



Principal's Message

Located in the heart of Dhaka city in Lalmatia-Dhanmondi, Daffodil International College, Dhaka, is a reputed educational institution. Our institution is committed to tirelessly work towards nurturing students to become competent citizens of the country. Daffodil International College, Dhaka, firmly pledges to surpass barriers in exploring the potential of our students and preparing them to become capable individuals in their future lives. Additionally, we emphasize on co-education programs, extra-curricular activities, and fostering human values equally.

It is not just about achieving good results; our aim is to unleash each student's developed moral, social and cultural values through discussions. Only economic progress cannot bring happiness, peace or prosperity to people. Therefore, there is a need to develop human qualities through discussions on justice, truth and beauty. The students of this college will be dedicated to building a knowledgeable and justice-based society and state.

We hope that the students of this college will be inspired by unwavering patriotism to actively participate in multifaceted activities and develop their talents for their own development. The development of creativity and intellect outside the curriculum is also Important. Discussions on justice, truth, and beauty will foster awareness of their own moral and human values.

Alongside academic excellence, we are committed to emphasizing on acquiring technological knowledge to meet global demands. We strive to actively support our youth to become confident, patriotic and responsible citizens. Our experienced and skilled faculty members are dedicated to ensuring the gateway to limitless possibilities for the future of our students.

We hope that the students of Daffodil International College will play a significant role in the development of Bangladesh in the future. I, especially from Daffodil International College, Dhaka, request the esteemed guardians to support and cooperate us on this glorious journey. I express sincere gratitude and appreciation to the respected guardians for their trust in us.

Finally, in pursuit of academic excellence, we have maintained Daffodil Family's continuous effort to ensure that every student easily succeeds in obtaining the appropriate education and training for success, InshaAllah. May the Creator be our helper.

Col Mohammad Sadikul Bari, PSC (Retd.)

Principal

Daffodil International College, Dhaka

National Anthem

My Bengal of gold, I love you
Forever your skies, your air set my heart in tune
as if it were a flute,
In Spring, Oh mother mine, the fragrance from
Your mango groves make me wild with joy-
Ah, what a thrill!
In Autumn, Oh mother mine,
in the full-blossomed paddy fields,
I have seen spread all over – sweet smiles!
Ah, what a beauty, what shades, what an affection
and what a tenderness!
What a quilt have you spread at the feet of
banyan trees and along the banks of rivers!
Oh mother mine, words from your lips are like
Nectar to my ears!
Ah, what a thrill!
If sadness, Oh mother mine, casts a gloom on your face,
my eyes are filled with tears!

Principal's Introduction

Col Col Mohammad Sadikul Bari, PSC (Retd.) Principal, Daffodil International College, Dhaka. Former Principal: Jhenaidah Cadet College (JCC), Jhenaidah and Former Principal: Cantonment College, Jessore Cantonment.

Other Achievements

- ◆ Former Chief Engineer, Bangladesh University of Engineering and Technology (BUET), Dhaka.
- ◆ Received 'Commendation Certificate' from Chief of Army Staff (COAS) of Bangladesh Army.
- ◆ Received 'Commendation Certificate' from the United Nations Mission's highest authority in Mali, Africa.

This institution is managed using its own learning management system (LMS) platform, SmartEdu, maintaining a dashboard to track student or user progress, ensuring regular attendance information, checking regular class routines, examination schedules, exam results, and overall performance verification.

Introduction

Daffodil International College, Dhaka, founded in 2003 by Dr. M. Sabur Khan, creates a serene environment free from commotion in Dhanmondi, aiming to fulfill the substantial demand for modern education, which surpasses the available number of seats in Bangladesh. The college is approved and accredited by the Dhaka Education Board. Colonel M. Sadikul Bari, a distinguished figure in the education sector and former principal of Jhenaidah Cadet College, currently serves as the Chairman of the college.

Objectives and Goals

- ❖ Ensuring quality education delivered by skilled and experienced faculty.
- ❖ Creating morally and ethically conscious skilled manpower.
- ❖ Fostering dormant talents and developing creative abilities among students, instilling patriotism.
- ❖ Equipping every student for higher education both domestically and internationally.
- ❖ Maintaining the college as an exemplary educational institution.

Features

- Education delivered by skilled and experienced faculty.
- Special classes for underperforming students.
- Arrangement of regular recovery/review classes.
- Regular monthly and other examinations.
- Special emphasis on ICT subjects.
- Regular co-curricular activities.
- Provision of class teachers and guide teachers.
- Well-equipped labs and library.
- Politics and smoke-free campus.

Facilities

- Well-managed classrooms with controlled heating and cooling.
- Separate branch for female students.
- Campus under constant surveillance with CCTV cameras.
- Arrangement of hostel and transportation facilities.
- Dissemination of various information to guardians via Educational Institute Management System (EIMS).
- Scholarships ranging from 30% to 100% for Daffodil International College students admitted to Daffodil International University.
- Help desk for online applications.

- ▶ A pioneering college in Bangladesh for conducting online classes
- ▶ The Learning Management System (LMS) is maintained on its own platform
- ▶ Through the LMS, classes, lecture materials, recorded video classes, handouts, class tests, quizzes, assignments, and homework are provided
- ▶ Dashboards are included to track the progress of students or users
- ▶ Regular attendance information of students is ensured
- ▶ Regular class schedules, exam schedules, exam results, and overall performance are monitored

Smart Edu

- A college management software accessible anytime, anywhere for students and teachers.

Academic Curriculum

Follows the national curriculum and textbooks approved by the National Curriculum and Textbook Board (NCTB). Implements educational programs with the goal of expanding students' knowledge and perspectives through adherence to prescribed textbooks and supplementary books. The curriculum is organized into two parts and lesson plans are prepared accordingly.

For the information of respected parents

Daffodil International College, a unique institution of business and science education, is the key to the success of discipline and creative testing methods. In order to build good character, teach and create a bright future for each student, the student councilor/class teacher collects information about the students' classroom attendance records, examination results verification, behavior and other issues. Any information about a student should be contacted by the designated student advisor between 11:00 a.m. and 1:30 p.m. on any weekday. Besides, there is a class teacher/guide teacher for every 20-25 students to look after regular educational activities. Special classes are held with the class teacher/guide teacher on fixed dates every month. Respected parents can directly communicate with the Student Counselor and Class Teacher/Guide Teacher about the educational progress of their child/pet. For the information of parents, various important points related to college rules and examination procedure are mentioned below: Rules and regulations

A parent should ensure the following before sending his/her child/pet to college:

- Students will wear college uniform, belt and shoes appropriately.
- Students will have their hair cut short, clean shaven with zulfi and shirt on.
- Girls' hair will normally be braided. There will be no hair in front of the forehead, no hair tied high on the head. Avoid large ornaments of any kind (small ear tops may be worn. Bras may not be worn). Those who will wear a burqa will wear a white burqa over the college uniform.
- Students cannot be brought with any kind of electronic products (i-Pad, i-Pod, Tab, Gear/Smart Watch etc.).
- Students will not smoke or take any other intoxicants.
- Students will eat food from home and come to college and bring food with him if needed.
- Students will enter college in due time.
- Students will avoid dishonest company. If necessary, keep in touch with the student's classmates and friends.

If any of the above is violated your child/pet will not be able to enter the college. In this case, the student may not be able to enter the college and get involved in silly chatter which may hinder his good character formation. Besides, the parents will keep a watchful eye on whether the college returns home on time or not.

Examination related activities

All the information related to the examination is mentioned in the academic calendar in very clear language. Parents can easily check the following from the Academic Calendar – Monthly Exam/Half-Yearly/Annual Exam Schedule, Exam Admit Card Distribution Date etc.

Date of Declaration of Exam Result * Necessary guidelines to be followed during the exam. * Schedule of new section announcement * External and internal activities of the college like- important * Announcement of celebration of national and international days National and International holidays etc. * Besides, urgent notices, exam results, section change, general leave, absence etc. are sent to the parent's phone through SMS. Students can get all the information daily by browsing the college portal and website. WhatsApp group will be formed section wise including students and guardians.

Guardian Meeting

The parent meeting is held at the beginning of class XI and after every semester/term examination. In this meeting, the parents are informed about the progress of a student's education. For this, presence of real parents of students with ID card is required. This tripartite relationship of teachers-students-parents needs to be tied together in order to achieve good results of the students.

Daffodil International College, Dhaka is a family. A child/pet is easily able to achieve the desired success through the cooperative behavior of the parents. So if a parent is aware of his child's movement and education 24 hours a day, 7 days a week, 30 days a month and 365 days a year, there is no possibility of that child going to astray. In this case, everyone's cooperation towards the rules and order and fair education program of the organization Daffodil International College, Dhaka is absolutely necessary. Only then the country and nation will be gifted with a beautiful future.

For information of students

Every student must comply with the following:

- Students should wear college prescribed uniform and enter the college regularly at specified times. Must enter the campus within 8:30 minutes during morning classes. All activities of the college will be conducted as per the academic calendar on any matter of college, the concerned Student Counselor/Class Teacher/Guide Teacher should be contacted.
- In order to resolve any complication related to studies, the Subject teachers of the concerned subject always stay with the students.
- Students must compulsorily attend regular class activities. No class shall be absent for even one day without the permission of the college authorities. If a student is absent for a day, the concerned student will not be allowed to participate in the next class or examination without the prior permission of the CT. It should be noted that a penalty of Tk 100/- (One Hundred) per day is to be paid for absence without permission.
- 15 minutes in 1st period General Knowledge is discussed for the development of students' intelligence. Besides, moral education is also discussed in the classroom.
- Class activities are conducted according to certain routines. In this case, the prescribed notebook for each subject should be used.
- If 2 subject teachers take classes on the same subject, the book of that subject will be divided into 2 parts. The date, teacher's name and subject of the lesson must be written in the class book every day.

- Students must bring the materials necessary for the examination such as admit card, paper, pen, eraser, scale, calculator etc. during all examinations. Carrying any kind of bags, books, notebooks, notes, mobiles etc. is completely prohibited. Forgery or anything similar to counterfeiting is found, the student will be immediately expelled from the college.
- No student will be allowed to take the exam without the admit card in all examinations. However, if the admit card is lost, one can participate in the examination of that day with the permission of the controller of examination. Later, you have to collect the alternative admit card by depositing 100/- (one hundred) taka in the account branch.
- Students who fail in three or more subjects will not be promoted to the next phase. He has to leave the college with a clearance letter (TC).
- Participation in all examination and passing in all subjects is compulsory.
- A student who fails year final examination will not be admitted to 2nd year (Class XII) and a student who fails in Selective (Test) examination will not be allowed to appear in Final Board (Higher Secondary/HSC) Examination. Alternatively, the student has to withdraw or remain in Class XII.
- If any student is sick, he must inform the college authority before starting the class or examination. Otherwise the sick days will be treated as absence. In that case, cancellation of admission will become urgent. It should be noted that a maximum of 10 days leave is granted in case of any serious illness after admission to the college.
- A maximum of 5 days leave is granted on the application of the parent for urgent family needs or unavoidable matters. However, no leave is given during the examination.
- 2 consecutive days before/after a weekly holiday (Friday and Saturday) 3 consecutive days including Fridays as per rules if absent without permission. which will be eligible for cancellation of admission.
- If any student is found smoking in or around the college, there are severe penalties including cancellation of admission.
- Students must sit in the designated seat allotted in the classroom.
- Objectionable pictures or comments on Facebook or any other social media or anything negative about classmates/teachers/college/state or bullying and barraging of classmates will be punished.
- Any student who engages in unruly behavior at any place inside/outside the college will be reprimanded immediately.
- Students must pay the tuition fee within the stipulated time. A fine of Tk.100/- (one hundred) per day shall be paid after the prescribed time.
- In all cases the student must obey the class teacher's written/oral instructions.
- Student's uniform must be neat and clean. Wearing dirty/smelling clothes/shoes-socks is prohibited from entering the college.

- Students should keep their classrooms clean and tidy.
- No tea cups, water bottles, food from college canteen can be taken upstairs or to the classroom.
- Students cannot stand with feet on the wall.
- Chocolates, Pickles, Chips or tempting food etc. shall not be entered/eaten in the classroom.
- No student will be allowed to stay in the balcony, college grounds, canteen and library during academic hours.
- It is forbidden to leave the college without the permission of the authority before the class break.
- Final punishment may include cancellation of admission. Students must leave the college in an orderly manner after the class.
- Expulsion or cancellation of admission for any undesirable reason other than those mentioned above. Even the registration of the board can be stopped as per requirement. Any recommendation or lobbying in this regard will be considered as a repeat offence.

Examination Instructions

- No student will be allowed to appear in the examination without admit card and identity card.
- No other documents, books, bags, mobiles etc. shall be brought to the examination hall except examination related papers.
- Students must enter the examination hall at least 25 minutes before the commencement of the examination.
- Exchange of pens, pencils, erasers, scales, calculators etc. is completely prohibited in the exam hall.
- Candidates must write 16 to 18 lines per page of the answer sheet and write at least 5 to 6 words per line.
- Candidates have to sit and participate in the examination if it is full time.
- At the end of the examination no candidate shall leave his seat before the answer sheets are collected by the room invigilators.
- Students participating in the examination should come in proper uniform.
- 1 inch margin should be given on the left side and top of the answer sheet and question no should be written above the margin.
- Candidates should fill and circle the examination name, roll number, registration number, subject code box etc. in the specified places on the cover page of the answer sheet properly with black ink ball point pen.
- Candidates will start writing the answer from the designated space in the answer sheet. Answers should be written on both pages of the answer sheet except the cover page.
- It is prohibited to write or mark anything other than the specified space on the cover page of OMR/answer sheet.

- The OMR/Answer Sheet cannot be folded under any circumstances.
- Candidates will be expelled if there is any evidence of malpractice in the examination hall.
- If the admit card is lost or left at home or if one cannot bring the admit card for any other reason, then on the day of the examination the admit card must be collected from the examination control branch by depositing 100/- (one hundred rupees) in the Accounts Branch.
- Offensive writing/indecent comments or requests in the answer sheet, leaving without submitting the answer sheet, discourteous behavior with any person engaged in conducting the examination, resorting to unfair means in the examination or creating any obstacle in the conduct of the fair examination will result in cancellation of admission/expulsion from the college along with cancellation of the examination. .
- Candidate's name, roll number, registration number, mobile phone/telephone number etc. cannot be written anywhere inside the answer sheet under any circumstances. If written, the examination of the concerned candidate will be considered cancelled.
- Any change due to circumstances arising will be intimated by notice.
- Next day activities, class timings, holiday notices, exam schedule and results will be informed through www.dic.edu.bd website.

