

# Syllabus

Grade-VII

Session: 2024-2025



**St. Joseph International School**

97, Asad Avenue, Mohammadpur, Dhaka-1207, Bangladesh.

Telephone: 880-2-41022469

Website: [www.international.sjs.edu.bd](http://www.international.sjs.edu.bd)

## *Ten Basic Tips to Help Stop Climate Change*

Climate is defined as an area's long-term weather patterns. The simplest way to describe climate is to look at average temperature and precipitation over time. Other useful elements for describing climate include the type and the timing of precipitation, amount of sunshine, average wind speeds and directions, number of days above freezing, weather extremes, and local geography. You must consider all the factors that work together to determine climate. Don't have a lot of time, but want to take action? Here are ten, simple, everyday things each of us can do to help stop climate change.

**Change a light:** Replacing a regular light bulb with a compact fluorescent one saves 150 pounds of carbon dioxide each year.

**Drive less:** Walk, bike, carpool, take mass transit, and/or trip chain. All of these things can help reduce gas consumption and one pound of carbon dioxide for each mile you do not drive.

**Recycle more and buy recycled:** Save up to 2,400 pounds of carbon dioxide each year just by recycling half of your household waste.

**Check your tires:** Properly inflated tires mean good gas mileage. For each gallon of gas saved, 20 pounds of carbon dioxide are also never produced.

**Use less hot water:** It takes a lot of energy to heat water. Reducing the amount used means big savings in not only your energy bills, but also in carbon dioxide emissions.

**Avoid products with a lot of packaging:** Preventing waste from being created in the first place means that there is less energy waste and fewer resources consumed.

**Adjust your thermostat:** Keeping your thermostat at 68 degrees in winter and 78 degrees in summer not only helps with your energy bills, but it can reduce carbon dioxide emissions as well.

**Plant a tree:** A single tree can absorb one ton of carbon dioxide over its lifetime.

**Turn off electronic devices when not in use:** Simply turning off your TV, VCR, computer and other electronic devices can save each household thousands of pounds of carbon dioxide each year.

**Stay informed:** Use the Earth 911 Web site to help stay informed about environmental issues, and share your knowledge with others. Together, we can and do make Every Day Earth Day!

Ref:<http://earth911.com/blog/2001/04/02>

## ***Few Words on the Syllabus of 2024-2025***

It is our utmost pleasure to introduce you to the syllabus of grade-III to X for the academic year of 2024-2025. We believe a syllabus should help students becoming more effective learners in the course. Hard work and regular studies only can enable students to achieve their desired academic success. To accomplish this aim, unit heads of those classes had been assigned for making and developing the syllabus of 8 subjects taught in different grades. Then the unit heads, with the help of subject-teachers, produce this example of collective effort to give a detailed outline about the topics and readings to be covered in the whole session. We have included CT and Hall test syllabus, question patterns and marks distribution for first and final semester of the current academic year. We have followed Cambridge Curriculum System to make it a useful learning tool. Therefore, learners of SJIS are expected to follow them and take preparations accordingly. Educational institutions should facilitate the scholastic and cognitive development (physical, mental, moral and spiritual) of the young aspirants. In order to achieve this objective, a well-planned syllabus is an essential means. As this is written on our school monogram, advancing in wisdom and virtue, we are dedicated to develop stimulated intellect of our students.

In about 182 years earlier, after the French Revolution, founder of the Congregation of Holy Cross, Blessed Basil Anthony Moreau, CS.C established the congregation with some enthusiast and dedicated brothers and prioritized education to develop his country. In order to follow his legacy Holy Cross Brothers are also serving in different educational institutions to help students transforming into an ideal human being till date.

Since some subjects might not incorporate CT syllabus but the chapters name only, students are asked to discuss these issues with the respective subject-teachers.

In addition, I want to extend my sincere thanks and appreciation to all the soul worked to develop this syllabus. Moreover, any observations or suggestions regarding this syllabus will be highly regarded. With thanks



Brother Victor Bikash D' Rozario, CSC  
Vice Principal

## English literature

**Objectives: The prime goals for this particular literary content are:**

1. To develop their analytical skill in a critical manner.
2. Assist the learners to enhance cognitive flexibility, innovation and cultural literacy to incorporate with their entity.
3. To cultivate the linguistic potentials within a proper literary context and discourse

**Books: 1. Oxford Reading Circle 8**

**2. Tales from Shakespeare**

### Half Yearly Syllabus

| Name of the Exam        | Chapters  | Pattern  | Marks      |
|-------------------------|---|--|------------|
| Half Yearly Examination | <b>Stories:</b> <ol style="list-style-type: none"> <li>1. After Twenty Years</li> <li>2. Great Expectations</li> <li>3. Romeo and Juliet</li> <li>4. The Post Master</li> </ol> <b>Poems:</b> <ol style="list-style-type: none"> <li>1. Life- Charlotte Bronte</li> <li>2. Sonnet - I Edmund Spenser</li> <li>3. In the Garden- Emily Dickenson</li> </ol> <b>Drama:</b> <ol style="list-style-type: none"> <li>1. Othello</li> </ol> | Broad Question, Short Question, Poem analysis, Character Analysis, lines/ stanza explanation, one word answer, One sentence answer, True/ False, W/M | 50         |
| CT-1                    | <b>Stories:</b> <ol style="list-style-type: none"> <li>1. After Twenty Years</li> <li>2. Great Expectations</li> </ol> <b>Poem:</b> <ol style="list-style-type: none"> <li>1. Life- Charlotte Bronte</li> </ol>   | Broad Question, Short Question, Poem analysis, Character Analysis, lines/ stanza explanation, one word answer, One sentence answer, True/ False, WM  | 15         |
| CT-2                    | <b>Drama:</b> <ol style="list-style-type: none"> <li>1. Othello</li> </ol> <b>Poem:</b> <ol style="list-style-type: none"> <li>1. Sonnet - I Edmund Spenser</li> </ol>  | Broad Question, Short Question, Poem analysis, Character Analysis, lines/ stanza explanation, one word answer, One sentence answer, True/ False, WM  | 15         |
|                         | SBA   |  | 10         |
|                         | Assignment/ Presentation/ Poster  |  | 10         |
|                         | <b>Total</b>  |  | <b>100</b> |

