Syllabus 2017-18

Knowledge is Power

The Millennium Stars School & College

Rangpur Cantonment

[CLASS: XI-XII]

SCIENCE

The Millennium Stars School and College

Rangpur Cantonment

Syllabus: XI & XII (2017-18)

বিষয়ঃ বাংলা (আবশ্যিক) প্রথম ও দ্বিতীয় পত্র

Class Test	Half Yearly & Annual	Pre-Test & Test
ক্লাস টেস্ট- ১ :	**অর্ধ বার্ষিক পরীক্ষাঃ**	**প্রাক-নির্বাচনী পরীক্ষাঃ**
প্রথম পত্র ঃ	**প্রথম পত্র ঃ**	**প্রথম পত্র ঃ**
গদ্যঃ	**গদ্যঃ** ক। চাষার দুক্ষু	**গদ্যঃ** ক। মহাজাগতিক কিউরেটর
ক। বিড়াল	খ। আহ্বান	খ। নেকলেস
খ। অপরিচিতা	**কবিতাঃ** ক। সাম্যবাদী	**কবিতাঃ** ক। লোক লোকান্তর
কবিতাঃ	খ। এই পৃথিবীতে এক স্থান আছে	খ। রক্তে আমার অনাদি অস্থি
ক। বিভীষণের প্রতি মেঘনাদ	**উপন্যাসঃ** লালসালু (ভূমিকা	**নাটকঃ** সিরাজ উদ্দৌলা (সম্পূর্ণ)
খ। ঐকতান	অংশ থেকে ৩৩ পৃষ্ঠা পর্যন্ত)	**দ্বিতীয় পত্র ঃ**
দ্বিতীয় পত্র ঃ	**দ্বিতীয় পত্র ঃ**	ক। সমাস, প্রত্যয় ও উপসর্গ
ক। বানানের নিয়ম ও শব্দ শুদ্ধি	ক। বাক্যতত্ত্ব ও বাক্য রূপান্তর	খ। ই-মেইল ও পত্র লিখন
	খ। পারিভাষিক শব্দ (A থেকে	গ। ক্ষুদে বার্তা ও আবেদনপত্র
ক্লাস টেস্ট- ২ :	N পর্যন্ত) ও বঙ্গানুবাদ	ঘ। প্রবন্ধ রচনা
প্রথম পত্র ঃ	গ। দিনলিপি ও ভাষণ	
গদ্যঃ	ঘ। সারাংশ, সারমর্ম ও	** প্রাক নির্বাচনী পরীক্ষার
ক। আমার পথ	ভাবসম্প্রসারণ	সিলেবাসে ৩য় ক্লাস টেস্টের
খ। জীবন ও বৃক্ষ	** অর্ধ বার্ষিক পরীক্ষার	সিলেবাস অন্তর্ভুক্ত হবে ।
কবিতাঃ	সিলেবাসে ১ম ক্লাস টেস্টের	
ক। তাহারেই পড়ে মনে	সিলেবাস অন্তর্ভুক্ত হবে।	
খ। সেই অস্ত্র		
দ্বিতীয় পত্র ঃ	**বার্ষিক পরীক্ষাঃ**	**নির্বাচনি পরীক্ষাঃ**
ক। ব্যাকরণিক শব্দ শ্রেণি/পদ	**প্রথম পত্র ঃ**	নির্বাচনি পরীক্ষা ১ম ও ২য় পত্রের
	গদ্যঃ ক। মাসি-পিসি	সম্পূর্ণ সিলেবাসের উপর বোর্ডের
	খ। বায়ান্নর দিনগুলো	নমুনা প্রশ্ন অনুযায়ী অনুষ্ঠিত হবে।
ক্লাস টেস্ট- ৩ :	**কবিতাঃ** ক। আঠারো বছর বয়স	
প্রথম পত্র ঃ	খ। ফেব্রুয়ারি ১৯৬৯	
গদ্যঃ	**উপন্যাসঃ** লালসালু (৩৪ পৃষ্ঠা	
ক। জাদুঘরে কেন যাব	থেকে শেষ পর্যন্ত)	
খ। রেইনকোট	**দ্বিতীয় পত্র ঃ**	
কবিতাঃ	ক। বাক্যশুদ্ধি/অনুচ্ছেদ শুদ্ধি	
ক। আমি কিংবদন্তির কথা বলছি	খ। পারিভাষিক শব্দ (M-Z)/	
খ। নূরলদীনের কথা মনে পড়ে	অনুবাদ	
যায়	গ। অভিজ্ঞতা ও প্রতিবেদন	
দ্বিতীয় পত্র ঃ	ঘ। সংলাপ ও ক্ষুদে গল্প	
ক। উচ্চারণের নিয়ম/শুদ্ধ উচ্চারণ	** বার্ষিক পরীক্ষার সিলেবাসে	
	২য় ক্লাস টেস্টের সিলেবাস	
	অন্তর্ভুক্ত হবে ।	