Daffodil International College, Dhaka
Term Exam & Duration, Session: 2024-25 (Tentative)

Class Start: 30 July 2024

SL No	Name of the Exam	Date	Duration
Half Yearly			
1	1 st Monthly Test	4 th September 2024	110 days
2	2 nd Monthly Test	2 nd October 2024	
3	Half Yearly Exam	10 th November 2024	
Year Final			
4	3 rd Monthly Test	1 st January 2025	135 days
5	4 th Monthly Test	9 th February 2025	
6	Year Final Exam	13 th April 2025	

Pre-Test			
7	5 th Monthly Test	19 th June 2025	95 days
8	Pre-Test Exam	5 th August 2025	
Test Exam			
9	6 th Monthly Test	14 th September 2025	95 days
10	Test Exam	16 th November 2025	

Daffodil International College, Dhaka

Academic Calendar 2024-2025

Term-1 (Half Yearly Exam): Total Class Activities-80 days

Duration: August 24-November 24

July		August	
1 Mon		1 Thu	
2 Tue		2 Fri	
3 Wed		3 Sat	
4 Thu		4 Sun	
5 Fri		5 Mon	
6 Sat		6 Tue	
7 Sun		7 Wed	
8 Mon	*Hijri New Year	8 Thu	
9 Tue		9 Fri	
10 Wed		10 Sat	
11 Thu		11 Sun	
12 Fri		12 Mon	
13 Sat		13 Tue	

Pre-Test			
7	5 th Monthly Test	19 th June 2025	95 days
8	Pre-Test Exam	5 th August 2025	
Test Exam			
9	6 th Monthly Test	14 th September 2025	95 days
10	Test Exam	16 th November 2025	

Daffodil International College, Dhaka

Academic Calendar 2024-2025

Term-1 (Half Yearly Exam): Total Class Activities-80 days

Duration: August 24-November 24

July		August	
1 Mon		1 Thu	
2 Tue		2 Fri	
3 Wed		3 Sat	
4 Thu		4 Sun	
5 Fri		5 Mon	
6 Sat		6 Tue	
7 Sun		7 Wed	
8 Mon	*Hijri New Year	8 Thu	
9 Tue		9 Fri	
10 Wed		10 Sat	
11 Thu		11 Sun	
12 Fri		12 Mon	
13 Sat		13 Tue	

14 Sun		14 Wed	
15 Mon		15 Thu	National Mourning Day
16 Tue		16 Fri	
17 Wed	*Ashura	17 Sat	
18 Thu		18 Sun	
19 Fri		19 Mon	
20 Sat	*Hijri New Year	20 Tue	
21 Sun		21 Wed	
22 Mon		22 Thu	
23 Tue		23 Fri	
24 Wed		24 Sat	
25 Thu		25 Sun	
26 Fri		26 Mon	*Janmashtami
27 Sat		27 Tue	
28 Sun		28 Wed	
29 Mon	*Ashura	29 Thu	
30 Tue		30 Fri	
31 Wed	Freshers' Reception Session (2024-25)	31 Sat	

**Legend: White: Working Days Red : Others Holidays Yellow: Examinations
Light Green : Event Blue : National Celebration**

Day *Religious Festivals may change as per the subject of the moon sighting.

***Any Unavoidable change will be notified in due time.**

Academic Calender-2024

September		October	
1 Sun		1 Tue	
2 Mon		2 Wed	Monthly Test-02(Half Yearly) Session(2024-25)
3 Tue		3 Thu	
4 Wed	Monthly Test-01(Half Yearly) Session(2024-25)	4 Fri	
5 Thu		5 Sat	
6 Fri		6 Sun	
7 Sat		7 Mon	
8 Sun		8 Tue	
9 Mon		9 Wed	
10 Tue		10 Thu	
11 Wed		11 Fri	
12 Thu		12 Sat	
13 Fri		13 Sun	Durga Puja & Fateha-Yaz Daham
14 Sat		14 Mon	
15 Sun		15 Tue	
16 Mon	*Eid-e-Miladunnabi	16 Wed	
17 Tue		17 Thu	
18 Wed		18 Fri	
19 Thu	Quran Kirat/Hamd/Nath Competition	19 Sat	
20 Fri		20 Sun	
21 Sat		21 Mon	

22 Sun		22 Tue	
23 Mon		23 Wed	
24 Tue		24 Thu	
25 Wed		25 Fri	
26 Thu		26 Sat	
27 Fri		27 Sun	
28 Sat		28 Mon	
29 Sun		29 Tue	
30 Mon		30 Wed	
31 Tue		31 Thu	*Shama Puja

Legend: White: Working Days **Red :** Others Holidays **Yellow:** Examinations
Light Green : Event **Blue :** National Celebration

Day *Religious Festivals may change as per the subject of the moon sighting.
***Any Unavoidable change will be notified in due time.**

Academic Calender-2024-25
Term-1 (Year Final Exam): Total Class Activities 74 days
Duration: December 24-April 25

November		December	
1 Fri		1 Sun	
2 Sat		2 Mon	
3 Sun		3 Tue	
4 Mon		4 Wed	
5 Tue		5 Thu	
6 Wed		6 Fri	

7 Thu		7 Sat	Parents' Meeting Session (2023-24)
8 Fri		8 Sun	
9 Sat		9 Mon	
10 Sun	Half Yearly Exam Session(2024-25)	10 Tue	
11 Mon		11 Wed	
12 Tue		12 Thu	
13 Wed		13 Fri	
14 Thu		14 Sat	Martyred Intellectual Day
15 Fri		15 Sun	
16 Sat		16 Mon	Victory Day
17 Sun		17 Tue	
18 Mon		18 Wed	
19 Tue		19 Thu	
20 Wed		20 Fri	
21 Thu		21 Sat	
22 Fri		22 Sun	Winter Vacation & Christmas Day
23 Sat		23 Mon	
24 Sun		24 Tue	
25 Mon		25 Wed	
26 Tue		26 Thu	
27 Wed		27 Fri	
28 Thu		28 Sat	
29 Fri		29 Sun	
30 Sat		30 Mon	
31 Sun		31 Tue	

Academic Calender-2025

January		February	
1 Wed	Monthly Test-03(Year Final) Session(2024-25)	1 Sat	Annual Picnic'25
2 Thu		2 Sun	* Saraswati Puja
3 Fri		3 Mon	
4 Sat		4 Tue	
5 Sun		5 Wed	
6 Mon		6 Thu	
7 Tue		7 Fri	
8 Wed		8 Sat	
9 Thu		9 Sun	Monthly Test-04 (Year Final) Session(2024-25)
10 Fri		10 Mon	
11 Sat		11 Tue	
12 Sun		12 Wed	*Maghi Purnima
13 Mon	Annual Sports'25	13 Thu	
14 Tue		14 Fri	*Shab-e-Barat
15 Wed		15 Sat	
16 Thu		16 Sun	
17 Fri		17 Mon	
18 Sat		18 Tue	
19 Sun		19 Wed	
20 Mon		20 Thu	
21 Tue		21 Fri	International Mother Language Day

22 Wed		22 Sat	
23 Thu		23 Sun	
24 Fri		24 Mon	
25 Sat		25 Tue	Monthly Test-02(Half Yearly) Session(2024-25)
26 Sun		26 Wed	
27 Mon	*Shab-e-Meraj	27 Thu	
28 Tue		28 Fri	
29 Wed			
30 Thu			
31 Fri	Winter Fest'25		

Legend: White: Working Days **Red** : Others Holidays **Yellow**: Examinations

Light Green : Event **Blue** : National Celebration

Day *Religious Festivals may change as per the subject of the moon sighting.

*Any Unavoidable change will be notified in due time.

Academic Calender-2025

March		April	
1 Sat	Beginning of Holy Ramadan	1 Tue	
2 Sun	Teachers' Gathering'24	2 Wed	
3 Mon		3 Thu	
4 Tue		4 Fri	
5 Wed		5 Sat	
6 Thu		6 Sun	
7 Fri		7 Mon	
8 Sat	*Shab-e-Barat	8 Tue	

9 Sun		9 Wed	
10 Mon		10 Thu	
11 Tue		11 Fri	
12 Wed		12 Sat	
13 Thu		13 Sun	Year Final Exam Session(2024-25)
14 Fri		14 Mon	Bengali New Year
15 Sat		15 Tue	
16 Sun		16 Wed	
17 Mon	Birth Anniversary of Banga Bandhu (National Child Day)	17 Thu	
18 Tue		18 Fri	
19 Wed		19 Sat	
20 Thu		20 Sun	*Estar Sunday
21 Fri		21 Mon	
22 Sat		22 Tue	
23 Sun	*Ramadan, Jumatul Wida Shab-e-Qadar	23 Wed	
24 Mon		24 Thu	
25 Tue		25 Fri	
26 Wed	Independence Day	26 Sat	
27 Thu		27 Sun	
28 Fri		28 Mon	
29 Sat		29 Tue	Summer Vacation
30 Sun		30 Wed	
31 Mon			

Academic Calender-2025
Term-3 (Pre-Test Exam): Total Class Activities-56 days
Duration: May 25-August 25

May		June	
1 Thu	International Worker's Day	1 Sun	
2 Fri		2 Mon	
3 Sat		3 Tue	
4 Sun		4 Wed	
5 Mon	*Buddha Purnima	5 Thu	
6 Tue		6 Fri	
7 Wed		7 Sat	
8 Thu		8 Sun	
9 Fri		9 Mon	
10 Sat		10 Tue	
11 Sun		11 Wed	
12 Mon		12 Thu	
13 Tue		13 Fri	
14 Wed		14 Sat	Parents' Meeting Session (2024-25)
15 Thu		15 Sun	
16 Fri		16 Mon	
17 Sat		17 Tue	
18 Sun	Debate Competition (Bangla)	18 Wed	
19 Mon		19 Thu	Monthly Test-05(Pre-Test) Session(2024-25)
20 Tue		20 Fri	

21 Wed		21 Sat	
22 Thu		22 Sun	
23 Fri		23 Mon	
24 Sat		24 Tue	
25 Sun		25 Wed	
26 Mon		26 Thu	*Hijri New Year
27 Tue		27 Fri	
28 Wed		28 Sat	
29 Thu		29 Sun	
30 Fri	Winter Fest'25	30 Mon	
31 Sat			

Legend: White: Working Days **Red :** Others Holidays **Yellow:** Examinations
Light Green : Event **Blue :** National Celebration

Day *Religious Festivals may change as per the subject of the moon sighting.

***Any Unavoidable change will be notified in due time.**

Academic Calender-2025

July		August	
1 Tue		1 Fri	
2 Wed		2 Sat	
3 Thu		3 Sun	
4 Fri		4 Mon	
5 Sat	*Ashura	5 Tue	Pre-Test Exam Session(2024-25)
6 Sun		6 Wed	
7 Mon		7 Thu	

8 Tue		8 Fri	
9 Wed		9 Sat	
10 Thu		10 Sun	
11 Fri		11 Mon	
12 Sat		12 Tue	
13 Sun		13 Wed	
14 Mon		14 Thu	
15 Tue		15 Fri	National Mourning Day
16 Wed		16 Sat	
17 Thu		17 Sun	
18 Fri		18 Mon	
19 Sat		19 Tue	
20 Sun	*Hijri New Year	20 Wed	*Akheri Chahar Shomba
21 Mon		21 Thu	
22 Tue		22 Fri	
23 Wed		23 Sat	
24 Thu		24 Sun	
25 Fri		25 Mon	
26 Sat		26 Tue	
27 Sun		27 Wed	
28 Mon		28 Thu	
29 Tue	*Ashura	29 Fri	
30 Wed		30 Sat	
31 Thu		31 Sun	

Academic Calender-2025
Term-4 (Test Exam): Total Class Activities-51 days
Duration: September 25-December 25

September		October	
1 Mon		1 Wed	
2 Tue		2 Thu	
3 Wed		3 Fri	
4 Thu	*Eid-e-Miladunnabi	4 Sat	*Fateha-Yaz Daham
5 Fri		5 Sun	
6 Sat		6 Mon	
7 Sun		7 Tue	
8 Mon		8 Wed	
9 Tue		9 Thu	
10 Wed		10 Fri	
11 Thu		11 Sat	
12 Fri		12 Sun	
13 Sat		13 Mon	
14 Sun	Monthly Test-06(Test Exam)	14 Tue	
15 Mon		15 Wed	
16 Tue		16 Thu	
17 Wed		17 Fri	
18 Thu		18 Sat	Sheikh Rasel Day
19 Fri		19 Sun	
20 Sat		20 Mon	*Shama Puja

21 Sun		21 Tue	
22 Mon		22 Wed	
23 Tue		23 Thu	
24 Wed		24 Fri	
25 Thu		25 Sat	
26 Fri		26 Sun	
27 Sat	Quran Kirat/Hamd/Nath Competition	27 Mon	
28 Sun		28 Tue	
29 Mon		29 Wed	
30 Tue		30 Thu	
		31 Fri	

Legend: White: Working Days **Red** : Others Holidays **Yellow**: Examinations
Light Green : Event **Blue** : National Celebration

Day *Religious Festivals may change as per the subject of the moon sighting.
 *Any Unavoidable change will be notified in due time.

Academic Calender-2025

November		December	
1 Sat		1 Mon	
2 Sun		2 Tue	
3 Mon		3 Wed	
4 Tue		4 Thu	
5 Wed		5 Fri	
6 Thu		6 Sat	
7 Fri		7 Sun	

8 Sat	Parents' Meeting Session (2024-25)	8 Mon	
9 Sun		9 Tue	
10 Mon		10 Wed	
11 Tue		11 Thu	
12 Wed		12 Fri	
13 Thu		13 Sat	
14 Fri		14 Sun	
15 Sat		15 Mon	
16 Sun	Test Exam Session (2024-25)	16 Tue	Victory Day
17 Mon		17 Thu	
18 Tue		18 Fri	
19 Wed		19 Sat	
20 Thu		20 Sun	
21 Fri		21 Mon	
22 Sat		22 Tue	Winter Vacation & Christmas Day
23 Sun		23 Wed	
24 Mon		24 Thu	
25 Tue		25 Fri	
26 Wed		26 Sat	
27 Thu		27 Sun	
28 Fri		28 Mon	
29 Sat		29 Tue	
30 Sun		30 Wed	
		31 Thu	

পাঠ্যক্রম বিন্যাস
বাংলা ১ম ও ২য় পত্র

একাদশ শ্রেণি

১ম টার্ম (অর্ধ বার্ষিক পরীক্ষা)

মেয়াদকাল : আগস্ট ২০২৪ - নভেম্বর ২০২৪

মোট শ্রেণি কার্যদিবস: ৮০

১ম মাসিক পরীক্ষা	পূর্ণমান: ৩০
বাংলা ১ম পত্র গদ্য: অপরিচিতা – রবীন্দ্রনাথ ঠাকুর কবিতা: সোনার তরী – রবীন্দ্রনাথ ঠাকুর	বাংলা ২য় পত্র ব্যাকরণ: ১। বাংলা উচ্চারণ
২য় মাসিক পরীক্ষা	পূর্ণমান: ৩০
বাংলা ১ম পত্র গদ্য: বিলাসী কবিতা: প্রতিদান	বাংলা ২য় পত্র ব্যাকরণ: বাংলা বানান

১ম টার্ম / অর্ধ বার্ষিক পরীক্ষা	পূর্ণমান: ১০০
বাংলা ১ম পত্র গদ্য: বাঙ্গালার নব্য লেখকদিগের প্রতি নিবেদন – বঙ্কিমচন্দ্র চট্টোপাধ্যায় বিলাসী - শরৎচন্দ্র চট্টোপাধ্যায় কবিতা: বিভীষণের প্রতি মেঘনাদ – মাইকেল মধুসূদন দত্ত প্রতিদান – জসীম উদ্দীন সহপাঠ: উপন্যাস (লালসালু – সৈয়দ ওয়ালীউল্লাহ)	বাংলা ২য় পত্র নির্মিত : ০১. দিনলিপি/ প্রতিবেদন ০২. বৈদ্যুতিন চিঠি/ আবেদনপত্র এবং ১ম ও ২য় মাসিক পরীক্ষার সম্পূর্ণ সিলেবাস
এবং ১ম ও ২য় মাসিক পরীক্ষার সম্পূর্ণ সিলেবাস	

একাদশ শ্রেণি
২য় টার্ম (১ম বর্ষ সমাপনী পরীক্ষা)
মেয়াদকাল : ডিসেম্বর ২০২৪ - এপ্রিল ২০২৫
মোট শ্রেণি কার্যদিবস: ৭৪