### Annual Term Syllabus

| Name of the Exam          | Chapters  | Pattern   | Marks      |
|---------------------------|---|---|------------|
| <b>Annual Examination</b> | <b><u>Stories:</u></b> <ol style="list-style-type: none"> <li>Virtually True</li> <li>The Monkey's Paw</li> <li>The Necklace</li> <li>Mrs. Packletide's Tiger</li> </ol> <b><u>Poems:</u></b> <ol style="list-style-type: none"> <li>Hymn To God My God In My Sickness- John Donne</li> <li>To the Evening Star - Willam Blake</li> <li>The Village Schoolmaster- Oliver Goldsmith</li> </ol> <b><u>Dramas:</u></b> <ol style="list-style-type: none"> <li>Macbeth</li> </ol> | Broad Question, Short Question, Poem analysis, Character Analysis, lines/ stanza explanation, one word answer, One sentence answer, True/ False, W.M. | 50         |
| CT-1                      | <b><u>Stories:</u></b> <ol style="list-style-type: none"> <li>Virtually True</li> <li>The Monkey Paw</li> </ol> <b><u>Poem:</u></b> <ol style="list-style-type: none"> <li>Hymn To God My God In My Sickness- John Donne</li> </ol>   | Broad Question, Short Question, Poem analysis, Character Analysis, lines/ stanza explanation, one word answer, One sentence answer, True/ False, W.M. | 15         |
| CT-2                      | <b><u>Drama:</u></b> <ol style="list-style-type: none"> <li>Macbeth</li> </ol> <b><u>Poem:</u></b> <ol style="list-style-type: none"> <li>To the Evening Star - Willam Blake</li> </ol>   | Broad Question, Short Question, Poem analysis, Character Analysis, lines/ stanza explanation, one word answer, One sentence answer, True/ False, W.M. | 15         |
|                           | SBA   |   | 10         |
|                           | Assignment/ Presentation/ Poster  |   | 10         |
|                           | <b>Total</b>  |   | <b>100</b> |

# English Language

## Books:

1. Cambridge Lower Secondary English Learner's Book 8
2. Cambridge Lower Secondary English Workbook 8
3. General Certificate English by Alan Etherton

## Half Yearly Syllabus

| Name of the Exam        | Chapters  | Pattern  | Marks |
|-------------------------|---|--|-------|
| Half Yearly Examination | <b><u>Cambridge Books:</u></b> <ol style="list-style-type: none"> <li>2. Unit-1 Nature and humans</li> <li>3. Unit-2 Grandmother's Song</li> <li>4. Unit-3 Strange islands</li> <li>5. Unit-4 This is the modern world</li> <li>6. Unit-5 Heroes</li> </ol>   | Selected exercises from the mentioned topics and workbook. | 50    |
|                         | <b><u>General Certificate English</u></b> <ol style="list-style-type: none"> <li>7. Part 1- Summary</li> <li>8. Part 2- Comprehension Practice passage 9-13</li> <li>9. Part 3 –Descriptive Composition</li> <li>10. Part 4, 61 Idioms and common expressions</li> <li>11. Part 5 , 64 Adjectives</li> <li>12. Part 5, 81 Verbs (Present tense) , 82 Verbs( Past tense).</li> </ol> |  |       |
| CT-1                    | <b><u>Cambridge Books:</u></b> <ol style="list-style-type: none"> <li>1. Unit-1 Nature and humans</li> <li>2. Uni-2 Grandmother's Song</li> </ol>   | Selected exercises from the mentioned topics and workbook. | 15    |
|                         | <b><u>General Certificate English</u></b> <ol style="list-style-type: none"> <li>1. Part 4, 55 Antonym</li> <li>2. Part 5, 68-Comparison</li> </ol>   |  |       |
| CT-2                    | <b><u>Cambridge Books:</u></b> <ol style="list-style-type: none"> <li>1. Unit 3- Strange islands</li> <li>2. Unit 4-This is the modern world</li> </ol>   | Selected exercises from the mentioned topics and workbook. | 15    |

|  |  |  |            |
|--|--|--|------------|
|  | <b><u>General Certificate English</u></b><br>1. Part 4, 55 Synonym and homonyms<br>2. Part 5, 69- Conditionals |  |            |
|  | SBA  |  | 10         |
|  | Assignment   |  | 10         |
|  | <b>Total</b>   |  | <b>100</b> |

#### Annual Term Syllabus

| Name of the Exam          | Chapters  | Pattern  | Marks      |
|---------------------------|---|--|------------|
| <b>Annual Examination</b> | <b><u>Cambridge Books:</u></b><br><br>1. Unit 6 - Monsters<br>2. Unit 7- The Plantation<br>3. Unit 8- Choices and decisions<br>4. Unit 9- Endings   | Selected exercises from the mentioned topics and workbook. | 50         |
|                           | <b><u>General Certificate English</u></b><br><br>1. Part 2- Comprehension Practice passage 14-17<br>2. Part 3 -Narrative Composition<br>3. Part 5<br>73 Indirect speech,<br>74 Indirect questions,<br>76 Participles,<br>79 Punctuation |  |            |
| CT-1                      | <b><u>Cambridge Books:</u></b><br>1. Unit 6 - Monsters<br>2. Unit 7- The Plantation   | Selected exercises from the mentioned topics and workbook. | 15         |
|                           | <b><u>General Certificate English</u></b><br>1. Part 5 , 70 Connectives   |  |            |
| CT-2                      | <b><u>Cambridge Books:</u></b><br>1. Unit 8- Choices and decisions<br>2. Unit 9- Endings  | Selected exercises from the mentioned topics and workbook. | 15         |
|                           | <b><u>General Certificate English</u></b><br>1. Part 5, 72 Gerunds  |  |            |
|                           | SBA   |  | 10         |
|                           | Assignment  |  | 10         |
|                           | <b>Total</b>  |  | <b>100</b> |

\*\*Grade 7 will be in complete synchronization with Grade 8, O Levels syllabus.