ক্লাস টেস্টের মানবণ্টন:

ক। সৃজনশীল: ২টি উদ্দীপকের মধ্যে ১টির উত্তর দিতে হবে ।	১০×১= ১০
খ। বহুনির্বাচনি: ৫টি প্রশ্নের প্রত্যেকটির উত্তর দিতে হবে।	১×৫=৫
গ। নির্ধারিত ব্যাকরণ অংশ থেকে ১টি প্রশ্নের উত্তর দিতে হবে	৫×১=৫
	মোট = ২০

অর্ধ বার্ষিক/ বার্ষিক/প্রাক নির্বাচনি পরীক্ষার মানবণ্টন:

প্রথম পত্র:
গদ্য:

ক। সৃজনশীল প্রশ্নের ২টি উদ্দীপকের ১টির উত্তর দিতে হবে ।	১০×১= ১০
খ। বহুনির্বাচনি ১৩টি প্রশ্নের প্রত্যেকটির উত্তর দিতে হবে।	১×১৩= ১৩
	মোট = ২৩

কবিতা:

ক। সৃজনশীল প্রশ্নের ২টি উদ্দীপকের ১টির উত্তর দিতে হবে ।	১০×১ = ১০
খ। বহুনির্বাচনি ১২টি প্রশ্নের প্রত্যেকটির উত্তর দিতে হবে।	১×১২= ১২
	মোট = ২২

উপন্যাস/নাটক :

ক। সৃজনশীল প্রশ্নের ২টি উদ্দীপকের ১টির উত্তর দিতে হবে ।	১০×১ = ১০
খ। বহুনির্বাচনি ০৫টি (উপন্যাস থেকে ০৫টি) প্রশ্নের প্রত্যেকটির উত্তর দিতে হবে।	১×০৫ = ০৫
	মোট = ১৫

দ্বিতীয় পত্র:

ক। নির্ধারিত ব্যাকরণ অংশ থেকে ২টি প্রশ্নের উত্তর দিতে হবে	৫×২=১০
খ। নির্ধারিত নির্মিতি অংশ থেকে ৩টি প্রশ্নের উত্তর দিতে হবে	১০×৩=৩০
	মোট= ৪০

বি: দ্র: প্রথম ও দ্বিতীয় পত্র - সর্বমোট (২৩+২২+১৫+৪০)=১০০

সার্বিক মানবণ্টন:

ক। ক্লাস টেস্ট	২০÷২=১০
খ। ক্লাসে উপস্থিতি	= ০৫
গ। অর্ধ বার্ষিক/ বার্ষিক/ প্রাক নির্বাচনি পরীক্ষা ১০০ নম্বরের ভিত্তিতে রূপান্তরিত হবে	= ৮৫
	মোট = ১০০

\# নির্বাচনি পরীক্ষা ১ম ও ২য় পত্রের সম্পূর্ণ সিলেবাসের উপর বোর্ডের নমুনা প্রশ্ন অনুযায়ী অনুষ্ঠিত হবে।

পাঠ্যপুস্তক তালিকা: বাংলা প্রথম পত্র

১। সাহিত্য পাঠ (গদ্য ও কবিতা)	সম্পাদক অধ্যাপক ডঃ মাহবুবুল আলম
২। সহপাঠ (উপন্যাস ও নাটক)	সম্পাদক অধ্যাপক ডঃ মাহবুবুল আলম

সহায়ক গ্রন্থ তালিকা: বাংলা দ্বিতীয় পত্র

১। উচ্চতর বাংলা ভাষারীতি	প্রফেসর ড. আলাউদ্দিন আল আজাদ
২। একাডেমিক উচ্চ মাধ্যমিক বাংলা ব্যাকরণ ও নির্মিতি	মীর মোশাররফ হোসেন (মিলু)
৩। বাংলা ব্যাকরণ ও নির্মিতি	ড. হায়াৎ মামুদ
৪। বাংলা ব্যাকরণ ও নির্মিতি	ড. গিয়াস শামীম
৫। টার্গেট বাংলা ব্যাকরণ ও নির্মিতি	