৩য় মাসিক পরীক্ষা		পূর্ণমান: ৩০
<p>বাংলা ১ম পত্র গদ্য: গৃহ – রোকেয়া সাখাওয়াত হোসেন কবিতা : বিদ্রোহী – কাজী নজরুল ইসলাম</p>	<p>বাংলা ২য় পত্র ব্যাকরণ : ৩। বাংলা ভাষার ব্যাকরণিক শব্দশ্রেণি</p>	
৪র্থ মাসিক পরীক্ষা		পূর্ণমান: ৩০
<p>বাংলা ১ম পত্র গদ্য: আহ্বান – বিভূতিভূষণ বন্দ্যোপাধ্যায় কবিতা: সূচেতনা — জীবনানন্দ দাশ</p>	<p>বাংলা ২য় পত্র ব্যাকরণ : বাংলা শব্দ গঠন (উপসর্গ, প্রত্যয় ও সমাস)</p>	
২য় টার্ম / অর্ধ বার্ষিক পরীক্ষা		পূর্ণমান: ১০০
<p>বাংলা ১ম পত্র গদ্য: আমার পথ – কাজী নজরুল ইসলাম মানব-কল্যাণ – আবুল ফজল মাসি-পিসি – মানিক বন্দ্যোপাধ্যায় কবিতা: তাহায়েই পড়ে মনে – সুফিয়া কামাল পদ্মা – ফররুখ আহমদ আঠারো বছর বয়স – সুকান্ত ভট্টাচার্য এবং তৃতীয় মাসিক, চতুর্থ মাসিক পরীক্ষার সিলেবাস সহ।</p>	<p>বাংলা ২য় পত্র ব্যাকরণ : ৫। বাক্যতত্ত্ব ৬। বাংলা ভাষার অপপ্রয়োগ ও শুদ্ধ প্রয়োগ নির্মিতি: পারিভাষিক শব্দ / বঙ্গানুবাদ, সংলাপ/ খুঁদে গল্প রচনা এবং তৃতীয় মাসিক, চতুর্থ মাসিক পরীক্ষার সিলেবাস সহ।</p>	
৫ম মাসিক পরীক্ষা		পূর্ণমান: ৩০
<p>বাংলা ১ম পত্র গদ্য : বায়ামর দিনগুলো – শেখ মুজিবুর রহমান কবিতা : ফেব্রুয়ারি ১৯৬৯ – শামসুর রাহমান</p>	<p>বাংলা ২য় পত্র ব্যাকরণ : ব্যাকরণিক শব্দশ্রেণি</p>	
প্রাকনির্বাচনী পরীক্ষা		পূর্ণমান: ১০০
<p>বাংলা ১ম পত্র গদ্য: বায়ামর দিনগুলো – শেখ মুজিবুর রহমান রেইনকোট – আখতারুজ্জামান ইলিয়াস কবিতা : ফেব্রুয়ারি ১৯৬৯ – শামসুর রাহমান আমি কিংবদন্তির কথা বলছি – আবু জাফর ওবায়দুল্লাহ নাটক: সিরাজউদ্দৌলা – সিকান্দার আবু জাফর এবং পঞ্চম মাসিক পরীক্ষার সিলেবাস</p>	<p>বাংলা ২য় পত্র ব্যাকরণ: বাক্যতত্ত্ব নির্মিতি : ৭। পারিভাষিক শব্দ এবং অনুচ্ছেদ অনুবাদ ৮। বৈদ্যুতিন চিঠি, খুঁদে বার্তা, পত্র এবং আবেদনপত্র এবং পঞ্চম মাসিক পরীক্ষার সিলেবাস</p>	

দ্বাদশ শ্রেণি
৪র্থ টার্ম (নির্বাচনী পরীক্ষা)
 মেয়াদকাল : সেপ্টেম্বর ২০২৫ - ডিসেম্বর ২০২৫
 মোট শ্রেণি কার্যদিবস: ৫১

৬ষ্ঠ মাসিক পরীক্ষা	পূর্ণমান: ৩০
বাংলা ১ম পত্র গদ্য: মহাজাগতিক কিউরেটর— মুহম্মদ জাফর ইকবাল কবিতা : নূরলদীনের কথা মনে পড়ে যায় – সৈয়দ শামসুল হক	বাংলা ২য় পত্র নির্মিত: সারমর্ম, সারাংশ, সারসংক্ষেপ এবং ভাব-সম্প্রসারণ
৪র্থ টার্ম / নির্বাচনী পরীক্ষা	পূর্ণমান: ১০০
বাংলা ১ম পত্র গদ্য : নেকলেস – গি দ্য মোপাসাঁ কবিতা : ছবি – আবু হেনা মোস্তফা কামাল এবং ১ম মাসিক পরীক্ষা, ২য় মাসিক পরীক্ষা, অর্ধবার্ষিক পরীক্ষা, ৩য় মাসিক পরীক্ষা, চতুর্থ মাসিক পরীক্ষা, বার্ষিক, পঞ্চম মাসিক পরীক্ষা, গ্রোক-নির্বাচনী পরীক্ষার সিলেবাস (অর্থাৎ বাংলা ১ম ও ২য় পত্রের সম্পূর্ণ সিলেবাস)	বাংলা ২য় পত্র ব্যাকরণ: বাক্যের প্রয়োগ ও অপপ্রয়োগ নির্মিত: ১০। সারমর্ম, সারাংশ, সারসংক্ষেপ এবং ভাব-সম্প্রসারণ ১১। সংলাপ এবং খুঁদে গল্প ১২। প্রবন্ধ/নিবন্ধ এবং ১ম মাসিক পরীক্ষা, ২য় মাসিক পরীক্ষা, অর্ধবার্ষিক পরীক্ষা, ৩য় মাসিক পরীক্ষা, চতুর্থ মাসিক পরীক্ষা, বার্ষিক, পঞ্চম মাসিক পরীক্ষা,
	গ্রোক-নির্বাচনী পরীক্ষার সিলেবাস (অর্থাৎ বাংলা ১ম ও ২য় পত্রের সম্পূর্ণ সিলেবাস)

English-I & II Paper
1st Year
Term-I (Half Yearly Examination)
Course Duration August 24-November 2024
 Total Class Activities; 80 days

Monthly Test-1		Full Marks: 30
SL	Syllabus Outline	
1	<p>English Paper I Unit: 1 & 2 Question Items a) MCQ b) Comprehension Question c) Flow Chart/Completing Table d) Close Test with Clues Writing Part a) Graph/Chart b) Informal Letter/Mail</p>	<p>English Paper II Question Items a) Articles b) Preposition c) Special uses of words/phrases Writing Part a) Paragraph</p>

Monthly Test-2		Full Marks: 30
1	<p>English Paper I Unit: 3 & 4 Question Items a) MCQ b) Comprehension Question c) Summarizing d) Close Test without Clues e) Rearranging Writing Part a) Graph/Chart</p>	<p>English Paper II Question Items a) Special uses of words/phrases b) Completing Sentence Writing Part a) Paragraph b) Application</p>

First Term/ Half yearly Exam		Full Marks: 100
SL	Syllabus Outline	
1	English Paper I Unit: 1, 2, 3 & 4 Question Items a) MCQ b) Comprehension Question c) Flow Chart/Completing Table d) Summarizing e) Close Test with Clues f) Close Test without Clues g) Rearranging Writing Part English Paper I Question Items a) Graph/Chart b) Informal Letter/Mail	English Paper II Question Items a) Articles b) Preposition c) Special uses of words/phrases d) Completing Sentence Writing Part a) Paragraph b) Application

1stYear

Term-2: Year Final Examination

Course Duration December 2024-April 2025

Total Class Activities; 74 days

Monthly Test-3		Full Marks: 30
SL	Syllabus Outline	
1	English Paper I Unit: 5 & 6 Question Items a) MCQ b) Comprehension Question c) Flow Chart/Completing Table d) Summarizing e) Close Test with Clues f) Close Test without Clues Writing Part Question Items a) Completing Story b) Theme Writing	English Paper II Question Items a) Right Forms of Verbs b) Changing Sentence c) Punctuation Writing Part a) Paragraph b) Application

Monthly Test-4		Full Marks: 30
SL	Syllabus Outline	
1	<p>English Paper I Unit: 7 & 8 Question Items a) MCQ b) Comprehension Question c) Flow Chart/Completing Table d) Summarizing e) Close Test with Clues f) Close Test without Clues Writing Part a) Completing Story</p>	<p>English Paper II Question Items a) Completing Sentence b) Changing Sentence Writing Part a) Paragraph</p>

Second Term/Year Final Exam		Full Marks: 100
SL	Syllabus Outline	
1	<p>English Paper I Unit: 9, 10 & Revision of Units 1-7 Question Items a) MCQ b) Comprehension Question c) Flow Chart/Completing Table d) Summarizing e) Close Test with Clues f) Close Test without Clues g) Rearranging Writing Part a) Completing Story b) Theme Writing c) Letter Writing</p>	<p>English Paper II Question Items a) Articles b) Preposition c) Special uses of words/phrases d) Completing Sentence e) Right Forms of Verbs f) Changing Sentence g) Punctuation Writing Part a) Paragraph b) Application</p>

2nd Year
Term-3 (Pre-Test Examination)
Course Duration May 25- August 25
 Total Class Activities; 56 days

Monthly Test-5		Full Marks: 30
SL	Syllabus Outline	
1	<p>English Paper I Unit: 11, 12 & 13 Question Items a) MCQ b) Comprehension Question c) Flow Chart/Completing Table d) Summarizing e) Close Test with Clues f) Close Test without Clues g) Rearranging Writing Part a) Completing Story c) Letter Writing</p>	<p>English Paper II Question Items a) Modifiers b) Sentence Connectors c) Synonyms & Antonyms d) Punctuation Writing Part a) Paragraph b) Application</p>

Pre-Test Exam		Full Marks: 100
SL	Syllabus Outline	
1	<p>English Paper I Unit: Revision of all Units Question Items a) MCQ b) Comprehension Question c) Flow Chart/Completing Table d) Summarizing e) Close Test with Clues f) Close Test without Clues g) Rearranging Writing Part English Paper I Question Items a) Completing Story</p>	<p>English PaperII Question Items a) Completing Sentence b) Right Forms of Verbs c) Changing Sentence d) Modifiers e) Sentence Connectors f) Synonyms & Antonyms g) Punctuation Writing Part a) Paragraph b) Application c) Letter Writing</p>

2nd Year
Term-4: (Pre-Test Examination)
Course Duration September 25-December 25
 Total Class Activities; 51 days

Monthly Test-6		Full Marks: 30
SL	Syllabus Outline	
1	English Paper I a) Close Test with Clues b) Close Test without Clues	English PaperII a) Completing Sentence b) Changing Sentence c) Modifiers

Fourth Term (Test Exam) Paper		Full Marks: 100
SL	Syllabus Outline	
1	English Paper I Revision of all Syllabus	English PaperII Revision of all Syllabus

Information and Communication Technology (ICT)
Term-I (Half Yearly Examination)
Course Duration: August 24-November 2024
 Total Class Activities; 80 days

Monthly Test-1	Full Marks: 30
Chapter -3: Numerical Systems and Digital Devices History of number discovery, types and conversion of number systems. Binary addition, subtraction, signed numbers, 2's complement, codes, concept of codes (BCD, EBCDIC, Alphanumeric code, ASCII, Unicode)	

Monthly Test-2	Full Marks: 30
Chapter -3: Numerical Systems and Digital Devices Basic gate (AND, OR, NOT gate), Universal Gate, Special Gate (XOR, XNOR, gate) Simplification, Circuit Design, Encoder, Decoder, Adder, Register, Counter.	

Half Yearly Examination**Full Marks: 100****Chapter -3: (Full)****Chapter -2: Communication Systems and Networking**

Communication system, concept of communication system, concept of data communication, bandwidth, data transmission method, data transmission mode, data communication medium, wire medium, coaxial, twisted pair, optical fiber, wireless medium, radio wave, microwave, wireless, Communication systems, applications of wireless communication, Bluetooth, Wi-fi dsd Wi-Max, mobile communication, different generations of mobiles. Computer Networking, Concept of Network, Purpose of Network, Types of Network, Network Devices, Modem, Hub, Router, Gateway, Switch, Bridge. Working of network, network topology, concept of cloud computing, benefits of cloud computing.

1st Year**Term-2 (Year Final Examination)****Course Duration: December 2024 - April 2025**

Total Class Activities; 74 days

Monthly Test-3**Full Marks: 30****Chapter -4: Web Design Introduction and Concepts**

Concepts of Web Design, Web Site Structure, Basics of Logo, Concepts of Logo, Benefits, Introduction to Tags and Syntax, Design and Structure Layout, Formatting, Hyperlinks, Adding Images (including Banners), Tables, Web Page Designing, Web Sites Publishing.

Monthly Test-4**Full Marks: 30****Chapter-1: Information and Communication Technology World and Bangladesh Perspective**

Concept of Global Village: Communication, Employment, Education, Medical, Research, Office, Residence, Business—Commerce, News, Entertainment and Social Communication, Cultural Exchange, Virtual Reality, Impact of Virtual Reality in Daily Life Recent Trends in Information and Communication Technology: Artificial Intelligence, Robotics, Cryosurgery, Space Expeditions, ICT-based Manufacturing Systems, Defense, Biometrics, Bioinformatics, Genetic Engineering, Nanotechnology.

Chapter -3: Basic Gate (AND,OR, NOT gate), Universal Gate, Special Gate (XOR, XNOR, gate), Simplification, Circuit Design.

Chapter-1: Information and Communication Technology World and Bangladesh Perspective

Virtual Reality, Impact of Virtual Reality on Daily Life, Recent Trends in Information and Communication Technology: Artificial Intelligence, Robotics, Cryosurgery, Space Expeditions, ICT-based Manufacturing Systems, Defense, Biometrics, Bioinformatics, Genetic Engineering, Nanotechnology.

Chapter -2: Communication Systems and Networking

Bandwidth, data transmission method, data transmission mode, data communication medium, cable medium, coaxial, twisted pair, optical fiber, network device, modem, hub, router, gateway, switch, cable. Working of network, network topology, concept of cloud computing, benefits of cloud computing.

Chapter -3: (Full) : Numerical Systems and Digital Devices**Chapter -4: Web Design Introduction and Concepts**

Web Design Concepts, Web Site Structure, Formatting, Hyperlinks, Adding Images (including Banners), Tables, Web Page Designing, Web Site Publishing.

1st Year Practical (Web Design & HTML)

Experiment No 1: Create a web page of your college which when loaded in any browser will display the name of the college, picture and list of names of different departments of the college

Experiment No 2: Create a web page of your college which, when loaded in any browser, will display in a table the information of the students of the science department of the eleventh class of the college.

Experiment No 3: Create a network or web linked structure website of your college which when loaded in any browser will display the name and image of the college on the home page and the names of the various departments of the college on one page and the list of working teachers on the other.

Experiment No 4: Create a tree or hierarchical structure website of your college which when loaded in any browser will display the name of the college and the roll number of the students of different academic years in the home page and with the roll number there will be a link to the personal information page of the students. The personal information page will have various test result links.

2nd Year
Term-3 (Pre-Test Examination)
Course Duration : May 25 - August 25
Total Class Activities; 56 days

Monthly Test-5	Full Marks: 30
Chapter 5: Programming Languages Concept of programming, programming language, machine language, assembly language, middle level language, high level language, fourth generation language, translator program, compiler, assembler, interpreter, program organization, program development steps, algorithm, flowchart, program design model. Chapter 4: (Full)	

Pretest Examination	Full Marks: 100
Chapter 5: Programming Languages Concept of programming, programming language, machine language, assembly language, middle level language, high level language, fourth generation language, translator program, compiler, assembler, interpreter, program organization, program development steps, algorithm, flowchart, program design model. C' Programming Language: Basic Concepts, Features, Program Compiling, Program Structure. Data Types, Constants, Variables, Arrays, Keywords, Input Output Statements. Conditional Statements, Loop Statements, Arrays, Functions Chapter 1: (Full) Chapter 3: (Full) Chapter 4: (Full)	

2nd Year
Term-4 (Test Examination)
Course Duration: September 25-December 25
Total Class Activities; 51 days

Monthly Test -6	Full Marks: 30
Chapter - 2: Communication Systems and Networking Bandwidth, data transmission method, data transmission mode, data communication medium, cable medium, coaxial, twisted pair, optical fiber, network device, modem, hub, router, gateway, switch, cable. Working of network, network topology, concept of cloud computing, benefits of cloud computing.	

Chapter - 6: Database Management Systems:

Database Management, Working of DBMS, DBMS, Features of DBMS, Usage, Database Creation, Queries, Sorting, Indexing. Database Relations, Corporate Databases, Databases in Government Organizations, Data Security, Data Encryption.