# Bengali

## Objectives:

- Increase the ability to communicate clearly, accurately and effectively in writing.
- Enable students to use a wide range of vocabulary, and correct grammar, spelling and punctuation.

**Books:** ১) বাংলা (বোর্ড বই) ২) ভাষা-শিক্ষা বাংলা ব্যাকরণ ও নির্মিতি।

## Half Yearly Syllabus

| Name of the Exam        | Chapters  | Pattern   | Marks      |
|-------------------------|---|---|------------|
| Half Yearly Examination | <b>গল্প:</b><br>১) পিরামিড<br>২) জগদীশচন্দ্র বসু<br>৩) তোলপাড়<br>৪) কত কাল ধরে<br><b>ব্যাকরণ ও নির্মিতি:</b><br>১) সন্ধি<br>২) বাক্য-প্রকরণ<br>৩) বাগধারা<br>৪) অনুচ্ছেদ<br>৫) পত্র: ক) ঢাকা শহরের দর্শনীয় স্থান<br>খ) গ্রাম্য মেলার বর্ণনা | শব্দার্থ- ২.৫<br>বানান- ২.৫<br>সন্ধি- ৫<br>বাক্য শুদ্ধি- ৫<br>বাক্য রূপান্তর- ৫<br>বাগধারা- ৫<br>পত্রলিখন- ৫<br>অনুচ্ছেদ- ৫<br>প্রশ্ন- ১৫ | 50         |
| CT-1                    | ১) পিরামিড,<br>২) তোলপাড়<br><b>ব্যাকরণ ও নির্মিতি:</b> বাগধারা   | শব্দার্থ- ২.৫<br>বানান- ২.৫<br>প্রশ্ন- ৫<br>বাগধারা- ৫  | 15         |
| CT-2                    | সন্ধি<br>বাক্য-প্রকরণ<br>পত্র   | সন্ধি- ৫<br>বাক্য পরিবর্তন- ৫<br>পত্র- ৫  | 15         |
|                         | SBA   |   | 10         |
|                         | Assignment/Presentation   |   | 10         |
|                         | <b>Total</b>  |   | <b>100</b> |



### Annual Term Syllabus

| Name of the Exam          | Chapters  | Pattern  | Marks      |
|---------------------------|---|--|------------|
| <b>Annual Examination</b> | <p>গল্প:</p> <p>১) আষাঢ়ের এক রাতে</p> <p>২) বাংলা নববর্ষ</p> <p>৩) সেই ছেলেটি</p> <p><b>ব্যাকরণ ও নির্মিতি:</b></p> <p>১) সন্ধি</p> <p>২) উক্তি পরিবর্তন</p> <p>৩) জোড় শব্দ</p> <p>৪) প্রবাদ</p> <p>৫) অনুচ্ছেদ</p> <p>৬) আবেদন পত্র:</p> <p>ক) বিলম্বে বেতন প্রদানের জন্য জরিমানা মাফ চেয়ে তোমার বিদ্যালয়ের প্রধান শিক্ষকের নিকট একটি দরখাস্ত লেখ।</p> <p>খ) শিক্ষা সফরে প্রেরণের আবেদন জানিয়ে তোমার বিদ্যালয়ের প্রধান শিক্ষকের নিকট একটি দরখাস্ত লেখ।</p> <p>গ) তোমার বিদ্যালয়ে লাইব্রেরি প্রতিষ্ঠার জন্য আর্থিক সাহায্য চেয়ে প্রধান শিক্ষকের নিকট একটি দরখাস্ত লেখ</p> | <p>শব্দার্থ- ২.৫</p> <p>বানান- ২.৫</p> <p>সন্ধি- ৫</p> <p>উক্তি পরিবর্তন- ৫</p> <p>জোড় শব্দ- ৫</p> <p>প্রবাদ- ৫</p> <p>অনুচ্ছেদ- ৫</p> <p>আবেদন পত্র- ৫</p> <p>প্রশ্ন- ১৫</p> | 50         |
| <b>CT-1</b>               | <p>১) আষাঢ়ের এক রাতে</p> <p>২) বাংলা নববর্ষ</p> <p>৩) অনুচ্ছেদ</p>   | <p>শব্দার্থ- ২.৫</p> <p>বানান- ২.৫</p> <p>প্রশ্ন- ৫</p> <p>অনুচ্ছেদ- ৫</p>   | 15         |
| <b>CT-2</b>               | <p>উক্তি পরিবর্তন</p> <p>প্রবাদ</p> <p>আবেদন পত্র- ১, ২</p>   | <p>উক্তি পরিবর্তন- ৫</p> <p>প্রবাদ- ৫</p> <p>আবেদন পত্র- ৫</p>   | 15         |
|                           | SBA   |  | 10         |
|                           | Assignment/Presentation   |  | 10         |
|                           | <b>Total</b>  |  | <b>100</b> |

### Mathematics

#### Objectives:

The syllabus is designed to enrich the learners with basic and essential knowledge of the topics: Number, Algebra, Probability, Geometry and Measure so that they can easily start their O-level journey from next grade. This syllabus contains topics from Cambridge lower secondary stage 9 books which is the last book for lower secondary. The main objectives of the syllabus are:

1. Developing certain 'thinking and working mathematically' skills.
2. Making several mathematical models of real-life problems.
3. Identifying and describing properties of mathematical objects.
4. Comparing and evaluating ideas for solutions.
5. Refining your mathematical ideas to reach more effective approaches or solutions.