Subject: English 1ˢᵗ and 2ⁿᵈ Paper

Class Test	Half Yearly & Annual	Pre-Test & Test
1ˢᵗ Class Test Unit-1: People or Institutions Making History Unit-2: Traffic Education Grammar : Synonyms & Antonyms: Transformation (Affirmative, Negative, Interrogative, Exclamatory)	**Half Yearly Exam** Unit-1: People or Institutions Making History Unit-2: Traffic Education Unit-3: Food Adulteration Unit-4: Human Relationships Unit-5: Adolescence Unit-6: Path To Higher Education Grammar: Synonyms & Antonyms; Transformation (All items) Writing Part: Paragraph	**Pre- Test Exam** Unit-12: Peace and Conflict Unit-13: Greatest Scientific Achievements Unit-14: Art and Music Unit-15: Tours and travels Grammar: Right Form of Verbs, Synonyms & Antonyms; Article, Preposition, Unclear Pronoun, Punctuation Writing Part: Paragraph, Composition, E-mail, Report
2ⁿᵈ Class Test Unit-7: Human Rights Unit-8: Environment and Nature Grammar: Right Form of Verbs; Synonyms & Antonyms; Preposition	**Annual Exam** Unit-7: Human Rights Unit-8: Environment and Nature Unit-9: Myths and Literature Unit-10: Dreams Unit-11: Diaspora Grammar: Right Form of Verbs; Article, Preposition Writing Part: Paragraph	**Test Examination** 1. Revision of English 1ˢᵗ Paper **(As per syllabus of NCTB)** 2. Revision of English 2ⁿᵈ Paper **(As per syllabus of NCTB)**
3ʳᵈ Class Test Unit-13: Greatest Scientific Achievements Unit-14: Art and Music Unit-15: Tours and travels Grammar: Modifiers, Linkers, Narration, Guided Writing: E-mail, Report		

Marks Distribution for class test

1. Comprehension based question	15 marks
2. Guided Writing	05 marks
	Total=20 marks

Marks Distribution of Half Yearly Exam

1st Class Test	20 Marks
Class Attendance	5 Marks
Written Exam (100 Marks) converted into	75 Marks
	Total= 100 Marks

Marks Distribution of written Test

Comprehension based Question	25 Marks
Vocabulary	15 Marks
Rearrangement	10 Marks
Grammar:	10 Marks
Guided Writing (items to be included from 1st & 2nd Paper)	40 Marks
	Total 100 Marks

Marks Distribution of Annual Exam

2nd Class Test	20 Marks
Class Attendance	5 Marks
Written Exam (100 Marks) converted into	75 Marks
	Total= 100 Marks

Marks Distribution of written Test

Comprehension based Question	25 Marks
Vocabulary	15 Marks
Rearrangement	10 Marks
Grammar	10 Marks
Guided Writing	40 Marks
	Total 100 Marks

Marks Distribution of Pre-Test Exam

3rd Class Test	20 Marks
Class Attendance	5 Marks
Written Exam (100 Marks) converted into	75 Marks
	Total= 100 Marks

Marks Distribution of Pre- Test Exam

Part A: Grammar	60 Marks
Part B: Guided Writing	40 Marks
	Total =100 Marks

Marks Distribution of Test Exam

1. English 1st Paper	100 Marks
2. English 2nd Paper	100 Marks
	Total =200 Marks

Recommended Book

1. Text Book English for Today (For English 1st paper) Prescribed by NCTB
2. Text Book English Grammar & Composition (For English 2nd paper) by NCTB

Subject: Information and Communication Technology

Class Test	Half Yearly & Annual	Pre-Test & Test
Class Test- 1 Chapter-2: Communication System	**Half Yearly Exam** Chapter-1: ICT world and Bangladesh perspective Chapter-2: Communication system Chapter-3: Number system	**Pre-Test Examination** Chapter-5: Program design and C-programming Chapter-6: Fundamental concept of database
Class Test- 2 Chapter-3: Digital device **Class Test- 3** Chapter-5: Program design and C-programming	**Annual Exam** Chapter-1: ICT world and Bangladesh perspective Chapter-2: Communication System Chapter-3: Digital device Chapter-4: Webpage design	**Test Examination** Full book

Note: Syllabus can be changed by subject teacher under any circumstances.