Term -4 (Test Examination)**Full Marks: 100**

Chapter 1 (Full): Information and Communication Technology World and Bangladesh Perspective

Chapter 2 (Full) : Communication Systems and Networking

Chapter 3 (Full) : Number Systems and Digital Devices

Chapter 4 (Full) : Web Design Introduction and Concepts

Chapter 5 (Full): Programming Languages

Chapter 6 (Full): Database Management Systems:

2nd Year Practical (Programming Language and Database)

Experiment No 1: Program to convert Celsius temperature to Fahrenheit temperature.

Experiment No 2: Program to find the largest number out of three numbers.

Experiment No 3: Program to find the area of a triangle from the values of three sides

Experiment No 4: Program to determine the sum of a series

Experiment No 5: Accessing a database, creating tables and fields.

1st Year
Physics-I & II Paper
Term-I (Half Yearly Examination)
Course Duration: August 24 - November 2024
 Total Class Activities; 80 days

Monthly Test-1	Full Marks: 30
<p>Physics Paper I</p> <p>Chapter One: Physical World and Measurement Nature of Physical World; The Scope and Excitement of Physics; Concept, Law, Principle, Postulates, Hypothesis, Theory; Physics and other Scientific world: chemistry, mathematics, biology, astronomy, different branches of technology, medical science, agricultural science, literature and culture, sociology, philosophy, sports and games; space, time and mass in physics: old concept, modern concept, Fundamental and derived unit, Fundamental principle of measurement; Evolution and importance of observation and experiment; Archimedes, Galileo, Newton, Thomas Young, Michael Faraday, Lord Rutherford, Albert Einstein, Max Planck;</p> <p>Errors in measurement : Instrumental, Observational, Random, Systematic; Determination of more accurate value of measurable quantity.</p> <p>Chapter Two: Vector Vector: Property, symbol. Vector representation: Force, Rotational force, Angular momentum, surface. Few special vectors: unit vector, null vector, position vector, displacement vector. Geometric law of vector</p>	<p>Physics Paper II</p> <p>Chapter One: Thermodynamics Principle of measurement of temperature: Thermal equilibrium, concept of temperature. First law of thermodynamics: Concept, uses, thermal system, internal energy, heat, internal energy and work. Second law of thermodynamics: Concept, reversible and irreversible process, Carnot cycle. Heat engine: Refrigerator: Efficiency of engine, entropy and disorderliness.</p>

addition: Addition and subtraction of vectors with the help of perpendicular components. Resolution of vectors by three dimensional rectangular unit vectors, scalar multiplication and vector multiplication. Calculus in physics: Use and importance. Vector calculus: Differentiation, integration. Use of vector operator: Gradient, Divergence and Curl.

Monthly Test-2

Full Marks: 30

Physics Paper I

Chapter Four: Newtonian Mechanics

Intuitive concept of force, Newton's second law of motion, Relation between the laws of motion of Newton, Uses of Newton's laws of motion: Pulling of carts by horse, pulling of boat by rope, recoil motion of gun, space expedition by rocket: Limitations of Newton's laws of motion. Concept of force, field and intensity. Conservation of linear momentum: Concept, verification, Newton's third law of motion and conservation of momentum. Moment of inertia and angular momentum. Quantities related to angular momentum: Angular displacement, angular velocity, angular acceleration. Torque, moment of inertia and angular acceleration. Conservation of angular momentum. Centripetal and centrifugal force: Concept and uses. Collision: Concept, elastic and inelastic collision, one dimensional collision and problems.

Physics Paper II

Chapter Three: Current Electricity

Effect of temperature on resistance, Laws of Joule's heating effect. Electric Cell: Internal resistance and electromotive force, Series and Parallel Combination. Kirchoff's law: Concept of law, use in circuits uses of Shunt.

Chapter Eleven : Astronomy

Mystery of the creation of the universe, fate of the universe in the light of physics; principal matter and events of the universe; principles-radiotelescope, optical telescope, gamma and X-rays, artificial satellites.

Syllabus Outline

Physics Paper I**Chapter Three: Dynamics**

Inertial frame; Absolute motion, Relative motion; Preliminary ideas of Differentiation and Integration to describe motion; Position-time and Velocity-time graphs; Projectile motion; Laws of Falling bodies; Uniform circular motion

Physics Paper II**Chapter Two: Static Electricity**

Coulomb law and field theory. Point charge: Electric force, electric field intensity, electric potential, equipotential surface. Electric Dipole: Concept, electric field intensity, electric potential. Quantization and Conservation of Charge. Insulator and Dielectric Capacitor: Concept, Capacitance, series and parallel Combination, equivalent capacitance, energy, uses. Gauss law from Coulomb law, use of Gauss law to determine electric field intensity. Limitations of

Chapter Four: Magnetic Effects of Current and Magnetism

Oersted's concept about magnetic field, Biot-Savart's law, Ampere's law; moving charge, Hall effect; conducting wire and force in magnetic field; moving electron in an orbit, electron spin and magnetic field, terrestrial magnetism and its magnetic elements; magnetism-para, dia, ferro, ferri, antiferro magnetism; magnetic domain, electro- magnet and permanent magnet, applications of temporary and permanent magnets.

1st Year
Term-2: Year Final Examination
Course Duration: December 2024 - April 2025
 Total Class Activities; 74 days

Monthly Test-3	Full Marks: 30
Syllabus Outline	
<p>Physics Paper I Chapter Five: Work, Energy and Power Universal concept work and energy, Force, Displacement and work, Elastic force and gravitation force and work performed. Kinetic energy: Mathematical expression deduction, solution of problems. Potential energy: Deduction of Mathematical expression and solution of problems. Use of conservation law of energy: The maximum height of a projectile, energy of simple harmonic motion. Power, force and velocity. Conservative and non-conservative force, Efficiency</p>	<p>Physics Paper II Chapter Five: Electro-Magnetic Induction and Alternating Current Electro-magnetic induction, production of electricity by a magnet, induced electromotive force, Faraday's laws of electro-magnetic induction; Lenz's law: Lenz's law and principle of conservation of energy; self-induction and mutual induction; generation of alternating current; root mean square value, peak value, mean value of current.</p>

Monthly Test-4	Full Marks: 30
Syllabus Outline	
<p>Physics Paper I Chapter Six: Gravitation and Gravity Galileo's laws of falling bodies. Kepler's laws regarding planetary motion. Kepler's laws from Newton's law. Relation between gravitational constant and acceleration due to gravity. Uses of law of gravitation: At different places inside and outside a sphere. Gravitation: force, field intensity and potential. Variation of acceleration due to gravity: altitude, shape and diurnal motion. Centre of gravity, Escape velocity, Uses of gravitation law: in search of natural wealth, communication through artificial satellite, material research.</p>	<p>Physics Paper II Chapter Six: Geometrical Optics Fermat's principle-concept, laws of reflection and refraction of light with the help of Fermat's principle: Lens Maker's formula or equation; Experimental : determination of refractive index of a liquid: determination of focal length and power of a lens; microscope; telescope; reflecting telescope: refraction and dispersion of light in a prism.</p>

Syllabus Outline

Physics Paper I**Chapter Seven: Structural Properties of Matter**

Intermolecular attractive and repulsive forces: Solid, liquid and gaseous. Bonds of matter: Ionic bond, covalent bond, metallic bond and Van der Waals bond. Intermolecular force and elasticity of matter. Quantities about elasticity: elasticity, plastic substance, perfectly rigid substance, elastic limit, breaking load, breaking stress, elastic fatigue, strain (length, shape and volume) stress (length, shape and volume) Hook's law, Relation between stress-strain, Elastic moduli: Young's modulus, modulus of rigidity and bulk modulus. Poisson's ratio.

Physics Paper II**Chapter Seven: Physical Optics**

Electromagnetic wave, Electromagnetic spectrum, Wave front. Huygens' Principle: Concept, Wave front, Reflection and refraction of light. Interference of light: Concept, Young's double slit experiment. Diffraction of light.

2nd Year
Term-3 (Pre-Test Examination)
Course Duration: May25 - August 25
Total Class Activities; 56 days

Monthly Test-5	Full Marks: 30
Syllabus Outline	
<p>Physics Paper I Chapter Eight: Periodic Motion Periodicity: Spatial periodicity and temporal periodicity. Periodic motion, characteristics of periodic force, quantities relating simple harmonic motion. Differential equation of bodies executing simple harmonic motion, Simple harmonic motion: Concept, differential equation, uses. Motion of a simple pendulum. Relation between simple harmonic motion and circular motion.</p>	<p>Physics Paper II Chapter Eight: Beginning of Modern Physics Inertial frame & non inertial frame. Michelson-Morley experiment. Theory of Relativity of Einstein: Galilean Transformation, Lorentz transformation, time dilation, length contraction, increase of mass, mass energy relation, Fundamental forces, use of theory of relativity in space travel. Planck's black body radiation, X-ray, Photoelectric effect, De Broglie wave, Compton effect, Heisenberg's Uncertainty Principle.</p>

Pre-Test Exam	Full Marks: 100
Syllabus Outline	
<p>Physics Paper I Chapter Nine: Wave Propagation of wave, Wave and Energy. Transverse wave, Longitudinal wave, Progressive wave; Concept of progressive wave, Mathematical expression of Progressive wave, Intensity of wave; Concept, Mathematical expression: Principle of superposition: Stationary wave, condition for propagation of stationary wave, Mathematical expression; Resonance. Intensity and Intensity level of sound, Beats Concept. Mathematical Expression, Musical Scale and Harmonics, Contribution of Physics in the Analysis of musical sound: Noise and musical sound and their effect.</p>	<p>Physics Paper II Chapter Nine: Atomic Model and Nuclear Physics Development of Concept of structure of atom. Rutherford's alpha particle experiment, Rutherford's atomic model, limitation of Rutherford's model. Bohr's atomic model. Structure of the nucleus. Some important phenomena of Nuclear Physics: Radioactivity, Decay, Half-life. Average life, Mass defect, Binding energy, Nuclear Reaction, Chain Reaction, Nuclear Fission, Nuclear Fusion.</p>

2nd Year
Term-4 (Test Examination)
Course Duration: September 25 - December 25
Total Class Activities; 51 days

Monthly Test-6	Full Marks: 30
Syllabus Outline	
<p>Physics Paper I Chapter Ten : Ideal Gas and Kinetic Theory of Gas Ideal gas: Laws, equation, Basic postulates of molecules, Molecular kinetic theory of gases. Kinetic theory of gas and laws of ideal gas, Principle of equipartition of energy, water vapor and air pressure: Concept, relation between pressure of water vapor and air pressure. Dew point and relative humidity: concept, relation between dew point and relative humidity.</p>	<p>Physics Paper II Chapter Ten: Semiconductor & Electronics Band theory, conductor, insulator & semiconductor in the light of band theory. Intrinsic and extrinsic semiconductor, concept of hole and electron, p-type and n-type semiconductor. Function of Junction diode. Rectification: Concept, bridge rectification. Junction transistor (pnp & npn): Construction and function. Uses of transistor: Amplifier, switch. Number System: Decimal, Binary, Octal, Hexadecimal. Binary operation: Addition, subtraction, multiplication division. Logic Gate: NOT gate, OR gate, NOR gate, XOR gate, AND gate, NAND gate.</p>

Fourth Term (Test Exam) Paper	Full Marks: 100
Syllabus Outline	
<p>Physics Paper I Revision of all Syllabus</p>	<p>Physics Paper II Revision of all Syllabus</p>

Physics 1st Part Practical		Full Marks: 100
1 st	i. Determination of the volume of a neuter cylinder by measuring the length with slide calipers and the radius with screw gauges. ii. Determination of Radius of Curvature of Spherical Surface with Ferrometer. iii. Determination of mass of object by oscillating method with the help of balance.	
4 th	Determining the inertia of a flywheel.	
5 th	Determine the potential energy of a spring.	
6 th	Verify the law of falling objects by rolling marbles down an incline and measuring distance and time.	
7 th	Determination of Young's modulus of elasticity using Vernier method.	
8 th	i. Determine the spring constant of a spring. ii. Comparison of the masses of different objects using a spring as an oscillator.	
9 th	Determination of melodic frequency with Melody instrument.	
10 th	i. Validation of Boyle's formula and drawing of P-V curve. ii. Determination of relative heat of a liquid by Newton's method of cooling.	

Physics 2nd Part Practical		Full Marks: 30
3 rd	i. Determination of mechanical equivalent of heat. ii. Comparison of the electromagnetic force of two cells with the help of potentiometer. iii. Determination of relative resistance of a cable element with meter bridge. iv. Determining resistance using the Whitestone bridge principle with the help of post office boxes.	
6 th	i. Determination of refractive index of liquids using mirrors and convex lenses. ii. Determination of focal length and power of convex lens with $1/u$ vs $1/v$ diagram (Pin method) iii. Determination of focal length and power of convex lens with $1/u$ vs $1/v$ diagram (candle method).	

10 th	<p>i. Conversion of an alternating current to a unidirectional current using a full bridge of diodes.</p> <p>ii. Operation of OR gate circuit using integrated circuit or truth table verification.</p> <p>iii. Operation of AND gate circuit using integrated circuit or truth table verification.</p> <p>iv. Operation of NOT gate circuit using integrated circuit or truth table verification.</p> <p>v. Operation of NOR gate circuit using integrated circuit or truth table verification.</p> <p>vi. Operation or truth table verification of NAND gate circuit using integrated circuit.</p> <p>vii. Operation of X-OR gate circuit using integrated circuit or truth table verification.</p>
------------------	---

Syllabus
Chemistry 1st and 2nd paper
1st Year
Term-I (Half Yearly Examination)
Course Duration August 24-November 2024
 Total Class Activities; 80 days

1st Monthly Test	Full Marks: 30
<p>1st paper</p> <p>Chapter 02: Qualitative Chemistry</p> <p>Primary Concept Rutherford's Atom Model, Bohr's Atom Model, Quantum Number, Different Sub-shells & Electron Capacity, Heisenberg's Uncertainty, Sub-Shells' Shape, Rules of electronic configuration: Aufbau rule, Hund's Principle and its Explanation. Pauli's Exclusion Principle, Electromagnetic Spectrum, Different Regions of Electromagnetic Spectrum, Hydrogen Atom Spectrum Uses of UV: Radiation to Detect Fake Passport & Money, Uses of IR Radiation in Medical Science, Principle of MRI Test to Identify Diseases.</p>	

2nd Monthly Test

Full Marks: 30

2nd paper

Chapter 02: Organic Chemistry

Classification of organic compounds, Homologous series, Functional Group, Nomenclature of Organic Compounds, Nomenclature of compounds with Poly Functional Groups.

Chapter 05: Economical Chemistry

The Natural Gas Fields of Bangladesh and Use of Natural gas ,Production of Natural Gas, Composition and Uses of Natural Gases, Coal fields in Bangladesh, Quality and Uses of Bangladeshi coal, Probability of Industrialization in Bangladesh on basis of Fuel Resources, Introduction to Mentionable Chemical Industries , Basic Principle of Urea, Glass, Ceramic, Pulp-Paper and Cement Production,Principles of Leather Tanning, Pollutants of Cement, Urea, Leather, Textile and Dyeing Industries, Principle of Controlling Air Pollution, Principle of Action of Effluent Treatment plant, Recycling of Iron, Aluminum, Copper, Glass, Paper and Plastic Substances

1st Term/Half Yearly Exam

Full Marks: 100

Including syllabus of 1st Monthly Test, 2nd Monthly Test and the following:

1st paper

Chapter 02: Qualitative Chemistry

Solubility, Solubility Product, Ionic Product, Crystallization, Distillation, Fractional distillation, Steam distillation & Sublimation Solvent Extraction, Chromatography, Compound Separation from Mixture by Paper Chromatography.

Including syllabus of 1st Monthly Test, 2nd Monthly Test and the following:

2nd paper

Chapter 02: Organic Chemistry

Isomerism of Organic Compound & its Classifications, Aromatic Hydrocarbons Aromaticity, Classification of Aromatic Compounds.

Chapter 05: Economical Chemistry

Advantages and Disadvantages of Coal-Based Power Plant, Concept of Nanoparticle & Nanotechnology, Comparison of physical properties between Nanoparticles and Normal state of Matter Probability of application of Nanoparticles in Industries.