#### Book:

1. Cambridge Lower Secondary Mathematics Learner's Book 9
2. Cambridge Lower Secondary Mathematics Workbook 9

### Half Yearly Syllabus

| Name of the Exam        | Chapter   | Topic   | Pattern                               | Mark |
|-------------------------|---|---|---------------------------------------|------|
| Half Yearly Examination | 1. Number and Calculation (Number)                | 1. Irrational Numbers                               | Structured or unstructured questions. | 50   |
|                         |   | 2. Standard Form                                    |                                       |      |
|                         |   | 3. Indices  |                                       |      |
|                         | 2. Expressions and Formulae (Algebra)             | 2.1 Substituting into expressions                   |                                       |      |
|                         |   | 2.2 Constructing expressions                        |                                       |      |
|                         |   | 2.3 Expressions and indices                         |                                       |      |
|                         |   | 2.4 Expanding the product of two linear expressions |                                       |      |
|                         |   | 2.5 Simplifying algebraic fractions                 |                                       |      |
|                         |   | 2.6 Deriving and using formulae                     |                                       |      |
|                         | 3. Decimals, percentages and rounding (Number)    | 3.1 Multiplying and dividing by powers of 10        |                                       |      |
|                         |   | 3.2 Multiplying and dividing decimals               |                                       |      |
|                         | 4. Equations and inequalities (Algebra)           | 4.1 Constructing and solving equations              |                                       |      |
|                         |   | 4.2 Simultaneous equations                          |                                       |      |
|                         | 5. Angles (Geometry and measure)                  | 5.5 Pythagoras' theorem                             |                                       |      |
|                         | 7. Shapes and measurements (Geometry and measure) | 7.1 Circumference and area of a circle              |                                       |      |
|                         |   | 7.2 Areas of compound shapes                        |                                       |      |
| CT - 1                  | 1. Number and Calculation (Number)                | 1.1 Irrational Numbers                              | Structured or unstructured questions. | 15   |
|                         |   | 1.2 Standard Form                                   |                                       |      |
|                         |   | 1.3 Indices   |                                       |      |
|                         | 2. Expressions and Formulae (Algebra)             | 2.1 Substituting into expressions.                  |                                       |      |

|            |                                       |   |                                       |     |
|------------|---------------------------------------|---|---------------------------------------|-----|
| CT - 2     | 2. Expressions and Formulae (Algebra) | 2.2 Constructing expressions.                       | Structured or unstructured questions. | 15  |
|            |                                       | 2.3 Expressions and indices                         |                                       |     |
|            |                                       | 2.4 Expanding the product of two linear expressions |                                       |     |
|            |                                       | 2.5 Simplifying algebraic fractions                 |                                       |     |
|            |                                       | 2.6 Deriving and using formulae                     |                                       |     |
| SBA        |                                       |   |                                       | 10  |
| Assignment |                                       |   |                                       | 10  |
| Total      |                                       |   |                                       | 100 |

**Annual Term Syllabus**

| Name of the Exam          | Chapter  | Topic   | Pattern                               | Marks |
|---------------------------|--|---|---------------------------------------|-------|
| <b>Annual Examination</b> | 8. Fractions (Number)  | 8.1 Fractions and recurring decimals  | Structured or unstructured questions. | 50    |
|                           |  | 8.2 Fractions and the correct order of operations                               |                                       |       |
|                           |  | 8.3 Multiplying fractions   |                                       |       |
|                           |  | 8.4 Dividing fractions  |                                       |       |
|                           |  | 8.5 Making calculations easier  |                                       |       |
|                           | 9. Sequences and functions (Algebra)                         | 9.1 Generating sequences  |                                       |       |
|                           |  | 9.2 Using the $n^{\text{th}}$ term Worksheet will be provided.                  |                                       |       |
|                           |  | 9.3 Representing functions  |                                       |       |
|                           | 10. Graphs (Algebra)   | 10.1 Functions  |                                       |       |
|                           |  | 10.2 Plotting graphs  |                                       |       |
|                           | 11. Ratio and proportion (Number)                            | 11.1 Using Ratio  |                                       |       |
|                           |  | 11.2 Direct and inverse proportion  |                                       |       |
|                           | 14. Volume, surface area and symmetry (Geometry and measure) | 14.1 Calculating the volume of prism  |                                       |       |
|                           |  | 14.2 Calculating the surface area of triangular prisms, pyramids, and cylinders |                                       |       |

|            |  |  |                                       |     |
|------------|--|--|---------------------------------------|-----|
|            | 12. Probability (Statistics and probability) | Worksheet will be provided.                                    |                                       |     |
| CT - 1     | 8. Fractions (Number)                        | 8.1 Fractions and recurring decimals                           | Structured or unstructured questions. | 15  |
|            |  | 8.2 Fractions and the correct order of operations              |                                       |     |
|            |  | 8.3 Multiplying fractions                                      |                                       |     |
|            |  | 8.4 Dividing fractions   |                                       |     |
|            |  | 8.5 Making calculations easier.                                |                                       |     |
| CT - 2     | 9. Sequences and functions (Algebra)         | 9.1 Generating sequences                                       | Structured or unstructured questions. | 15  |
|            |  | 9.2 Using the n <sup>th</sup> term Worksheet will be provided. |                                       |     |
|            |  | 9.3 Representing functions                                     |                                       |     |
| SBA        |  |  |                                       | 10  |
| Assignment |  |  |                                       | 10  |
| Total      |  |  |                                       | 100 |

## Physics

**Objectives:** Our approach in Cambridge Physics encourages learners to be:

**confident**, interested in learning about science, questioning ideas and using scientific language to communicate their views and opinions

**responsible**, working methodically and safely when working alone or collaboratively with others

**reflective**, learning from their experiences and interested in scientific issues that affect the individual, the community and the environment