Marks Distribution of All Class Test

Creative	10×1=10
MCQ	1×10=10
	Total=20

Mark Distribution of All Term Examination

Creative question	10×5=50
M.C.Q	1×25=25
Practical	=20
Attendance	=05
	Total=100

Book Reference:
1. Information and Communication technology - Md. Mahbubur Rahman
2. Information and Communication technology   - Md. Nimul Haque Niam
3. Information and Communication technology - Md. Mahfuzur Rahman & Md. Rasel kabir
4. Information and Communication technology - Forhad Monjur and others
5. Information and Communication technology - Anisul Islam and Others
6. Information and Communication technology - Emdadul Karim and Others
7. Information and Communication technology - Norendro Nath and Others

Practical
1. Practical Information and Communication technology - Md. Mahbubur Rahman
2. Practical Information and Communication technology - Md. Nimul Haque Niam

Subject: Physics 1st and 2nd Paper

Class Test	Half Yearly & Annual	Pre-Test & Test
Class Test-1 **First paper** : 2nd Chapter – Vector 3rd Chapter – Dynamics 10th Chapter - Ideal Gas and Kinetic Theory of Gases **Second Paper:** 6th Chapter-Geometrical Optics	**Half Yearly Examination** **First Paper** : 4th Chapter – Newtonian Mechanics and repetition of Chapters of 1st Class test	**Pre-test** **Second Paper :** 4th Chapter-Magnetic Effects of Current and Magnetism 8th Chapter-Introduction to Modern Physics Syllabus of 3rd class test will be included.
Class Test-2 **First Paper** : 5th Chapter – Work , Energy & Power 6th Chapter - Gravitation and Gravity 8th Chapter - Periodic motion **Second Paper :** 1st Chapter – Thermodynamics 2nd Chapter - Static Electricity **Class Test-3** **First Paper** : 9th Chapter - Wave **Second Paper** : 3rd Chapter-Current electricity 7th Chapter - Physical Optics.	**Annual Examination** **First Paper :** **7th** Chapter - Structural Property of Matter **Second Paper** : 3rd Chapter – Current electricity Syllabus of 2nd Class test will be included.	**Test Examination** ** 1st Paper and 2nd Paper whole syllabus will be included.

Marks distribution for first Terminal Examination

Class test- 1 (20 marks)	=20
Class attendance	=05
Half Yearly exam (theoretical) : Creative -	=50
MCQ-	=25
	Total=100

Marks distribution for theoretical exam:

A) Creative questions – 50 marks.
   Out of 8 questions any five have to write.
   Each of the questions carries 10 marks $10\times5=50$

B) MCQ - 25 marks
   25 questions are to give.
   Each of the questions has equal value and carries 01 $01\times25=25$

Total theoretical marks= 75

Marks distribution for annual examination

Class test- 2 (20 marks) and Practical (20)	$40\div2=20$
Class attendance	=05
Annual exam (theoretical) : Creative -	=50
MCQ-	=25

Total = 100

Marks distribution for Practical exam:

1. Experiment (1)	=10
2. Identification	=02
3. Note book	=03
4. Viva	=05

Total=20

Marks distribution for theoretical exam:

A) Creative questions – 50 marks.
   Out of 8 questions any five have to write.
   Each of the questions carries 10 marks. $10\times5=50$

B) MCQ - 25 marks
   25 questions are to give.
   Each of the questions has equal value and carries 01 marks $1\times25=25$

Total = 75

Marks distribution for pre-test examination

Class test- 3	20
Class attendance	05
Annual exam (theoretical) : Creative-	50
MCQ-	25

Total =100

Marks distribution for theoretical exam:

A) Creative questions – 50 marks
   Out of 8 questions any five have to write.
   Each of the questions carries 10 marks.   10x5=50

B) MCQ - 25 marks
   25 questions are to give.
   Each of the questions has equal value and carries 01 marks $1\times25=25$

Total = 75

Marks distribution for test examination

Practical	25
Annual exam (theoretical) : Creative -	50
MCQ-	25
	Total =100

Marks distribution for theoretical exam:

A) Creative questions – 50 marks.

Out of 8 questions any five have to write.

Each of the questions carries 10 marks. **$10\times5=50$**

B) MCQ - 25 marks

25 questions are to give.

Each of the questions has equal value and carries 01 marks **$01\times25=25$**

Total=75

Marks distribution of practical exam of 2nd Paper

Dissection (Dissection and Presentation-6, figure-2)	**=08**
Identification (3×3)	**=09**
Viva Voice	**=05**
Note Book	**=03**
	Total = 25

Second paper: Same as first paper.