1st Year
Term-2: Year Final Examination
Course Duration: December 2024 - April 2025
 Total Class Activities; 74 days

3rd Monthly Test		Full Marks: 30
<p style="text-align: center;">1st paper</p> <p>Chapter 03: Periodic Properties of Elements & Chemical Bonding Classification of Elements Based on Electronic Configuration, The General Properties of the Elements of Various Block, Periodic Properties: Electronegativity, Melting and boiling point of element, Size of Atom & Atomic Radius, Ionization energy, Electron affinity, Metallic Properties, Valency Classification of Covalent Bond, Hybridization of Orbital, Classification of Hybrid Orbit, Relation between Hybrid Orbital and Covalent Compounds, Effect of Lone Pair Electron on Shape and Bond Angle of Molecule.</p>	<p style="text-align: center;">2nd paper</p> <p>Chapter 02: Organic Chemistry Electrophile, Nucleophile, Free radical, Carbocation, Carbanion, Addition of Aliphatic and Aromatic compound (Electrophilic and Nucleophilic), Substitution (Electrophilic and Nucleophilic) Elimination and Multi substitution reaction of benzene and orientation.</p>	

4th Monthly Test		Full Marks: 30
<p>2nd paper</p> <p>Chapter 02: Organic Chemistry General Preparation, Chemical properties and uses of Alkane, Alkene, Alkyne, Identification, Separation of Alkane, Alkene, Alkyne from the mixture.</p> <p>Chapter 03: Quantitative Chemistry Chemical calculation and molar volume of gases from Chemical Equation, Determine the mass and volume of gas from reactant, Conversion of molarity into percentage and ppm unit, Acid-base Neutralization, indicator, Titration, Oxidation-Reduction Reaction, Oxidizing agent and reducing agent, balancing the redox reaction, Beer Lambert Law.</p>		

2nd Term/ 1st Year Final Exam		Full Marks: 100
<p>Including syllabus of half yearly exam, 3rd and 4th Monthly Test and the following:</p> <p style="text-align: center;">1st paper</p> <p>Chapter 03: Periodic Properties of Elements & Chemical Bonding</p> <p>Co-ordinate Covalent Bond, Comparison between Covalent & Co-ordination Covalent Bond, Polarity & Polarization, ionic Character of Covalent Compounds, Character in Ionic Compounds, Fajan's Rule, Van der Waals Force, Hydrogen Bond</p>	<p>Including syllabus of half yearly exam 3rd and 4th Monthly Test and the following:</p> <p style="text-align: center;">2nd paper</p> <p>Chapter 02: Organic Chemistry Alkyl halide, Alcohol, Aldehyde-Ketone, Carboxylic acid.</p> <p>Chapter 03: Quantitative Chemistry Iodometry, uses of Beer Lambert Law.</p>	

Chemistry 1st paper(Practical)	Full Marks: 25
<ul style="list-style-type: none"> ● Detection of Cation and Anion in sample (inorganic) salt. ● Preparation of pure crystal of NaCl from impure NaCl ● To determine the heat of solution of Oxalic acid(Calorimetrically) ● Vinegar preparation from Ethanoic acid. 	

2nd Year
Term-3 (Pre-Test Examination)
Course Duration May 25- August 25
Total Class Activities; 56 days

5th Monthly Test	Full Marks: 30
<p style="text-align: center;">1st paper</p> <p>Chapter 01: Safe Use of Laboratory Laboratory Safe Use of Glass Apparatus, Cleaning Laboratory apparatus, Solution of Different Concentration and Titration (Molar solution, Molal solution Normal Solution, Formal Solution, ppm, Acid-Base Titration, Universal Indicator, Neutralization) Heating Technique of Different Laboratory Apparatus, Technique of Using Reagent Bottle ,Caution in Storing and Using Chemical Reagents, Safe Storage and Disposal of Used Chemicals, Effects of the chemicals Used in the Laboratory on Environment, Semi-micro & Micro Analytical Process.</p>	<p style="text-align: center;">2nd paper</p> <p>Chapter 01: Environmental Chemistry Components of Atmosphere, Laws of Boyle, Charles, Avogadro, Gay-Lussac law, Dalton's partial pressure and Graham's diffusion law, Ideal Gas and Real Gas Equation, Physical significance of R, Value of molar gas constant, Deviation of the real gases from ideal gas, Compressibility co-efficient, Postulate of Kinetic theory of Gases. Nitrogen Fixation in Atmosphere during Thunderstorm, Reaction in Cylinder, Air Pollution ,Greenhouse Gases & its Effect, Uses of CFC, Ozone Layer Causes of Acid Rain & its Prevention, Theory of Arrhenius Bronsted-Lowry Theory & Conjugate Acid-Base , Water Standard of Measurement of Purity and Hardness of surface water (pH, DO, BOD, COD, TDS),Water Pollution Causes of Water Pollution & its Prevention, Food Chain Contamination by Heavy Metals,(As, Cr, Pb, Cd and Hg) contamination in food chain.</p>

Including syllabus of 5th Monthly Test and the following:

1st paper

Chapter 04: Chemical Changes

Chemical Reaction & Green Chemistry, Irreversible & Reversible Reaction, Characteristics of Rate Constant, Effect of Temperature, Pressure & Concentration, Catalyst & Classification of Catalyst, Effect of Catalyst on Rate of Reaction, Chemical Equilibrium, Dynamic Nature of Equilibrium, Le-Chatelier Principle Effect of Temperature, pressure & Concentration on Equilibrium, Application of Le-Chatelier principle on Industrial Production Law of Mass Action Equilibrium Constant, K_c & K_p , Characteristics of Equilibrium Constant, Derivation of Mathematical Equation of K_p & K_c , Significance of K_p & K_c , Equilibrium constant of Acid (K_a) and Dissociation Constant of Base (K_b), ionic Product of H_2O (K_w), Intensity of Acids & Bases, pH & Buffer solution, preparation of buffer solution, Importance of pH in Agriculture, Chemical Industry, Toiletries & Pharmaceuticals, Principle of Conservation of Mass and Energy, Change of Heat (Heat of Reaction, Enthalpy of Phase Transitions, Heat of Atomization, Heat of Solution, Heat of Neutralization), Neutralization of Strong Acids & Bases, Bonding Energy Laws of Thermochemistry (Lavoisier and Hess's law) Law of Lavoisier and Laplace (1782) Hess's law of constant heat summation Illustration of Hess's Law

Including syllabus of 5th Monthly Test and the following

2nd paper

Chapter 02: Organic Chemistry

Ester, Amine, Ethers. Amide, Preparation of glycerin and Preparation & Identification Reactions Phenol Preparation & Identification Reaction Nitroglycerine, TNT, Dettol, Paracetamol Preparation and Uses Nitroglycerine, T.N.T, Dettol, Paracetamol, Role of Melting point and Boiling point to detect Organic Compounds and their purity, Polymer & Plasticity, Addition Polymerization Reactions, Condensation Polymerization Reactions, Glycoside and Peptide Bond in Polymer Molecules.

Chapter 05: Application Oriented Chemistry

Food Security and Chemistry Permitted Preservatives and Food Preservation, Process of Food Canning, Principles of Food Canning, Canning of Some Vegetables, Canning of fish and meat. Suspension and Coagulation Suspension, Percentage Composition of Milk, Separation of Butter from Milk, Dewatering of Butter Milk, Intensity of Acids & Bases, pH & Buffer solution, preparation of buffer solution, Importance of pH in Agriculture, Chemical Industry, Toiletries & Pharmaceuticals, Principle of Conservation of Mass and Energy, Change of Heat (Heat of Reaction, Enthalpy of Phase Transitions, Heat of Atomization, Heat of Solution, Heat of Neutralization), Neutralization of Strong Acids & Bases, Bonding Energy Laws of Thermochemistry (Lavoisier and Hess's law) Law of Lavoisier and Laplace (1782) Hess's law of constant heat summation Illustration of Hess's Law Preparation of Ghee from Butter, Glass cleaner, Toilet cleaner, Reason of using Ammonia in Flash Cleaner Instead of Caustic Soda, Preparation of Vinegar from Ethanoic Acid, Preparation of Malt Vinegar from Sugarcane, Food preservation of Technique of Vinegar, Importance of Vinegar in Preserving Food.

2nd Year
Term-4 (Test Examination)
Course Duration September 25- December 25
Total Class Activities; 51 days

6th Monthly Test	Full Marks: 30
<p>1st paper Chapter 04: Electrochemistry</p> <p>Electrical Conductors and its Classification, Conductance of Electrolytes, The Effect of factors on Electrolysis, Measurement of electrolytes using Faraday's first law, Activity Series of Metals, Oxidation Half-Reactions & Reduction Half-Reactions, Electrode Potential, Cell Potential Standard Electrode Potential, Nernst Equation Related to Electrode and Cell Potential, Salt Energy by Producing Cell, Electrochemical Cell of one and two Compartment (Electrolytic and Galvanic), Electrolytic cell of one compartment, Rechargeable Battery (Lead Storage and Lithium), Procedure and Recharge process, Formation of Rechargeable Battery, Advantages and disadvantages of using Lead Storage and Lithium Battery, Fuel Cell & its Classifications, Formation of fuel cell and reactions Advantage of Hydrogen Fuel Cell. Measurement of pH using pH meter.</p>	

4th Term/ Test		Full Marks: 100
<p>1st paper</p> <p>All chapters of 1st paper.</p>	<p>2nd paper</p> <p>All chapters of 2nd paper.</p>	

Chemistry 2nd paper (Practical)	Full Marks: 25
<ul style="list-style-type: none"> • Identification of functional groups of organic sample. (-OH, - CHO, >CO, - COOH) • Preparation the standard solution of Na₂CO₃ • To determine the strength of sample HCl solution with standard Na₂ CO₃ solution. • To determine the amount of FeSO₄ in solution with KMnO₄. 	

Higher Mathematics 1st & 2nd Paper
1st Year
Term-I (Half Yearly Examination)
Course Duration August 24- November 2024
 Total Class Activities; 80 days

1st Monthly Test		Full Marks: 30
Higher Mathematics 1st paper		
<p>Chapter-1: Matrices and Determinants Chapter-7: Trigonometric ratios of associated angles</p>		
2nd Monthly Test		Full Marks: 30
Higher Mathematics 2nd Paper		
<p>Chapter-3: Complex Numbers Chapter-4: Polynomials and Polynomial Equations</p>		
1st Term/Half Yearly Exam		Full Marks: 100
<p>Higher Mathematics 1st Paper Chapter- 1: Matrices and Determinants Introduction, definition of matrix, types of matrices, addition, subtraction, multiplication, determinants, properties of determination, inverse matrices, Cramer’s rule, solution of problem.</p> <p>Chapter-3: Straight Lines Cartesian and polar co-ordinates, distance between two points, area of a triangles, locus and its equation, slope, parallel and perpendicular straight line, intersecting point of two straight line, angle between two lines, solution of problem.</p> <p>Chapter-6: Trigonometric ratios Angle of trigonometry, quadrant, unit of measurement of angle, trigonometric ratios, fundamental relation, graph of trigonometric functions, solutions of problem.</p>	<p>Higher Mathematics 2nd Paper Chapter-1: Real Numbers & Inequality Number, Inequality, Interval, Bounded Set and Absolute Value</p> <p>Chapter-3: Complex Numbers Modulus, argument, polar form, argument of complex number according to the quadrant, properties, addition, subtraction, square root, cube root of unity, solution of problem.</p> <p>Chapter-4: Polynomials and Polynomial Equations Quadratic equation, relation between roots and coefficients, discriminant and nature of the roots, formation of a quadratic equation, common root, relation between roots and coefficients for a cubic equation, solution of problem.</p>	

<p>Chapter-7: Trigonometric ratios of associated angles Introduction, Trigonometric ratios of associated angles Trigonometric ratio of compound angle, Trigonometric ratios of compound angles related corollary, Trigonometric ratios of multiple angles, Trigonometric Identities, Sine & Cosine rule of a triangle, Expressing trigonometric ratio of half angles, Area of triangles. Radius of circumcircle and incircle of a triangle.</p>	
---	--

1st Year

Term-2: Year Final Examination

Course Duration December 2024 - April 2025

Total Class Activities; 74 days

<p>3rd Monthly Test Full Marks: 30</p>	
<p>Higher Mathematics 1st Paper Chapter-9: Differentiation</p>	<p>Higher Mathematics 2nd Paper Chapter-6: Conics</p>

<p>4th Monthly Test Full Marks: 30</p>	
<p>Higher Mathematics 1st Paper Chapter-4: Circle</p>	<p>Higher Mathematics 2nd Paper Chapter-7: Inverse Trigonometric Functions and Trigonometric Equations</p>

<p>2nd Term /Year Final Full Marks: 30</p>	
<p>Higher Mathematics 1st Paper Chapter-2: Vector</p>	<p>Higher Mathematics 2nd Paper Chapter -2: Linear Programing</p>
<p>Different type of vector, position vector, length, properties of vector, solutions of problem Chapter -4: Circle Definition of circle, general equation of circle, equation of the circle in polar coordinates, tangent and normal to the</p>	<p>Linear Programming, uses of linear programming, Condition, advantage, formation of problem, solutions of problem. Chapter - 6: Conics Conic, various kinds of conics, different form of parabola,</p>

circle, length of tangent, common chord of two circle, solutions of problem.

Chapter-9: Differentiation

Definition, limit, derivative of sum, first principle law, differentiation of polynomial function, solutions of problem.

ellipse, drawing the graph of the ellipse, different form of the ellipse, hyperbola, drawing the graph of hyperbola, parametric coordinates of hyperbola, solutions of the problem.

Chapter - 7: Inverse Trigonometric Functions and Trigonometric Equations

Inverse Trigonometric Functions and its principal value, transformation of one inverse trigonometric function, graphs, general solutions of trigonometric function, solutions of problem.

Higher Mathematics Practical: First Paper Straight line

- 1(a) To find the coordinates of the point which divides the line segment joining two points $A(-2, -1)$ and $B(6, 3)$ internally in the ratio 3: 1.
- 1(b) To find the coordinates of the point which divides the line segment joining two points $A(2, 3)$ and $B(5, 6)$ externally in the ratio 5: 2.
- 1(c) To find the area of $\triangle ABC$ whose three vertices are $A(4, 8)$, $B(2, 5)$ and $C(10, 3)$.
- 2(a) To draw the graph of the straight line $3x + 4y = 12$ and state the characteristics.
- 2(b) To draw the graph of the straight line passing through the points $(-5, 0)$, $(0, 3)$ and hence find its equation.
- 3(a) To find the image of the point $P(3, 2)$ with respect to x and y axes...
- 3(b) To find the image of the point $(5, 7)$ with respect to the line $3x+5y -16 = 0$.
- 3(c) To find the image of the points $A(6, 3)$, $B(-5, -1)$, $C(-3, 4)$, $D(0, -4)$, $E(5, 0)$ with respect to the line $y = x$.

Circle:

- 4(a) To draw the graph of the circle $x^2 + y^2 = 9$ and state the characteristics.
- 4(b) To draw the graph of the circle $x^2 + y^2 - 4x - 2y + 1 = 0$ and state the characteristics.....
- 4(c) To draw the graph of the circle $x^2 + y^2 = 4$ with the help of free hand and state the characteristics.

Trigonometric ratios of associates angle:

- 5(a) Lengths of three sides of a triangle are 9, 10 and 11 cm; to find the greatest and smallest angles of the triangle.
- 5(b) Three angles of a triangle are 105° , 60° , 15° ; to find the ratio of the sides.
- 5(c) Two angles are 60° , 70° and length of one side is 5 cm; to find the length of two other sides.
- 5(d) The lengths of two sides of a triangle are 15 cm and 10 cm and their included angle is 60° ;

to determine the length of third side and other two angles..