**innovative**, solving unfamiliar problems confidently and creatively

**engaged**, keen to develop scientific skills, curious about scientific principles and their application in the world.

**Book's Name:** *Complete Physics for Cambridge IGCSE (Third edition) by Stephen Pople*

### Half Yearly Syllabus

| Name of the Exam               | Chapters  | Question Pattern  | Marks |
|--------------------------------|---|---|-------|
| <b>Half Yearly Examination</b> | Chapter-1: Measurement and units (Unit:1.04-1.05)<br>Chapter-2: Forces and motion (Unit:2.04,2.06- 2.07)<br>Chapter-3: Forces and pressure (Unit:3.05-3.06)<br>Chapter-4: Forces and energy (Unit:4.04, 4.06-4.07)<br>Chapter-5: Thermal effects(Unit:5.06- 5.07)<br>Chapter -6 :Waves and sound (Unit:6.05-6.06) | •True/False<br>•Fill in the blanks<br>•Multiple choice questions (MCQs)<br>•Structured Question (short questions, Broad question , mathematical problems, &drawing diagram) | 50    |
| CT-1                           | Chapter-1: Measurement and units (Unit:1.04-1. 05)<br>Chapter-2 :Forces and motion  | •True/False<br>•Fill in the blanks<br>• Multiple Choice questions (MCQs)  | 15    |

|      |   |   |            |
|------|---|---|------------|
|      | (Unit:2.04,2.06)  | •Structured Question(short questions, Broad question ,mathematical problems& drawing diagram)   |            |
| CT-2 | Chapter-3 : Forces and pressure (Unit:3.05-3.06)<br>Chapter-4 : Forces and energy (Unit:4.04, 4.06) | •True/False<br>•Fill in the blanks<br>• Multiple Choice questions (MCQs)<br>•Structured Question(short questions, Broad question, mathematical problems &drawing diagram) | 15         |
|      | SBA   |   | 10         |
|      | Assignment/Lab Copy/<br>Presentation/ Scrap Book  |   | 10         |
|      | <b>Total</b>  |   | <b>100</b> |

#### Annual Term Syllabus

| Name of the Exam          | Chapters   | Question Pattern  | Marks      |
|---------------------------|--|---|------------|
| <b>Annual Examination</b> | Chapter-2: Forces and motion (Unit:2.09 - 2.11)<br>Chapter-5: Thermal effects (Unit:5.10 &5.11)<br>Chapter-7:Ray and waves (Unit:7.04-7.06)<br>Chapter-8: Electricity (Unit:8.04-8.05)<br>Chapter-9: Magnets and currents (Unit:9.03-9.04) | • True/False<br>•Fill in the blanks<br>•Multiple choice questions (MCQs)<br>• Structured Question(short questions, Broad question , mathematical problems &drawing diagram) | 50         |
| CT-1                      | Chapter-2: Forces and motion (Unit:2.09 - 2.11)  | •True/False<br>•Fill in the blanks<br>•Multiple choice questions (MCQs)<br>•Structured Question(short questions, Broad question , mathematical problems & drawing diagram)  | 15         |
| CT-2                      | Chapter-5: Thermal effects (Unit:5.10 &5.11)<br>Chapter-7: Ray and waves (Unit:7.04)   | •True/False<br>•Fill in the blanks<br>•Multiple choice questions (MCQs)<br>• Structured Question(short questions, Broad question, mathematical problems & drawing diagram)  | 15         |
|                           | SBA  |   | 10         |
|                           | Assignment/Lab Copy/<br>Presentation/ Scrap Book   |   | 10         |
|                           | <b>Total</b>   |   | <b>100</b> |

# Chemistry

## Objective:

Approaching this syllabus for grade 7 Chemistry the learners will be beneficiary in many ways.

- It will help students for the next step of their education, to become confident, responsible, reflective, innovative and engaged.
- Learners will get a thorough knowledge and understanding of the subject matters and get help to develop their skills and the knowledge acquired to solve problems in everyday life, including the sustainability issues and the challenges facing our environment.
- It will help learners to develop a life-long curiosity about the natural world and enables them to seek scientific explanations to the phenomena around them.

## Book:

### 1. New Coordinated Science: Chemistry for Higher Tier. (3<sup>rd</sup> Edition)

**Authors:** RoseMarie Gallagher and Paul Ingram

### Half Yearly Syllabus

| Name of the Exam        | Chapters  | Pattern  | Marks |
|-------------------------|---|--|-------|
| Half Yearly Examination | <b>Chapter 5:</b><br>Extracting metals<br>5.01 Metals in the Earth's crust<br>5.02 Extracting metals from their ores<br>5.03 Making use of metals<br>5.04 Extracting iron<br>5.05 Principles of electrolysis<br>5.06 Extracting aluminium<br>5.07 Purifying copper by electrolysis<br>5.08 Corrosion<br><b>Chapter 6:</b><br>The non-metals<br>6.01 The non-metal groups in the periodic table<br>6.02 Reactions of the halogens<br>6.03 Compounds of the halogens<br>6.04 The electrolysis of sodium chloride<br>6.05 The chlor-alkali industry<br><b>Chapter 7:</b><br>Reactions, equations and amounts<br>7.01 The masses of atoms<br>7.02 Percentage composition of a compound<br>7.03 The formula of a compound<br>7.04 Equations for chemical reactions | 1. Objective type questions (MCQ/Fill in the blanks/True or False etc.)<br>2. Structured questions | 50    |

| Name of the Exam | Chapters   | Pattern  | Marks |
|------------------|--|--|-------|
| CT-1             | <b>Chapter 5:</b><br>Extracting metals<br>5.01 Metals in the Earth's crust<br>5.02 Extracting metals from their ores<br>5.03 Making use of metals<br>5.04 Extracting iron                              | 1. Objective type questions (MCQ/Fill in the blanks/True or False etc.)<br>2. Structured questions | 15    |
| CT-2             | <b>Chapter 6:</b><br>The non-metals<br>6.01 The non-metal groups in the periodic table<br>6.02 Reactions of the halogens<br>6.03 Compounds of the halogens<br>6.04 The electrolysis of sodium chloride | 1. Objective type questions (MCQ/Fill in the blanks/True or False etc.)<br>2. Structured questions | 15    |
| SBA              |  |  | 10    |
| Assignment       |  |  | 10    |
| <b>Total</b>     |  |  | 100   |

