Dairy and Fish Production

Crop Production

- Agricultural economics
- Basic Horticulture
- Fruit Production
- Vegetable production
- Flowers, medicinal and aromatic plants
- Cultivation of crops
- Cropping system
- Soil and water management
- Weed management
- Recent trends in agriculture
- Preservation of fruits and vegetables
- Extension education