- 6(a) To draw the graph of $y = f(x) = x^2 - 4x + 3$ and state the characteristics.
- 6(b) To draw the graph of $y = \log_{10} x$ and state the characteristics.
- 6(c) To draw the graph of $y = \ln x$ and state the characteristics.
- 6(d) To draw the graph of $y = \sin x / \cos x$; ($-360^\circ \leq x \leq 360^\circ$) and state the characteristics.
- 6(e) To draw the graph of $y = \sin^2 x / \cos^2 x$; ($-360^\circ \leq x \leq 360^\circ$) and state the characteristics.
- 6(f) To draw the graph of $y = \sin 2x / \cos 2x$; ($-360^\circ \leq x \leq 360^\circ$) and state the characteristics.

Functions:

- 7(a) To draw the graph of $y = [x]$ and state the characteristics.
- 7(b) To draw the graph of $y = 3x - 2$ and state the characteristics.

To draw the graph of a function and transformed function:

- 8(a) To draw the graph of the translated functions $f(x) + 2 = x^2 + 2$ and $f(x) - 3 = x^2 - 3$ $y = f(x) = \sin x$... of the function $y = f(x) = x^2$ and hence find also their domain and range.
- 8(b) To draw the graph of the translated function $y = (x+2)^2 - 3$ of the function $y = f(x) = x^2$

Differentiation:

- 9(a) Local substitution of the graph of $y = f(x) = x^2$ at the point (1, 1) by the graph of tangent line approximately at that point and finding the error.
- 9(b) Approximately substitution the graph of the function $y = x^2 - 2x + 1$ by the graph of combining the graphs of small pieces of straight lines.

Integration:

Determination of area ABCD bounded by $y = f(x)$, x-axis and the lines $x = a$ and $x = b$

10(a) Using six ordinates find the value of $\int_0^{10} x^2 dx$ and determine the percentage.

10(b) Using six ordinates find the value of $\int_0^{\frac{\pi}{2}} \cos x dx$ and determine the percentage.

2nd Year

Term-3 (Pre-Test Examination)

Course Duration May25 - Agust 25

Total Class Activities; 56 days

5th Monthly Test	Full Marks: 30
Higher Mathematics 1st Paper Chapter-5: Permutations & Combinations	Higher Mathematics 2nd Paper Chapter-5: Binomial Expansions

Pretest Exam	Full Marks: 100
Higher Mathematics 1st Paper Chapter-5: Permutations & Combinations Introduction, fundamental principle of association, meaning of n, relation between number of permutations and combinations, complementary combination, conditional combinations, solution of problem. Chapter-8: Functions & Graph of Functions Relation and graph of function, Domain and range ,different types of function, inverse function, sketch the function , solution of the problem. Chapter-10: Integration Indefinite integral, properties of integration, special type of integral, area enclosed by two curve, solution of problem.	Higher Mathematics 2nd Paper Chapter- 5: Binomial Expansions Binomial Theorem, Pascal’s triangle, middle term, Binomial series, convergent series, partial fraction, solution of problem. Chapter -9: Motion of Particles in a Plane Velocities and acceleration, resultant of velocities, parallelogram law of velocities, law of triangle ,relative velocity, equation of motion, acceleration due to gravity for vertical motion, greatest height and time of flight, motion of a particle, solution of problem. Chapter -10: Measures of Dispersions and Probability Central tendency, data, uses of measure of dispersion, absolute measures, coefficient of ranges, frequency ,mean

	deviation, probability, various kinds of events, measurement of probability, conditional probability, solution of problem.
--	--

2nd Year
Term-4 (Test Examination)
Course Duration: September 25-December 25
 Total Class Activities; 51 days

6th Monthly Test		Full Marks: 30
Higher Mathematics 1st Paper Chapter- 10: Integration	Higher Mathematics 2nd Paper Chapter - 10: Measures of Dispersions and Probability	

4th Term/Test Exam		Full Marks: 100
Higher Mathematics 1st Paper Total Syllabus	Higher Mathematics 2nd Paper Chapter -8: Statics Elementary ideas of mechanic, vector and scalar quantities, action and reactions of a force, resultant of a force, parallelogram law, theorem of resolved parts, equilibrium state of a system, Lami's theorem, parallel forces, center of gravity, solutions of problem & Total Syllabus	

Higher Mathematics Practical: Second Paper

Solution of problems related to linear program:

1(a) To find the maximum value of $z = 2x + 3y$ by the help of graph subject to the conditions: $x + 2y \leq 10$, $x + y \leq 6$, $x \leq 4$, $x \geq 0$, $y \geq 0$.

1(b) To find the minimum value of $z = 2x - y$ by the help of graph subject to the conditions: $x + y \leq 5$, $x + 2y \geq 8$, $x \geq 0$, $y \geq 0$.

1(c) To find the maximum value of $z = 3x + 5y$ by the help of graph subject to the conditions: $x \leq 2y + 2$, $x \geq 6 - 2y$, $y \leq x$, $x \leq 6$, $x \geq 0$, $y \geq 0$.

Determination of modulus and argument of sum, difference, product and quotient of two complex numbers in Argand diagram:

2(a) To find the sum of the two complex numbers $Z_1 = 15 + 5i$ and $Z_2 = 5 + 10i$ by representing them in Argand diagram and hence determination of modulus and argument.

2(b) To find the difference of the two complex numbers $Z_1 = 8 + 6i$ and $Z_2 = 4 - 3i$ by representing them in Argand diagram and hence determination of modulus and argument.

2(c) To find the product of the two complex numbers $Z_1 = 2 + 3i$ and $Z_2 = -1 + 2i$ by representing them in Argand diagram and hence determination of modulus and argument.

2(d) To find the quotient of the two complex numbers $Z_1 = -12 + 5i$ and $Z_2 = 3 + 4i$ by representing them in Argand diagram and hence determination of modulus and argument.

Determination of approximate value of real root of an equation by graphical method:

3(a) Determination of a real root of the equation $x^2 - 5x + 4 = 0$ by graphical method.

3(b) Determination of real roots of the equation $2x^3 - 5x^2 - 4x + 12 = 0$ by graphical

Determination of approximate value of real root of an equation by Bisection Method:

4(a) Determination of a real root of the equation $x^3 - x - 4 = 0$ correct up to 4 decimal places by Bisection Method.

4(b) Determination of a real root of the equation $x^3 - x^2 - 10x + 1 = 0$ correct up to 4 decimal places by Bisection Method.

Determination of real root of an equation by Newton Raphson Method:

places using Newton-Raphson Method.

4(c) Determination of a real root of the equation $x - \sin x = 2$ correct up to 4 decimal places using Newton-Raphson Method.

4(d) Determination of a real root of the equation $x^2 - 3x - 1 = 0$ correct up to 4 decimal places using Newton-Raphson Method.

Drawing the graph of parabola:

5(a) To draw the graph of the parabola $y^2 = 4x$ and state the characteristics.

5(b) To draw the graph of a parabola whose vertex $(0, 10)$, focus $(0, 15)$ and equation of directrix is $y = 5$.

Drawing the graph of ellipse:

6(a) To draw the graph of the ellipse and state the characteristics.

6(b) To draw an ellipse whose focus $(3,0)$, directrix $x+4=0$ and eccentricity, $e=3/5$

Drawing the graph of hyperbola:

7(a) To draw the graph of the hyperbola $9 = 1$ and state the characteristics.

7(b) To draw a hyperbola whose focus $(2,0)$, directrix $x = 4$ and 4 and eccentricity

Drawing the graph of inverse trigonometric function:

8(a) To draw the graph of $y = \sin^{-1} x$ and state the characteristics.

8(b) To draw the graph of $y = \cos^{-1} x$ and state the characteristics

8(c) To draw the graph of $y = \tan^{-1} x$ and state the characteristics graph paper.

Resultant of two or more forces by graphical method:

9(a) Two forces of magnitude 70 N and 50 N are acting at a point and the angle included between them is 55° , to find the magnitude and direction of the resultant graphically.

9(b) Forces 7N, 10N, 11N and 5N act simultaneously at a point such that their line of action makes angles 170° , 31° , 54° , 110° respectively with a straight line passing through the point. To find the magnitude and direction of their resultant.

Motion of particles in a plane:

10(a) Motion of particle displayed in graph.

Determination of variance and standard deviation:

11(a) Determination of variance and standard deviation for non-grouped data.

11(b) Determination of variance and standard deviation for grouped data.

Determination of probability of different events

12(a) Determination of probability for mutually exclusive events.

12(b) Determination of probability for not mutually exclusive events.

12(c) Determination of probability for dependent and independent events. Viva questions and answers.

Biology I & II Paper
1st Year
Term-I (Half Yearly Examination)
Course Duration August 24-November 2024
 Total Class Activities; 80 days

Monthly Test-1		Full Marks: 30
Biology 1st Paper Chapter-1: Cell and its structure	Biology 2nd Paper Chapter-1: Animal Diversity and classification	

Monthly Test-2		Full Marks: 30
Biology 1st Paper Chapter-2: Cell Division	Biology 2nd Paper Chapter-2: Animals Identity (<i>Hydra</i>)	

1st Term/Half-Yearly Exam		Full Marks: 100
<p>Chapter-1. Cell and its structure Cell wall, Plasma-membrane. Cytoplasm and Organelles (location, structure and functions of cell organelles): Ribosome, Golgi complex, Endoplasmic reticulum, Mitochondria, Chloroplast, Centrioles. Chromosome: Structure, Role in cell division. Hereditary materials: Structure of DNA, RNA; DNA replication; Transcription, Gene and genetic code.</p> <p>Chapter-2: Cell Division Mitosis, Meiosis; their importance.</p> <p>Chapter 7: Gymnosperms and Angiosperms Gymnosperms: Characteristics. Structure and indentifying characteristics of <i>Cycas</i>.</p> <p>Angiosperms : Description of the plants of the family Poaceae, general characteristics. Description of the plants of the family Malvaceae, general characteristics.</p>	<p>Biology 2nd Paper Chapter-1: Animal Diversity and classification Animal kingdom, Diversity Bases of classification, Non chordata (classify till major phyla), Chordata (classify till class),</p> <p>Chapter-two: Animals Identity <i>Hydra</i>: structure (With characteristics of the cells of cellwall)-Feeding and digestion mechanism <i>Hydra</i>-Locomotion and Reproduction - Symbiosis</p> <p>Grasshopper (<i>Poecilocus</i>) ,structure external, Digestion system mouth apparatus, digestive glands, Grasshopper Circulatory system - Respiratory system, Grasshopper - Excretory system Reproduction & metamorphosis, Compound eye of Grasshopper - structure - Visual mechanism ,</p> <p>Ruifish (<i>Lebeo</i>) - Body structure (external) - Blood circulatory system, structure of respiratory</p>	

	<p>system and air bladder. Life cycle, conservation (natural).</p> <p>Chapter- Five: Human Physiology: Breathing & Respiration</p> <p>Structure and functions of different parts of human respiratory system. Inspiration and expiration mechanism and control Gaseous transportation-oxygen transportation. transportation Carbondioxide transportation. Respiratory Pigments. Difficulties of respiratory tract, symptoms and remedy. Sinusitis, Otitis media Comparison of X-ray of lung,Smokers, Non- smokers, Objective of artificial respiration, mouth to mouth resusculation</p>
--	--

1st Year

Term-2: Year Final Examination

Course Duration December 2024 - April 2025

Total Class Activities; 74 days

Monthly Test-3		Full Marks: 30
<p>Biology 1st Paper Chapter 8: Tissue and Tissue system</p>	<p>Biology 2nd Paper Chapter 4: Human Physiology Blood and circulation</p>	

Monthly Test-4		Full Marks: 30
<p>Biology 1st Paper Chapter-4: Microbes</p>	<p>Biology 2nd Paper Chapter 3: Human Physiology: Digestion & Absorption</p>	

2nd Term/Annual exam		Full Marks: 100
<p>Biology 1st Paper Chapter- 4: Microbes Virus: Characteristics, structure and importance. Life cycle-Bacteriophage. Viral diseases: Ring spot of Papaya, H</p>	<p>Biology 2nd Paper Chapter 3: Human Physiology: Digestion & Absorption Food digestion in Buccalcavity - Mechanical - Chemical</p>	

epatitis, Dengue. Bacteria: Classification (on the basis of cell shape), structure, reproduction, importance. Bacterial diseases: Blight diseases of rice, Cholera. Plasmodium (Malaria Parasite): Life cycle, infection, remedy

Chapter 8: Tissue and Tissue system

Meristematic tissue -Types. Tissue system (epidermal, ground and vascular) Chapter 11. Biotechnology Tissue culture technology-process and use. Mechanism of genetic engineering. Gene cloning. Use of biotechnology (Application of recombinant DNA technology), Agriculture production, Medicine and pharmaceutical industry (insulin and interferon), environmental management. Application of genome sequencing. Principles of biosafety in application of biotechnology

Chapter 11. Biotechnology

Tissue culture technology- process and use. Mechanism of genetic engineering. Gene cloning. Use of biotechnology (Application of recombinant DNA technology), Agriculture production, Medicine and pharmaceutical industry (insulin and interferon), environmental management. Application of genome sequencing. Principles of biosafety in application of biotechnology

NB.: Practical exam will be held in Annual exam

NB.: Practical exam will be held in Annual exam

Digestion in the different parts of the stomach - Mechanical Chemical, Function digestive gland-Liver - Pancreas, Role of nervous system and hormone in digestion, Food digestion in small intestine, Absorption of food in small intestine, Function of large intestine, Practical- Identification & observation of permanent slides of liver, pancreas & small intestine. Obesity -Idea-Cause Prevention

Chapter 4: Human Physiology Blood and circulation

Blood corpuscles of Lymph, Blood clotting, Structure of heart, Heartbeat different phases & role of SA node, AV Node and Purkinje fibres in control, Blood pressure and role of Baroreceptors & volume receptor, Blood circulation in human body-systemic circulation-Pulmonary circulation, what to do in different status of heart diseases - Chest pain - Heart attack - heart failure, Idea of treatment of heart diseases Role of pacemakers - Open heart surgery - Coronary bypass - Angioplasty.

Chapter 6 : Human Physiology: Excretory Products and Excretion

Excretory System of Human Physiology of Excretion, Role of Kidney, Sudden Failure of Kidney, Symptoms and Treatment, Hormonal Activity

NB.: Practical exam will be held in Annual exam

2 nd Year
Term-3 (Pre-Test Examination)
Course Duration May 25- Agust 25
Total Class Activities; 56 days

Monthly Test-5		Full Marks: 30
Biology 1st Paper Chapter 9: Plant Physiology	Biology 2nd Paper Chapter 8: Human Physiology: Co-ordination and Control	

3rd Term/Pre-test		Full Marks: 100
Biology 1st Paper Chapter-2:Cell Division Mitosis, Meiosis; their importance Chapter 5: Algae and Fungi Family: Algae: Characteristics and Structure Reproduction of Algae: Ulothrix Fungi: Characteristics, Structure and Reproduction, Importance of Fungi: Agaricus, Fungal Disease: Late Blight of Potato Fungal Disease: Ring Worm, Lichen Chapter 6 : Bryophyta and Pteridophyta Bryophyta: Riccia, Reproduction of Riccia, Sporophytic Stage of Riccia, Pteridophyta, Sporophytic Structure of Pteris, Gametophytic Stage of Pteris. Chapter 9. Plant Physiology Absorption of mineral salts; Absorption process: active absorption, passive absorption. Structure of stomata: Opening and closing mechanism of stomata (In the light of modern theory), Process of stomatal transpiration. Photosynthesis: Calvin cycle, Hatch and Slack cycle, Limiting	Biology 2nd Paper Chapter-7: Human Physiology: Locomotion & Organ Movement Human skeleton system – Principal division, Practical - Observation of different human bones (model), Structure and functions of muscles, Smooth, Cardiac, Skeleton ,Muscle face tone not pull.) Functioning of skeletal, Rods &Lever system. Coordination of bones & muscles in walking movement. Fractures of bone and first aid Simple, Compound Complex, Joint trauma , Dislocation, Sprain Chapter 8: Human Physiology: Co-ordination and Control Nervous Co-ordination, Brain: Structure, Parts and Function, Cranial Nerves: Origin, Nature and Function, Human Sensory Organs: Eye (Structure and Function), Accessory Parts of Eye, Formation of Image and Mechanism of Vision, Sensory Organs of Human: Ear (Structure), Mechanism of Human Ear, Chemical Co-ordination, Location, Secretion and Function of Endocrine Glands of Human, Effect of Hormon,	

actors.