Book list:
Physics 1st and 2nd Paper
1. Dr. Shahjahan Tapon and Muhammad Aziz Hasan
2. Professor Abu Ishaq
3. Professor A.T.M Samsur Rahman Shelu and Zakaria Towhid

Subject: Chemistry 1st and 2nd Paper

Class Test	Half Yearly & Annual	Pre-Test & Test
Class Test-1 **First Paper:** 1stChapter - (Full) 2ndChapter - (from beginning to Electromagnetic radiation, Hydrogen spectra**),** Form Use of UV & IR rays to end. 3rd Chapter- (from beginning to Periodic properties & Properties of oxides), Form Covalent bond to end. **Second Paper:** 3rdChapter- (from beginning to end point of acid base reaction)	**Half Yearly Exam** **First Paper** : 1st chapter: Use of Laboratory with safety measures 2nd Chapter: Qualitative Chemistry 3rdChapter:Periodic Properties of Elements and Chemical Bonding **Second Paper :** 3rd Chapter (half)	**Pre-test** **First Paper** : 5th Chapter - Chemistry in work and life **Second Paper** : 1st Chapter -Environmental chemistry 2nd Chapter - Organic Chemistry 3rd Chapter - Quantitative chemistry 4th Chapter- Chemical changes
Class Test-2 **First Paper :** 4th Chapter -(From beginning to Relation between Kp & Kc), From Ionic product of water to end**.** **Second Paper :** 1st Chapter - Environmental chemistry (Full) **Class Test- 3** **First Paper :** 5thChapter - Chemistry in work and life **Second paper :** Chapter - Organic Chemistry(from beginning to identification of Functional group) 3rd Chapter - Quantitative chemistry (From redox to end)	**Annual Exam** **First Paper** : 1st chapter 2nd Chapter 3rd Chapter **Second Paper :** 1st Chapter 2nd Chapter 3rd Chapter	**Test Examination** **Second paper** : 4thChapter - Electro chemistry 5th Chapter - Economic chemistry 1st Chapter- Environment chemistry 2nd Chapter- Organic Chemistry 3rd Chapter- Quantitative chemistry

Marks distribution for first Terminal Examination

Class test- 1 (20 marks)	=20
Class attendance	=05
Half Yearly exam (theoretical) : Creative -	=50
MCQ-	=25
	Total=100

Marks distribution for theoretical exam:

A) Creative questions – 50 marks.

Out of 8 questions any five have to write.

Each of the questions carries 10 marks $10 \times 5 = 50$

B) MCQ - 25 marks

25 questions are to give.

Each of the questions has equal value and carries 01 $01 \times 25 = 25$

Total theoretical marks= 75

Marks distribution for annual examination

Class test- 2 (20 marks) and Practical (20)	$40 \div 2 = 20$
Class attendance	=05
Annual exam (theoretical) : Creative -	=50
MCQ-	=25
	Total = 100

Marks distribution for Practical exam:

1. Experiment (1)	=10
2. Identification	=02
3. Note book	=03
4. Viva	=05
	Total=20

Marks distribution for theoretical exam:

A) Creative questions – 50 marks.

Out of 8 questions any five have to write.

Each of the questions carries 10 marks. $10 \times 5 = 50$

B) MCQ - 25 marks

25 questions are to give.

Each of the questions has equal value and carries 01 marks $1 \times 25 = 25$

Total = 75

Marks distribution for pre-test examination

Class test- 3	20
Class attendance	05
Annual exam (theoretical) : Creative-	50
MCQ-	25
	Total =100

Marks distribution for theoretical exam:

A) Creative questions – 50 marks

   Out of 8 questions any five have to write.

   Each of the questions carries 10 marks.   10x5=50

B) MCQ - 25 marks

   25 questions are to give.

   Each of the questions has equal value and carries 01 marks   1×25=25

                                                                     Total = 75

Marks distribution for test examination

Practical   25

Annual exam (theoretical)   : Creative -   50

                    MCQ-   25

                                                                     Total =100

Marks distribution for theoretical exam:

A) Creative questions – 50 marks.

   Out of 8 questions any five have to write.

   Each of the questions carries 10 marks.   **10×5=50**

B) MCQ - 25 marks

   25 questions are to give.