#### Annual Term Syllabus

| Name of the Exam          | Chapters  | Pattern  | Marks |
|---------------------------|---|--|-------|
| <b>Annual Examination</b> | <b>Chapter 7:</b><br>Reactions, equations and amounts<br>7.05 Calculations from equations<br>7.06 Calculating the volumes of gases<br>7.07 Calculations on electrolysis<br><b>Chapter 8:</b><br>Getting the rate right<br>8.01 Rates of reaction<br>8.02 Measuring the rate of a reaction<br>8.03 Changing the rate of a reaction (I)<br><b>Chapter 9:</b><br>Energy changes and reversible reactions<br>9.01 Exothermic and endothermic reactions<br>9.02 Explaining energy changes<br>9.03 Reversible reactions<br>9.04 Shifting the equilibrium<br>9.05 Making ammonia in industry<br>9.06 Fertilizers<br><b>Chapter 10:</b><br>Useful materials from crude oil<br>10.01 Crude oil<br>10.02 Separating oil into fractions<br>10.03 Cracking hydrocarbons | 1. Objective type questions (MCQ/Fill in the blanks/True or False etc.)<br>2. Structured questions | 50    |

| Name of the Exam | Chapters   | Pattern  | Marks |
|------------------|--|--|-------|
|                  | 10.04 The alkanes and alkenes<br>10.05 Polymerization and plastics   |  |       |
| CT-1             | <b>Chapter 7:</b><br>Reactions, equations and amounts<br>7.05 Calculations from equations<br>7.06 Calculating the volumes of gases<br>7.07 Calculations on electrolysis<br><b>Chapter 8:</b><br>Getting the rate right<br>8.01 Rates of reaction | 1. Objective type questions (MCQ/Fill in the blanks/True or False etc.)<br>2. Structured questions | 15    |
| CT-2             | <b>Chapter 9:</b><br>Energy changes and reversible reactions<br>9.01 Exothermic and endothermic reactions<br>9.02 Explaining energy changes<br>9.03 Reversible reactions<br>9.04 Shifting the equilibrium  | 1. Objective type questions (MCQ/Fill in the blanks/True or False etc.)<br>2. Structured questions | 15    |
| SBA              |  |  | 10    |
| Assignment       |  |  | 10    |
| <b>Total</b>     |  |  | 100   |

## Biology

**Objectives: Objectives: Students should study Biology to produce the following outcomes:**

- Ability to understand all living beings on the earth emerged from one being to another which inculcates ‘oneness’ of all living beings,
- To develop the individual sensitiveness to nature, make him feels at home with it and respect towards nature
- Understanding of basic biological principles, such as genetics, nutrition, evolution, reproduction of various life forms, structure-function relationships, disease, diversity, integration of life systems, life cycles, and energetics.
- Capacities for critical thinking in all areas of Biology. Ability to formulate questions about nature and living things and answers from observation and interpretation of natural phenomena.
- Ability to explain the living world in terms of scientific principles and appreciating all organisms which behave in different ways.

**Books: Biology for Higher Tier by Brian Beckett Rose Mario Gallagher**

### Half Yearly Syllabus

| Name of the Exam               | Chapters   | Pattern  | Marks |
|--------------------------------|--|--|-------|
| <b>Half Yearly Examination</b> | 1.04 Groups of living things<br>1.07 In and out of cells<br>1.08 Mitosis<br>1.09 Meiosis<br>2.03 Chromosomes and genes<br>3.05 Transport & support in plants<br>3.06 transpiration | 1. Creative/Structured Questions,<br>2. Short-Answer Questions,<br>3. Key words<br>4. Multiple Choice Questions,<br>5. Fill in the blanks,<br>6. True or False Questions,<br>7. Labeling/Drawing | 50    |



|      |  |  |            |
|------|--|--|------------|
| CT-1 | 1.02 Living things<br>1.04 Groups of living things<br>1.07 In and out of cells | 1. Creative/Structured Questions,<br>2. Short-Answer Questions,<br>3. Fill in the blanks<br>4. Multiple Choice Questions,<br>5. Labeling/Drawing | 15         |
| CT-2 | 1.08 Mitosis<br>1.09 Meiosis   | 1. Creative/Structured Questions,<br>2. Short-Answer Questions,<br>3. Key words<br>4. True or False Questions,<br>5. Labeling/Drawing            | 15         |
|      | SBA  |  | 10         |
|      | Lab Copy/ Assignment / Presentation  |  | 10         |
|      | <b>Total</b>   |  | <b>100</b> |

#### Annual Term Syllabus

| Name of the Exam          | Chapters   | Pattern   | Marks      |
|---------------------------|--|---|------------|
| <b>Annual Examination</b> | 4.11 Homeo stasis<br>4.12 Skin and temperature control<br>5.06 Digestion<br>5.08 Absorption and the liver<br>6.03 The Eye<br>6.04 Vision<br>6.07 More about the nervous system<br>9.02 Germs diseases and infection<br>9.03 Defenses against disease | 1. Creative/Structured Questions<br>2. Short Answer Questions<br>3. Key words<br>4. Multiple Choice Questions<br>5. Fill in the blanks<br>6. True or False Questions<br>7. Drawing & Labeling diagram | 50         |
| CT-1                      | 4.13 Excretion<br>5.06 Digestion<br>5.08 Absorption and the liver  | 1. Creative/Structured Questions,<br>2. Short-Answer Questions,<br>3. Fill in the blanks<br>4. Multiple Choice Questions,<br>5. Labeling/Drawing  | 15         |
| CT-2                      | 6.03 The eye<br>6.04 Vision<br>6.06 The nervous system   | 1. Creative/Structured Questions,<br>2. Short-Answer Questions,<br>3. Key words<br>4. True or False Questions,<br>5. Labeling/Drawing   | 15         |
|                           | SBA  |   | 10         |
|                           | Lab Copy & Assignment & Presentation   |   | 10         |
|                           | <b>Total</b>   |   | <b>100</b> |

### Computer Science

Objective: The aims describe the purpose of a course based on the syllabus.