NB.: Practical exam will be held in Pre-test exam

The Result of Uncontrolled Use of Hormones

Chapter 9: Human Life Continuance

Male Reproductive System and Its Hormonal Activities, Female Reproductive System and its Hormonal Action, Different Stages and Phases of Reproduction, Formation of Gamete/Gametogenesis, Fertilisation and Implantation, Formation of Embryo and Fate of Three Germ Layers, Pregnancy and Care During Pregnancy, Birth Control Methods and Family Planning, IVF Procedure: Artificial Pregnancy, Problems of Reproductive System, Imbalance of Male and Female Sex Hormone and Problem Occurred During the Period of Embryonic Development, Sexually Transmitted Diseases: Syphilis, Gonorrhoea and

Chapter 10: Immunity of Human Body

Immune System of Human Body First Level of Immunity Second Level of Immunity Third Level of Immunity, Role of Antibody in Immune System, Role of Vaccine in Immune System, Role of Memory Cell in Immune System.

NB.: Practical exam will be held in Pre-testexam

2nd Year
Term-4 (Test Examination)
Course Duration: September 25- December 25
 Total Class Activities; 51 days

Monthly Test-6		Full Marks: 30
Biology 1st Paper Chapter 3. Cell Chemistry	Biology 2nd Paper Chapter 12: Human Physiology: Animal behaviour	

4th Term/ Test exam		Full Marks: 100
Biology 1st Paper Chapter 1. Cell and its structure Cell wall, Plasma-membrane. Cytoplasm and Organelles (location, structure and functions of cell organelles): Ribosome, Golgi complex, Endoplasmic reticulum, Mitochondria, Chloroplast, Centrioles. Chromosome: Structure, Role in cell division. Hereditary materials: Structure of DNA, RNA; DNA replication; Transcription, Gene and genetic code. Chapter 3: Cell Chemistry Carbohydrate : Monosaccharide or Simple Carbohydrate, Disaccharide, Polysaccharide, Protein Lipids or Fats, Enzymes, Mechanism of Enzyme Action Chapter 7: Gymnospermae and Angiospermae Gymnosperms: Characteristics. Structure and indentifying characteristics of Cycas. Angiospermae :Description of the plants of the family Poaceae, general characteristics. Description of the plants of the family Malvaceae, general characteristics.	Biology 2nd Paper Chapter 3: Human Physiology: Digestion & Absorption Food digestion in Buccal cavity - Mechanical -Chemical • Digestion in the different parts of the stomach- -Mechanical -Chemical, Function digestive gland- -Liber -Pancrease ,Role of nervous system and hormone in digestion, Food digestion in small intestine, Absorption of food in small intestine, Function of large intestine, Practical- -Identification & observation of permanent slides of liver, pancreases & small intestine. Obesity - Idea -Cause -Prevention Chapter 4: Human Physiology Blood and circulation Blood corpuscles of Lymhp,Blood clotting, Structure of heart,Heartbeat different phases & role of SA node, AV Node and purkinje fibres in control, Blood pressure and role of Baroreceptors & volume receptor , Blood circulation in human body- systemic circulation - Pulmonaary circulation,what to do in different status of heart diseases- -Chest pain - Heart attack - heart failure, Idea of treatment of heart diseases - Role of	

Chapter 10: Reproduction of Plants

Plant Reproduction, Asexual Reproduction Artificial, Vegetative Propagation of Plants, Plant Hybridization

Chapter 11. Biotechnology

Tissue culture technology- process and use. Mechanism of genetic engineering. Gene cloning. Use of biotechnology (Application of recombinant DNA technology), Agriculture production, Medicine and pharmaceutical industry (insulin and interferon), environmental management. Application of genome sequencing. Principles of biosafety in application of biotechnology

Chapter 12 : Environment, Distribution and Conservation of Organisms

Species, Population and Biotic Community Ecosystem and Ecological Pyramid, Adaptation of Organisms: Aquatic Adaptation, Adaptation of Organisms: Desert Adaptation, Adaptation of Organisms: Salt or Brackish Water Adaptation, Biome: Terrestrial Biome Biome: Water Biome, Zoogeography, Oriental Region, Forests of Bangladesh: Deciduous Forest. Forests of Bangladesh: Evergreen, Semi Evergreen Forest, Mangrove Forest Coastal Forest and Green Belt ,Biodiversity Endangered Organisms of Bangladesh Biodiversity Crisis and Conserving Endangered Species, Methods of Conservation of Biodiversity Importance of Biodiversity Conservation

pacemakers - Open heart surgery - Coronary bypass - Angioplasty.

Chapter-5 : Human Physiology: Breathing & Respiration

Structure and functions of different parts of human respiratory system. Inspiration and expiration mechanism and control Gaseous transportation- oxygen transportation. transportation Carbondioxide transportation .Respiratory Pigments. Difficulties of respiratory tract , symptoms and remedy. Sinusitis, Otitis media Comparison of X-ray of lung, Smokers ,Non-smokers ,Objective of artificial respiration, mouth to mouth resusculation

Chapter-11: Genetics and Evolution

Mendelian Inheritance- -First and second law of mendal - Chromosomal theory of inheritance Exception of Mendal's law-Incomplete dominance, Co-dominance, lethal gene, complementary gene, Epistasis, Polygenic inheritance, Sex determination (XX XY, XX-XO) principle. Sex linked disorder- Colour blindness, haemophilia and muscular dystrophi. Problems created due to ABO blood group & Rh factor -- Problems related to blood transfusion - Problems related to pregnancy (Erythroblastosis Fetalis),

Chapter 12 : Animal Behaviour

Behaviour and Nature of Behaviour, Innate Behaviour, Innate Behaviour of Various Animals, Migration, Reflexes, Instincts, Learning, Social Behaviour

Biology Practical

1. Stages of mitosis cell division.
2. Observation of bacteria
3. Observation of plant specimen-Structure of *Ulothrix* & Fruit body of *Agaricus*
4. Observation of *Pteris*- Sporophytic stage/ Fern prothellus/ Structure of sorus
5. Observation of *Cycas*-Microsporophyll & Megasporophyll
6. Identification of Malvaceae
7. To demonstrate that CO_2 is essential for photosynthesis
8. To demonstrate that CO_2 is evolved in anerobic Respiration
9. Observation of the internal structure of root and stem
10. Observation of the structure of stomata.

Biology Practical

Biology 2nd Paper (Zoology)

1. Observation of Different phyla of non-chordate Animals
2. Observation of Different phyla of chordate Animals
3. Observation of Human skeleton
4. Dissection and observation of Mouth parts/ Digestive system/ Salivary glands Of cockroach.
5. Dissection and observation of gills/Air sac/ Afferent & efferent bronchial artery of Ruhi fish
6. Observation of permanent slide-stomach/ intestine/ Lungs/ kidney/ liver, Blood
7. Comparison of smooth and rough cardiac muscle

Engineering Drawing And Workshop Practice 1st & 2nd Paper Class XI Term-I (Half Yearly Examination)

Monthly Test-1

Full Marks: 30

Engineering Drawing And Workshop Practice 1st Paper

1. Drawing Instruments and their uses.
2. Standard of Lines and Methods of Dimensioning.
3. Triangle, Quadrilateral, Polygon Geometrical Drawing
4. Figures of equal areas.
5. Tangent to circles & Ellipse.
6. Enlarging or Reducing Plane Figures.

Monthly Test-2**Full Marks: 30****Engineering Drawing And Workshop Practice 2nd Paper**

1. Introduction of Surveying, Purpose of Surveying
Classification of Surveying.
2. Survey Instruments:
 - a. Chain Survey.
 - b. Compass Survey.
 - c. Plane table Survey.
3. Basic principle of chain Survey.
4. Instrument used in chain Survey
 - a) Engineers chain, b) Gunter's chain, c) Metric chain d) Ranging rod,
 - e) Offset rod, f) Plumb-bob, g) Arrows, h) Optical square.

First Term/ Half yearly Exam**Full Marks: 100****Engineering Drawing And Workshop Practice 1st Paper**

1. Drawing Instruments and their uses.
2. Standard of Lines and Methods of Dimensioning.
3. Triangle, Quadrilateral, Polygon Geometrical Drawing
4. Figures of equal areas.
5. Tangent to circles & Ellipse.
6. Enlarging or Reducing Plane Figures.

Engineering Drawing And Workshop Practice 2nd Paper

1. Introduction of Surveying, Purpose of Surveying
Classification of Surveying.
2. Survey Instruments:
 - a. Chain Survey. b. Compass Survey.
 - c. Plane table Survey.
3. Basic principle of chain Survey.
4. Instrument used in chain Survey
 - a) Engineers chain, b) Gunter's chain, c) Metric chain d) Ranging rod, e) Offset rod,
 - f) Plumb-bob, g) Arrows, h) Optical square.

Second Term/Year Final Exam

Monthly Test-3		Full Marks: 30
<p>Engineering Drawing And Workshop Practice 1st Paper Chapter II: Cubic Geometry 1. Drawing about equal areas 2. Drawing of circle, ellipse and tangent 3. Scaling the plane field</p>	<p>Engineering Drawing And Workshop Practice 2nd Paper Chapter II: Shital Survey 1. Chain folding and unfolding method 2. Rules for Commencement of Survey Work 3. Rules for describing and writing a field book 4. Measuring land with the help of chain and determining its area.</p>	

Monthly Test-4		Full Marks: 30
<p>Engineering Drawing And Workshop Practice 1st Paper Chapter Three: 1. Write letters and numbers 2. Simple and Diagonal Scales 3. Freehand drawing</p>	<p>Engineering Drawing And Workshop Practice 2nd Paper Chapter III: Compass Survey 1. Errors of survey: addition error, subtraction error and personal error 2. Area of drawing spots: Drawing and determining area</p>	

Second Term/Year Final Exam		Full Marks: 100
<p>Engineering Drawing And Workshop Practice 1st Paper Chapter II: Cubic Geometry 1. Drawing about equal areas 2. Drawing of circle, ellipse and tangent 3. Scaling the plane field Chapter Three: 1. Write letters and numbers 2. Simple and Diagonal Scales 3. Freehand drawing</p>	<p>Engineering Drawing And Workshop Practice 2nd Paper Chapter II: Shital Survey 1. Chain folding and unfolding method 2. Rules for Commencement of Survey Work 3. Rules for describing and writing a field book 4. Measuring land with the help of chain and determining its area. Chapter III: Compass Survey 1. Errors of survey: addition error, subtraction error and personal error 2. Area of drawing spots: Drawing and determining area.</p>	

Second Year
Term-3 (Pre-Test Examination)

Monthly Test-5		Full Marks: 30
<p>Engineering Drawing And Workshop Practice 1st Paper</p> <p>Chapter IV:</p> <ol style="list-style-type: none"> 1. Different types of screw thread drawing 2. Machine screw drawing 3. Square and hexagon head, profiled nuts, bolts 4. Drawings of rivets and rivet joints 	<p>Engineering Drawing And Workshop Practice 2nd Paper</p> <p>Chapter IV: Plane Table Survey</p> <ol style="list-style-type: none"> 1. Discuss the known and uses of plane table instrument 2. Plane Table Survey Method and Advantages Disadvantages 	

Pre-Test Exam		Full Marks: 100
<p>Engineering Drawing And Workshop Practice 1st Paper</p> <p>Chapter IV:</p> <ol style="list-style-type: none"> 1. Different types of screw thread drawing 2. Machine screw drawing 3. Square and hexagon head, profiled nuts, bolts 4. Drawings of rivets and rivet joints 	<p>Engineering Drawing And Workshop Practice 2nd Paper</p> <p>Chapter IV: Plane Table Survey</p> <ol style="list-style-type: none"> 1. Discuss the known and uses of plane table instrument 2. Plane Table Survey Method and Advantages Disadvantages 	

Fourth Term (Test Exam) Paper		Full Marks: 100
<p>Engineering Drawing And Workshop Practice 1st Paper</p> <p>Revision of all Syllabus.</p>	<p>Engineering Drawing And Workshop Practice 2nd Paper</p> <p>Revision of all Syllabus.</p>	

Accounting-I & II Paper
Term-I (Half Yearly Examination)
Course Duration August 24- November 2024
 Total Class Activities; 80 days

Monthly Test-1	Full Marks: 30
Accounting First Paper Chapter 1 (Introduction to Accounting) Chapter 2 (Books of Accounts)	

Monthly Test-2	Full Marks: 30
Accounting Second Paper Chapter 6: (Financial Statement Analysis) Chapter 7: (Cost Accounting)	

1st Term Exam / Half Yearly Exam	Full Marks: 100
Accounting First Paper Chapter 1 (Introduction to Accounting) Chapter 2 (Books of Accounts) Chapter 3: (Bank Reconciliation Statement) Chapter 4: (Trial balance)	Accounting Second Paper Chapter 6: (Financial Statement Anaysis) Chapter 7: (Cost Accounting) Chapter 8: (Inventory ledger)

Term-2: Year Final Examination
Course Duration December 2024-April 2025
 Total Class Activities; 74 days

Monthly Test - 3	Full Marks: 30
Accounting First Paper Chapter 7: (Worksheet)	Accounting Second Paper Chapter 4: (Capital of Joint Capital Companies)

Monthly Test - 4	Full Marks: 30
Accounting First Paper Chapter 3: (Bank Reconciliation Statement)	Accounting Second Paper Chapter 4: (Capital of Joint Capital Companies)

2nd Term / Year Final		Full Marks: 100
Accounting First Paper Chapter 1 (Introduction to Accounting): Chapter 2 (Books of Accounts): Chapter 3: (Bank Reconciliation Statement) Chapter 4: (Trial balance) Chapter 7: (Worksheet) Chapter 8: (Accounting for Tangible and Intangible Assets) Chapter 9: (Financial Statements)	Accounting Second Paper Chapter 4: (Capital of Joint Capital Companies) Chapter 5:(Financial Statements of Joint Capital Companies) Chapter 6: (Financial Statement Analysis) Chapter 7: (Cost Accounting) Chapter 8: (Inventory ledger)	

2nd Year

Term-3 (Pre-Test Examination)
Course Duration May25-August 25
Total Class Activities; 56 days

Monthly Test - 5		Full Marks: 30
Accounting First Paper Chapter 3: (Bank Reconciliation Statement)	Accounting Second Paper Chapter 2: (Accounting of partnership business)	

3rd Term / Pretest Exam:		Full Marks: 100
Accounting First Paper Chapter 3: (Bank Reconciliation Statement) Chapter 7: (Worksheet) Chapter 8: (Accounting for Tangible and Intangible Assets) Chapter 9: (Financial Statements)	Accounting Second Paper Chapter 2: (Accounting of partnership business) Chapter 4: (Capital of Joint Capital Companies) Chapter 5: (Financial Statements of Joint Capital Companies) Chapter 6: (Financial Statement Analysis)	

2nd Year
Term-4 (Test Examination)
Course Duration: September 25 - December 25
 Total Class Activities; 51 days

Monthly Test - 6	Full Marks: 30
Accounting First Paper Chapter 9: (Financial Statements)	Accounting Second Paper Chapter 5:(Financial Statements of Joint Capital Companies)

4th Term / Test Exam	Full Marks: 100
Accounting First Paper Previously discussed Chapter 1 (Introduction to Accounting): Chapter 2 (Books of Accounts): Chapter 3: (Bank Reconciliation Statement) Chapter 4: (Trial balance) Chapter 7: (Worksheet) Chapter 8: (Accounting for Tangible and Intangible Assets) Chapter 9 : (Financial Statements)	Accounting Second Paper Previously discussed Chapter 2: (Accounting of partnership business) Chapter 4: (Capital of Joint Capital Companies) Chapter 5: (Financial Statements of Joint Capital Companies) Chapter 6: (Financial Statement Analysis) Chapter 7: (Cost Accounting) Chapter 8: (Inventory ledger)