   Each of the questions has equal value and carries 01 marks   **01×25=25**

                                                                     Total=75

Marks distribution of practical exam of 2nd Paper

Dissection (Dissection and Presentation-6, figure-2)   **=08**

Identification (3×3)   **=09**

Viva Voice   **=05**

Note Book   **=03**

                                                                     Total = 25

Second paper: Same as first paper.

List of Books

1.   Chemistry- 1st & 2nd paper
      1. Swapan Kumar Mistry
      2. Sanjit Kumar Guha
      3. Mahbub Linkon
      4. Md. Jainul Abedin
      5. Biplob Kumar Dev
      6. Haradhan Nath

Subject: Higher Mathematics 1st and 2nd Paper

Class Test	Half Yearly & Annual	Pre-Test & Test
Class Test-1 **1st paper** : 1st Chapter - Matrix and Determinants [Exercise:-1.1 – 1.2] 3rd Chapter - Straight lines [Exercise- 3.1 - 3.5] **2nd Paper:** Real numbers and Inequalities [Exercise- 1.1–1.2] Linear programming [Exercise: 2]	**Half Yearly Examination** **Syllabus of class test -1** **1st Paper :** 4th Chapter - Circle [Exercise- 4.1 -4.2] **2nd Paper :** 7th Chapter – Inverse Trigonometric Function & Trigonometric Equations [Ex-7.1 – 7.2]	**Pre-test** **Full syllabus of class test-3** **2nd paper** : 3rd Chapter - Complex Numbers [Exercise: - 3] 10th Chapter - Measures of Dispersions [Exercise-10.1 - 10.2] 8th Chapter: Statics [Exercise: 8.1-8.4]
Class Test-2 **1st paper** : 1st Chapter - Straight lines [Exercise:-3.5 – 3.7] 7th Chapter - Trigonometric Ratios of Associated Angles [Exercise- 7.1 - 7.7] **2nd Paper:** Trigonometry Ex: 7.1, 7.2 **Class Test-3** **1st paper** : 6th Chapter : Conics [Exercise:-6.1 – 6.3] 8th Chapter : Function and Graph of Functions [Exercise- 8] 9th Chapter - Differentiation [Exercise:-9.1 – 9.6] 10th Chapter - Integration [Exercise- 10.1 – 10.7]	**Annual Examination** **Syllabus of class test -2.** **1st paper** : 2nd Chapter - Vectors [Exercise: - 2] 5th Chapter - Permutations and Combinations [Exercise- 5.1 - 5.2] 9th Chapter - Differentiation [Exercise:-9.7 – 9.9] **2nd Paper :** 5th Chapter - Binomial Expression [Exercise- 5.1 - 5.2]	**Test Examination** According to board syllabus 1st Paper and 2nd Paper

Marks Distribution of Term Examination

Class Test		20
Class Attendance		05
Theoretical examination -	Creative-	50
	MCQ-	25
		Total = 100

Marks Distribution of Theoretical Examination:

(a) Creative Question:

Total 8 questions (4+4) in 2 groups will be given out of them

5 questions are to be answered. From each group at least two questions are to be answered. Each question carries 10 marks   50

(b) MCQ

Total 25 questions will be given. All questions are to be answered

Each Question carries 01 marks   25

          Total= 75

Marks distribution of practical examination

Experiment	Theory	03
	Use of instruments and Data Collection	05
	Calculation and Analysis	04
Presentation of results with explaimation		05
Viva voce		05
Practical Note book		03

          Total= 25

Name of the book :

Higher Mathematics 1st Paper and 2nd Paper

1. Md. Rafiqul islam & Md. Habibur Rahman– Ruponti Prokashoni, Dhaka.
2. Md. Nazrul islam and Md. Ketab Uddin
3. Md. Surujuddin Ahmed and Md. Abdul Jabbar
4. Akkhar Patra Publication Writer: Asim kumar Saha and others.