The aims are to enable students to develop:

- Computational thinking skills.
- An understanding of the main principles of solving problems using computers.
- The skills necessary to solve computer-based problems using a high-level programming language.
- An understanding of the component parts of computer systems and how they interrelate.
- An understanding of the internet as a means of communication and its associated risks.
- An understanding of the development and use of automated and emerging technology.

Book: Click Start: Computer Science for Schools Book 8 (Revised Edition)

Authors: Anjna Virmani and Shalini Harisukh

### Half Yearly Syllabus

| Half Yearly Syllabus    |   |   |       |
|-------------------------|---|---|-------|
| Name of the Exam        | Chapters  | Pattern   | Marks |
| Half Yearly Examination | Chapter 1: MS Access 2010   | True/False, Fill in the blanks, Matching, MCQ, One Sentence Question Answer, Short Questions, Broad Questions, Diagram and Labeling | 50    |
|                         | Chapter 6: HTML 5-Introduction  |   |       |
|                         | Chapter 5: JavaScript in HTML Documents   |   |       |
|                         | Conversion of:<br>Byte Concept (New measurements)<br>Denary to Binary<br>Binary to Denary<br>(Handout will be provided) |   |       |
| CT 1                    | Chapter 1: MS Access 2010   | True/False, Fill in the blanks, MCQ, One Sentence Question Answer, Short Questions, and Labeling                                    | 15    |
| CT 2                    | Chapter 6: HTML 5-Introduction  |   | 15    |
| SBA+ Surprise test      |   |   | 10    |
| Assignment/Lab Work     |   |   | 10    |
| Total                   |   |   | 100   |

### Annual Term Syllabus

| Name of the Exam          | Chapters   | Pattern   | Marks |
|---------------------------|--|---|-------|
| <b>Annual Examination</b> | Chapter 7: Introduction to Python                  | True/False, Fill in the blanks, Matching, MCQ, One Sentence Question Answer, Short Questions, Broad Questions, Diagram and Labeling | 50    |
|                           | Chapter 8: More about Python                       |   |       |
|                           | Chapter 9: Introduction to Artificial Intelligence |   |       |
|                           | Chapter 10: Virus and Anti-Virus                   |   |       |
| CT 1                      | Chapter 7: Introduction to Python                  | True/False, Fill in the blanks, MCQ, One Sentence Question  | 15    |

|                     |  |                                       |     |
|---------------------|--|---------------------------------------|-----|
| CT 2                | Chapter 9: Introduction to Artificial Intelligence | Answer, Short Questions, and Labeling | 15  |
| SBA+ Surprise test  |  |                                       | 10  |
| Assignment/Lab Work |  |                                       | 10  |
| Total               |  |                                       | 100 |

\*\*\*Syllabus and question pattern can be changed or altered due to the time frame.

## Bangladesh and Global Studies

**Book: Bangladesh and Global Studies (Class 8)**

### Half Yearly Syllabus

| Name of the Exam               | Chapters  | Pattern  | Marks      |
|--------------------------------|---|--|------------|
| <b>Half Yearly Examination</b> | Chapter 2: Liberation war of Bangladesh<br>Chapter 3: Art and Culture of Bangladesh<br>Chapter 6: Bangladesh Economy<br>Chapter 8: Disaster in Bangladesh | MCQ, Matching, One sentence answer, True/ False, Creative, Picture Description, Short Questions, Broad Questions, Draw and fill the table. | 50         |
| CT-1                           | Chapter 5: Socialization and Development  | MCQ, Matching, True/False, One sentence answer, short question, Broad question, Table completion,  | 15         |
| CT-2                           | Chapter 3: Art and Culture of Bangladesh  | MCQ, Matching, True/False, One sentence answer, short question, Broad question, Table completion.  | 15         |
|                                | SBA   |  | 10         |
|                                | Assignment/Lab Copy/<br>Presentation/ Scrap Book  |  | 10         |
|                                | <b>Total</b>  |  | <b>100</b> |

### Annual Term Syllabus

| Name of the Exam          | Chapters   | Pattern  | Marks      |
|---------------------------|--|--|------------|
| <b>Annual Examination</b> | Chapter 4: Archaeological Description of Colonial Age<br>Chapter 11: Minority Ethnic Groups of Bangladesh<br>Chapter 12: Resources of Bangladesh<br>Handout: Sustainable Development Goals (SDG) | MCQ, Matching, One sentence answer, True/ False, Creative, Picture Description, Short Questions, Broad Questions, Draw and fill the table. | 50         |
| CT-1                      | Chapter 13: Bangladesh and some International Organization   | MCQ, Matching, True/False, One sentence answer, short question, Broad question, Table completion.  | 15         |
| CT-2                      | Handout: Sustainable Development Goals (SDG)   | MCQ, Matching, True/False, One sentence answer, short question, Broad question, Table completion.  | 15         |
|                           | SBA  |  | 10         |
|                           | Assignment/Lab Copy/ Presentation/ Scrap Book  |  | 10         |
|                           | <b>Total</b>   |  | <b>100</b> |