Business Organization & Management 1st & 2nd Paper
Term-I (Half Yearly Examination)
Course Duration August 24 - November 2024
 Total Class Activities; 80 days

Monthly Test - 1	Full Marks: 30
Business Organization & Management 1st Paper Chapter-1: Basic concept of business Chapter-2:Basic Business Environment	Business Organization & Management 2nd Paper Chapter-1: Concept of Management

Monthly Test - 2	Full Marks: 30
Business Organization & Management 1st Paper Chapter-3: Sole-tradership Business Chapter-4: Partnership Business	Business Organization & Management 2nd Paper Chapter-2: Principles of Management

1st Term Exam (Half Yearly Exam)		Full Marks: 100
Business Organization & Management 1st Paper	Business Organization & Management 2nd Paper	
Chapter-1: Basic concept of business	Chapter-1: Concept of Management	
Chapter-2: Basic Business Environment	Chapter-2: Principles of Management	
Chapter-3: Sole-tradership Business	Chapter-3: Planning and Decision making	
Chapter-4: Partnership Business	Chapter-4: Organizing	

Term-2: Year Final Examination
Course Duration December 2024-April 2025
Total Class Activities; 74 days

Monthly Test - 3		Full Marks: 30
Business Organization & Management 1st Paper	Business Organization & Management 2nd Paper	
Chapter-5: Joint Stock Business	Chapter-3: Planning and Decision making	
	Chapter-4: Organizing	

Monthly Test - 4		Full Marks: 30
Business Organization & Management 1st Paper	Business Organization & Management 2nd Paper	
Chapter-4: Partnership Business	Chapter-5: Staffing	
Chapter-6: Co-operative society		

2nd Term / Year Final		Full Marks: 100
Business Organization & Management 1st Paper	Business Organization & Management 2nd Paper	
Chapter-1: Basic concept of business	Chapter-1: Concept of Management	
Chapter-2: Basic Business Environment	Chapter-2: Principles of Management	
Chapter-3: Sole-tradership Business	Chapter-3: Planning and Decision making	
Chapter-4: Partnership Business	Chapter-4: Organizing	
Chapter-5: Joint Stock Business	Chapter-5: Staffing	
Chapter-6: Co-operative society		

2nd Year
Term-3 (Pre-Test Examination)
Course Duration May 25 - August 25
Total Class Activities; 56 days

Monthly Test - 5	Full Marks: 30
Business Organization & Management 1st Paper Chapter-5: Joint Stock Business	Business Organization & Management 2nd Paper Chapter-2: Principles of Management

3rd Term / Pretest Exam:	Full Marks: 100
Business Organization & Management 1st Paper Chapter-1: Basic concept of business Chapter-2: Basic Business Environment Chapter-3: Sole-tradership Business Chapter-4: Partnership Business Chapter-5: Joint Stock Business Chapter-6: Co-operative society	Business Organization & Management 2nd Paper Chapter-2: Principles of Management Chapter-3: Planning and Decision making Chapter-4: Organizing Chapter-5: Staffing Chapter-6: Leadership Chapter-10: Control ling

2nd Year
Term-4 (Test Examination)
Course Duration: September 25 - December 25
Total Class Activities; 51 days

Monthly Test - 6	Full Marks: 100
Business Organization & Management 1st Paper Chapter-6: Co-operative society	Business Organization & Management 2nd Paper Chapter-4: Organizing

4th Term / Test Exam	Full Marks: 100
Business Organization & Management 1st Paper Discussion of All Previous Chapter	Business Organization & Management 2nd Paper Discussion of All Previous Chapter

Production Management & Marketing 1st & 2nd Paper
Term-I (Half Yearly Examination)
Course Duration August 24 -November 2024
 Total Class Activities; 80 days

Monthly Test - 1		Full Marks: 30
Production Management & Marketing 1st Paper Chapter 1: Production Concept of production, importance of production, coverage of production, productivity and its importance	Production Management & Marketing 2nd Paper Chapter 1: Marketing Introduction Concept of marketing, evolution of marketing, characteristics of marketing, market, sales and marketing, importance/necessity of marketing	
Monthly Test - 2		Full Marks: 30
Production Management & Marketing 1st Paper Chapter 2: Equipment of Production: Concept of means of production, land - concept, characteristics, importance, labour - concept, characteristics, importance, types/division of labour, advantages and disadvantages of division of labour, capital - concept, characteristics, importance, capital formation, stages of capital formation, organization - concept, characteristics, importance, category division		
1st Term Exam / Half Yearly Exam		Full Marks: 100
Production Management & Marketing 1st Paper Chapter 1: Production: Concept of production, importance of production, coverage of production, productivity and its importance Chapter 2: Equipment of Production: Concept of means of production, land - concept, characteristics, importance, labour - concept, characteristics, importance, types/division of labour, advantages and disadvantages of division of labour, capital - concept, characteristics, importance, capital formation, stages of capital	Production Management & Marketing 2nd Paper Chapter 1: Marketing Introduction: Concept of marketing, evolution of marketing, characteristics of marketing, market, sales and marketing, importance/necessity of marketing Chapter 2: Marketing Environment Chapter 3: Marketing Procedures: Concept of marketing functions, marketing functions, purchase, sale, transportation, warehousing, standardization, standardization, distortion, advertising, importance and necessity of marketing functions	

formation, organization - concept, characteristics, importance, category division

Chapter 3: Production Levels

Term-2: Year Final Examination
Course Duration December 2024 - April 2025
 Total Class Activities; 74 days

Monthly Test - 3

Full Marks: 30

Production Management & Marketing 1st Paper

Chapter 5: Production Marketing:

Manufacturing marketing, concepts, goods and services, historical background of manufacturing marketing, importance of manufacturing marketing, Nature of production marketing trends/pace, growth of service sector, productivity challenges, production of quality goods, Customization

Monthly Test - 4

Full Marks: 30

Production Management & Marketing 2nd Paper

Chapter 4: Market segmentation and marketing (marketing) mix:

Market concepts and characteristics, Market category divisions, Consumer markets, Industrial markets, Concept of market segmentation, Basis of market segmentation, Considerations of effective market segmentation, Concept of marketing mix, Components of marketing mix

2nd Term / Year Final

Full Marks: 100

Production Management & Marketing 1st Paper

Chapter 1: Production: Concept of production, importance of production, coverage of production, productivity and its importance

Chapter 2: Equipment of Production:

Concept of means of production, land - concept, characteristics, importance, labour - concept, characteristics, importance, types/division of labour, advantages and disadvantages of division of labour, capital - concept,

Production Management & Marketing 2nd Paper

Chapter 1: Marketing Introduction:

Concept of marketing, evolution of marketing, characteristics of marketing, market, sales and marketing, importance/necessity of marketing

Chapter 2: Marketing Environment

Chapter 3: Marketing Procedures:

Concept of marketing functions, marketing functions, purchase, sale, transportation, warehousing, standardization, standardization, distortion,

<p>characteristics, importance, capital formation, stages of capital formation, organization - concept, characteristics, importance, category division</p> <p>Chapter 3: Production Levels</p> <p>Chapter 4: Production at the macro level</p> <p>Chapter 5: Production Marketing: Manufacturing marketing, concepts, goods and services, historical background of manufacturing marketing, importance of manufacturing marketing, Nature of production marketing trends/pace, growth of service sector, productivity challenges, production of quality goods, Customization</p> <p>Chapter 6: Product Design: Product design, concept, importance, phase, product design in context of Bangladesh</p>	<p>advertising, importance and necessity of marketing functions</p> <p>Chapter 4: Market segmentation and marketing (marketing) mix: Market concepts and characteristics, Market category divisions, Consumer markets, Industrial markets, Concept of market segmentation, Basis of market segmentation, Considerations of effective market segmentation, Concept of marketing mix, Components of marketing mix</p> <p>Chapter 5: Products and Product Pricing: Product Concept, Product Classification, Consumer Products, Industrial Products, Marketing Considerations of Consumer Products, Marketing Considerations of Industrial Products, Product Life Cycle, Product Pricing Concepts, Product Pricing Objectives, Value Ni methods of assessment and discounts and rebates</p> <p>Chapter 6: Product Distribution System:</p>
--	---

2nd Year

Term-3 (Pre-Test Examination)

Course Duration May25- August 25

Total Class Activities; 56 days

Monthly Test - 5	Full Marks: 30
<p>Production Management & Marketing 1st Paper</p> <p>Chapter 7: Quality Management: Concept, Importance, cost of production of low quality products, prevention cost, Application Cost, Internal Cost External, Failure Cost, Historical Context Quality Control</p>	

**Production Management & Marketing
1st Paper**

Chapter 1: Production: Concept of production, importance of production, coverage of production, productivity and its importance

Chapter 2: Equipment of Production: Concept of means of production, land - concept, characteristics, importance, labour - concept, characteristics, importance, types/division of labour, advantages and disadvantages of division of labour, capital - concept, characteristics, importance, capital formation, stages of capital formation, organization - concept, characteristics, importance, category division

Chapter 3: Production Levels

Chapter 4: Production at the macro level

Chapter 5: Production Marketing: Manufacturing marketing, concepts, goods and services, historical background of manufacturing marketing, importance of manufacturing marketing, Nature of production marketing trends/pace, growth of service sector, productivity challenges, production of quality goods, Customization

Chapter 6: Product Design: Product design, concept, importance, phase, product design in context of Bangladesh

Chapter 7: Quality Management: Concept, Importance, cost of production of low quality products, prevention cost, Application Cost, Internal Cost External, Failure Cost, Historical Context Quality Control

**Production Management & Marketing
2nd Paper**

Chapter 1: Marketing Introduction: Concept of marketing, evolution of marketing, characteristics of marketing, market, sales and marketing, importance/necessity of marketing

Chapter 2: Marketing Environment

Chapter 3: Marketing Procedures: Concept of marketing functions, marketing functions, purchase, sale, transportation, warehousing, standardization, standardization, distortion, advertising, importance and necessity of marketing functions

**Chapter 4: Market segmentation
and marketing (marketing) mix:**

Market concepts and characteristics, Market category divisions, Consumer markets, Industrial markets, Concept of market segmentation, Basis of market segmentation, Considerations of effective market segmentation, Concept of marketing mix, Components of marketing mix

**Chapter 5: Products and Product
Pricing:**

Product Concept, Product Classification, Consumer Products, Industrial Products, Marketing Considerations of Consumer Products, Marketing Considerations of Industrial Products, Product Life Cycle, Product Pricing Concepts, Product Pricing Objectives, Value Ni methods of assessment and discounts and rebates

<p>product design in context of Bangladesh</p> <p>Chapter 7: Quality Management: Concept, Importance, cost of production of low quality products, prevention cost, Application Cost, Internal Cost External, Failure Cost, Historical Context Quality Control</p> <p>Chapter 8: Production Capacity.</p> <p>Chapter 9: Business Development</p>	<p>Chapter 6: Product Distribution System:</p> <p>Chapter 7: Wholesale and Retail Trade</p> <p>Chapter 8: Sales Promotion and Advertising: Sales promotion concept, importance of sales promotion, sales promotion strategy, advertising concept, need for advertising, advertising functions, types of advertising media, considerations in selecting advertising media, difference between advertising and promotion</p> <p>Chapter 9: Individual Sales and Salesmanship</p>
--	--

2nd Year

Term-4 (Test Examination)

Course Duration: September 25 - December 25

Total Class Activities; 51 days

Monthly Test - 6		Full Marks: 30
<p>Production Management & Marketing 1st Paper</p> <p>Chapter 8: Sales Promotion and Advertising Sales promotion concept, importance of sales promotion, sales promotion strategy, advertising concept, need for advertising, advertising functions, types of advertising media, considerations in selecting advertising media, difference between advertising and promotion,</p>		
Test Exam		Full Marks: 30
<p>Production Management & Marketing 1st Paper Previously discussed all syllabus</p>	<p>Production Management & Marketing 2nd Paper Previously discussed all syllabus</p>	

Finance, Banking & Insurance-I & II Paper
Term-I (Half Yearly Examination)
Course Duration August 24 - November 2024
 Total Class Activities; 80 days

Monthly Test - 1		Full Marks: 30
1st Paper: Finance Chapter-1 Introduction to Finance Chapter-2 Legal Aspects of Financial Market	2nd Paper: Banking & Finance Chapter-1 Preliminary Concepts of Banking	

Monthly Test - 2		Full Marks: 30
1st Paper: Finance Chapter-3 Time Value of Money		

1st Term Exam / Half Yearly Exam		Full Marks: 100
1st Paper: Finance Chapter-1 Introduction to Finance Chapter-3 Time Value of Money	2nd Paper: Banking & Finance Chapter-1 Preliminary Concepts of Banking Chapter-2 Central bank Chapter-4 Bank Account	

1st Year
Term-2: Year Final Examination
Course Duration December 2024 - April 2025
 Total Class Activities; 74 days

Monthly Test - 3		Full Marks: 30
1st Paper: Finance Chapter-6 Long Term Finance	2nd Paper: Banking & Finance Chapter-6 Cheque, Bill of Exchange and Promissory Notes Chapter-9 Electronic & Modern Banking	

Monthly Test - 4		Full Marks: 30
1st Paper: Finance Chapter-8 Capital Budgeting & Investment Decisions	2nd Paper: Banking & Finance Chapter-10 Basic Concepts of Insurance	

2nd Term / Year Final		Full Marks: 100
1st Paper: Finance Chapter-1 Introduction to Finance Chapter-3 Time Value of Money Chapter-6 Long Term Finance Chapter-8 Capital Budgeting & Investment Decisions	2nd Paper: Banking & Finance Chapter-1 Preliminary Concepts of Banking Chapter-2 Central bank Chapter-6 Cheque, Bill of Exchange and Promissory Notes Chapter-9 Electronic & Modern Banking Chapter-10 Basic Concepts of Insurance	

2nd Year

Term-3 (Pre-Test Examination)

Course Duration May25-August 25

Total Class Activities; 56 days

Monthly Test - 5		Full Marks: 30
1st Paper: Finance Chapter-9 Risk & Return	2nd Paper: Banking & Finance Chapter-3 Commercial Bank Chapter-11 Life Insurance	

3rd Term / Pretest Exam:		Full Marks: 100
1st Paper: Finance Chapter-1 Introduction to Finance Chapter-3 Time Value of Money Chapter-4 Financial Analysis Chapter-9 Risk & Return	2nd Paper: Banking & Finance Chapter-1 Preliminary Concepts of Banking Chapter-3 Commercial Bank Chapter-7 Sources & Uses of Bank's Funds Chapter-11 Life Insurance	

2nd Year

Term-4 (Test Examination)

Course Duration: September 25 - December 25

Total Class Activities; 51 days

Monthly Test - 6		Full Marks: 30
1st Paper: Finance Chapter-4 Financial Analysis	2nd Paper: Banking & Finance Chapter-7 Sources & Uses of Bank's Funds	

1st Paper: Finance

Chapter-1: Introduction to Finance
Chapter-2: Legal Aspects of Financial Market
Chapter-3: Time Value of Money
Chapter-4: Financial Analysis
Chapter-5: Short Term & Mid Term Finance
Chapter-6: Long Term Finance
Chapter-7: Cost of capital
Chapter-8: Capital Budgeting & Investment Decision
Chapter-9: Risk of Return

2nd Paper: Banking & Finance

Chapter-1 Preliminary Concepts of Banking
Chapter-2 Central bank
Chapter-3 Commercial Bank
Chapter-4 Bank Account
Chapter-5 Negotiable Instrument
Chapter-6 Cheque, Bill of Exchange and Promissory Notes
Chapter-7: Sources of Uses of Bank's funds
Chapter-8: Foreign Exchange of foreign currency
Chapter-9: Election of Modern Bank
Chapter-10: Basic Concepts of Insurance
Chapter-11: Life Insurance
Chapter-12: Marine Insurance
Chapter-13: Fire Insurance
Chapter-14: Miscellaneous Insurance