Subject: Biology 1st and 2nd Paper

Class Test	Half Yearly & Annual	Pre-Test & Test
Class test-1 **First Paper**: 1st Chapter - Cell and it's structure **Second paper**: 1st Chapter - Animal diversity and classification	**Half Yearly exam** **First Paper**: 2nd Chapter - Cell division 3rd Chapter - Cell chemistry **Second Paper:** 2nd Chapter- Introduction to animal 3rd Chapter - Human physiology: digestion and absorption	**Pre- test exam** **First Paper** : 4th Chapter – Micro organisms 8th Chapter - Tissue and tissue system 9th Chapter -Plants physiology **Second Paper:** 4th Chapter - Human physiology: Blood and blood circulation 8th Chapter - Human physiology: Coordination and control 11th Chapter - Genetics and Evolution
Class test- 2 **First Paper**: 5th Chapter - Algae and Fungi **Second Paper:** 5th Chapter - Human physiology: Breathing and Respiration **Class test- 3** **First Paper** : 7th Chapter - Gymnosperm and angiosperm plants **Second Paper :** 7th Chapter -Human physiology: Locomotion and body movement	**Annual Exam** **First Paper** : 6th Chapter - Algae and Fungi **Second Paper :** 4th Chapter - Human physiology: Waste and excretion	**Test exam** **First Paper** : 10th Chapter - Plant reproduction 11th Chapter - Biotechnology 12th Chapter - Ecosystem and conservation **Second Paper** : 9th Chapter - Continuation of human life 10th Chapter -Immunity system of human body 12th Chapter -Animal behavior ***** There will be separate question paper on entire syllabus of first paper and second paper.**

Marks distribution for first Terminal Examination

Class test- 1 (20 marks)	=20
Class attendance	=05
Half Yearly exam (theoretical) : Creative -	=50
MCQ-	=25
	Total=100

Marks distribution for theoretical exam:

A) Creative questions – 50 marks.

Out of 8 questions any five have to write.

Each of the questions carries 10 marks $10\times5=50$

B) MCQ -   25 marks

25 questions are to give.

Each of the questions has equal value and carries 01 $01\times25=25$

Total theoretical marks= 75

Marks distribution for annual examination

Class test- 2 (20 marks) and Practical (20)	$40\div2=20$
Class attendance	=05
Annual exam (theoretical) : Creative -	=50
MCQ-	=25
	Total = 100

Marks distribution for Practical exam:

1. Experiment (1)	=10
2. Identification	=02
3. Note book	=03
4. Viva	=05
	Total=20

Marks distribution for theoretical exam:

A) Creative questions – 50 marks.

Out of 8 questions any five have to write.

Each of the questions carries 10 marks. $10\times5=50$

B) MCQ - 25 marks

25 questions are to give.

Each of the questions has equal value and carries 01 marks $1\times25=25$

Total = 75

Practical exam syllabus of 1st Paper

1. Observation of plant diversity.
2. Different stage of mitosis cell division.
3. Observation of Bacteria.
4. Identification of Malvaceae and poaceae family.
5. Observation of the transverse section of roots and shoots of monocotyledon plants.
6. To examine the importance of CO_2 in photo synthesis.
7. Examination of an aerobic respiration

Marks distribution for pre-test examination

Class test- 3	20
Class attendance	05
Annual exam (theoretical) : Creative-	50
MCQ-	25
	Total =100

Marks distribution for theoretical exam:

A) Creative questions – 50 marks

  Out of 8 questions any five have to write.

  Each of the questions carries 10 marks.   10x5=50

B) MCQ - 25 marks

  25 questions are to give.

  Each of the questions has equal value and carries 01 marks $1\times25=25$

Total = 75

Marks distribution for test examination

Practical	25
Annual exam (theoretical) : Creative -	50
MCQ-	25
	Total =100

Marks distribution for theoretical exam:

A) Creative questions – 50 marks.

  Out of 8 questions any five have to write.

  Each of the questions carries 10 marks.   **$10\times5=50$**

B) MCQ - 25 marks

  25 questions are to give.

  Each of the questions has equal value and carries 01 marks   **$01\times25=25$**

Total=75

**Marks distribution of practical exam of 2nd Paper

Dissection (Dissection and Presentation-6, figure-2)   **=08**

Identification (3×3)   **=09**

Viva Voice   **=05**

Note Book   **=03**

Total = 25

Second paper: Same as first paper.

Practical syllabus of 2nd Paper

1. Study of museum specimen
2. Study of permanent slide
3. Study of mouth parts of cockroach
4. Study of efferent branchial system (Rohu fish)
5. Study of Afferent branchial system (Rohu fish)
6. Study of operculum of fish
7. Study of air bladder of fish
8. Study of skeletal system of human.