### Geography

#### Objectives:

- To learn about the population, its varied distribution, and influencing factors of birth rate
- To understand the process, various effects of volcanic eruption and earthquakes, and ways to control their damage
- To comprehend the spectacular growth of south-east Asia and its impact
- To know about the economic, and environmental impacts of different energy resources, super dams, and tourism
- To study the physical, economic, and social aspects of countries like Japan and Brazil

#### Book: Geography in Action (Book 3)

#### Half Yearly Syllabus

| Name of the Exam               | Chapters   | Question Pattern   | Marks      |
|--------------------------------|--|--|------------|
| <b>Half Yearly Examination</b> | Chapter-2: The Active Earth<br>Chapter-3: Asian Revolution<br>Chapter-4: Japan | Matching<br>MCQ<br>One Word Q/A<br>One sentence Q/A Question/Answer<br>Drawing and Labelling<br>Complete the table<br>Creative Questions | 50         |
| CT-1                           | Chapter-1: Population matters  | Matching, One sentence Q/A, MCQ, Q/A, Creative Questions   | 15         |
| CT-2                           | Chapter-2: The Active Earth  | Matching, One sentence Q/A, MCQ, Q/A, Creative Questions   | 15         |
|                                | SBA  |  | 10         |
|                                | Assignment/Scrapbook/ Poster Making/Presentation                               |  | 10         |
|                                | <b>Total</b>   |  | <b>100</b> |

### Annual Term Syllabus

| Name of the Exam          | Chapters   | Question Pattern   | Marks      |
|---------------------------|--|--|------------|
| <b>Annual Examination</b> | Chapter-6: Superdams<br>Chapter-7: Ecotourism<br>Chapter-8: Brazil | Matching<br>MCQ<br>One Word Q/A<br>One sentence Q/A Question/Answer<br>Drawing and Labelling<br>Complete the table<br>Creative Questions | 50         |
| CT-1                      | Chapter-5: Energy  | Matching, One sentence Q/A, MCQ, Q/A, Creative Questions   | 15         |
| CT-2                      | Chapter-6: Superdams   | Matching, One sentence Q/A, MCQ, Q/A, Creative Questions   | 15         |
|                           | SBA  |  | 10         |
|                           | Assignment/Scrapbook/ Poster Making/Presentation                   |  | 10         |
|                           | <b>Total</b>   |  | <b>100</b> |

\*\*\*\*Syllabus can be changed or altered because of Time Frame.

## History

### Objectives:

1. To educate the students about personal and collective history. The processes and events of the past are revealed through history, which also connects them.
2. To educate the learners about the conflicts that have molded history and contributed to the present.
3. To encourage students to read for enjoyment and investigate more general and universal issues, fostering greater understanding.

**Book: The Oxford History Project (Book Three), Writer: Peter Moss.**

### Half Yearly Syllabus

| Name of the Exam               | Chapters   | Pattern  | Marks |
|--------------------------------|--|--|-------|
| <b>Half Yearly Examination</b> | Chapter 1: 1. The rise of nation states<br>2. The Tudors' rise to power<br>3. The Civil War<br>4. Commonwealth, Restoration and the 1688 Revolution<br>5. The Sun King<br>6. The Enlightenment<br>Chapter 2:<br>7. The Industrial Revolution<br>8. The Agricultural Revolution<br>9. The causes of Industrial Revolution<br>10. Social changes in the Industrial Revolution<br>Chapter 3:<br>11. The American Revolution: Independence<br>12. The causes of French Revolution<br>13. The French Revolution<br>14. Napoleon Bonaparte | Word meaning, True/False, matching, MCQ, One word/ One sentence, Broad Q/A, Short Q/A, picture description | 50    |

|      |   |  |            |
|------|---|--|------------|
| CT-1 | Chapter 1: 1.The rise of nation sates<br>2.The Tudors' rise to power<br>3.The Civil War<br>4.Commonweath, Restoration and the 1688 Revolution | Wordmeaning,True/False, MCQ, Short Q/A, Broad Q/A, | 15         |
| CT-2 | 5.The Sun King<br>Chapter 2:<br>6. The Industrial Revolution<br>7. The Agricultural Revolution<br>8. The causes of Industrial Revolution      | True/False, matching, Broad Q/A, Short Q/A;        | 15         |
|      | SBA   |  | 10         |
|      | Assignment/Lab Copy/<br>Presentation/ Scrap Book  |  | 10         |
|      | <b>Total</b>  |  | <b>100</b> |

#### Annual Term Syllabus

| Name of the Exam          | Chapters   | Pattern  | Marks      |
|---------------------------|--|--|------------|
| <b>Annual Examination</b> | Chapter 4:<br>1.China in the 18 <sup>th</sup> and 19 <sup>th</sup> centuries<br>2.The Anglo- Chinese wars<br>3.China<br>4.The modernization of Japan<br>5.India and the West<br>6.India<br>7.South-east Asia<br>8.Chapter 5: The world in 1900<br>9. Russia (1860-1914)<br>10. Russia (1914-18)<br>11. Communism<br>12.The causes of WWI<br>13. The effects of WWI<br>14. World War II<br>15. Chapter 6: The Communications Revolution | Word Meaning, True/False, Matching, MCQ, One word/<br>One sentence q/a, Broad Q/A, Short Q/A, picture description. | 50         |
| CT-1                      | 1.China in the 18 <sup>th</sup> and 19 <sup>th</sup> centuries<br>2.The Anglo- Chinese wars<br>3.China<br>4.The modernization of Japan   | Word Meaning, True/False, MCQ, Broad Q/A, Short Q/A;   | 15         |
| CT-2                      | 1.India and the West<br>2. India<br>3.South-east Asia<br>4. The world in 1900<br>5.Russia (1860-1914)  | True/False, Matching, Broad Q/A, Short Q/A;  | 15         |
|                           | SBA  |  | 10         |
|                           | Assignment/Lab Copy/<br>Presentation/ Scrap Book   |  | 10         |
|                           | <b>Total</b>   |  | <b>100</b> |