List of reference biology books
Name of the book Name of the author

Biology 1st paper Class 11-12	Biology 2nd paper Class 11-12
1. Prof. Dr. Md. Abul Hasan	1. Gazi Azmal and Asmat.
2. Gazi Azmal *et al.*	2. Md. Abdul Kaiyum and Prof. Meghnad Saha
3. Hafizur Rahman Mandal *et al*	3. Dr. Md. Abdul Alim
4. Prof.Md. Nazim Uddin *et al*	4. Prof. Md. Nazim Uddin

Subject: Engineering Drawing and Workshop Practice
1st and 2nd Paper

Class Test	Half Yearly & Annual	Pre-Test & Test
Class Test-1	**Half Yearly Examination**	**Pre-Test Examination**

1st paper
 1. Drawing instruments and their uses.
 2. Standard of lines and methods of dimensioning.
 3. Triangle, Quadrilateral, Polygon Geometrical.
 4. Figures of equal areas.
 	
 2nd paper
 1. Meaning of surveying, purpose of surveying classification of surveying
 2. Survey instruments:
   a. Chain surveying,
   b. Compass survey.
   c. Plane table survey.
 3. Basic principle of chain surveying.
 4. Instrument used in chain surveying: a) Engineers chain, b) Gunter's chain, c) Mataic chain d) Ranging rod, e) Offset rod, f) Plumb-bob, g) Arrow, h) Optical square.
 5. Measuring the field with chain & calculate the area.
	1st paper
	 1. Tangent to circles & Ellipse.
	 2. Enlarging or Reducing plane figures.
	 3. Lettering & Numbering.
	 4. Plain scale and Diagonal scale.
	 5. Conventional signs (Symbols).
	 6. Revision of the 1st class test syllabus.
	
	 2nd paper
	 1. List of error in chaining: Cumulative errors, (+) positive cumulative, (−) negative cumulative errors, compensating errors, Mistakes.
	 2. Draw plan and calculate the area of plot
	 3. Revision of 1st +2nd monthly syllabus
	 4. Folding & Unfolding of chain.
	 5. Procedure of chain surveying.
	 6. Booking procedure in field book, procedure of booking a field book.
		1st Paper
		 1. Building door & Windows.
		 2. Draw building plan, section & elevation for single & double room.
		
		 2nd Paper
		 1. Fore bearing, Back bearing, Resection by back sighting, Radiation methods
		 2. Revision of 1st 2nd & 3rd class test syllabus.

Class Test	Half Yearly & Annual	Pre-Test & Test
Class Test-2 **1st paper** 1. Isometric view. 2. First and third angle projection. 3. Projection of points, lines & planes. 4. Projection of Solids; Cube, Prism, Pyramid, Cylinder, Conc. 5. Development of prism, pyramid, cylinder & conc. **2nd paper** **Compass survey**: a) Classification of compass, Introduction of Instrument. b) Difference of Prismatic compass, Surveyors compass and use of Trough compass.	**Annual Examination** **1st paper** 1. Projection of Engineering drawing Instruments. 2. First angle projection, Oblique projection, Isometric view. 3. Revision of 2nd class test syllabus. **2nd paper** 1. Magnetic needle, Dip-of-the needle, Magnetic meridian. 2. Calculate the area with Bearing and traverse. 3. Revision of 2nd class test syllabus.	**Test Examination** **1st Paper & 2nd Paper whole syllabus.**
Class Test- 3 **1st paper** 1. Screw threads. 2. Machine Screws. 3. Square & Hexagonal Nut 4. Rivets **2nd paper** 1. Plane table survey. Introduction and used of plane table surveying instruments. 2. Methods of plane table surveying and advantages & disadvantages of plane table surveying		

Marks Distribution of Term exam

Class Test	20
Work book	=15
Class attendance	=05
Written test (Theoretical)	=60
	Total = 100

Marks Distribution of Written Test

1st paper out of 8 questions -4 are to be answer	$10 \times 4 = 40$
2nd paper out of 6 questions -4 are to be answer	$5 \times 4 = 20$
	Total=60

Name of Books:
First Paper
1. Engineering drawing and workshop practice (NCTB)
     ১. আ. ম. শফিউদ্দিন আহম্মেদ
     ২. মোঃ ইব্রাহিম হোসেন
2. Prathomik Engineering drawing (Reference Book)- শ্রী হেমন্ত কুমার ভট্টাচার্য্য

2nd Paper
1. Engineering drawing and workshop practice (NCTB).
     ১. আ. ম. শফিউদ্দিন আহম্মেদ
     ২. মোঃ ইব্রাহিম হোসেন
2. A text book of Surveying (Reference Book)- M. Shahjahan & M. A. Aziz
3. Surveying Vol-1 (Reference Book)- Dr. B.C. Punmia