

National University
Subject: Chemistry
Syllabus for Four Year B.Sc Honours Course
Effective from the Session: 2013-2014

Year wise Papers and marks distributions

FIRST YEAR

Paper Code	Paper Title	Marks	Credits
212801	Physical Chemistry-I	75	3
212803	Fundamentals of Organic Chemistry	75	3
212805	Fundamentals of Inorganic Chemistry	75	3
212806	Chemistry Practical: Qualitative inorganic analysis, inorganic preparations and elementary crystal chemistry	75	3
213709	Fundamentals of Mathematics	100	4
213711	Calculus-I	50	2
212707	Physics-I (Mechanics, Properties of Matter, Waves & Optics)	100	4
212709	Physics-II (Heat, Thermodynamics and Radiation)	50	2
211501	History of the Emergence of Independent of Bangladesh	100	4
	Total =	700	28

(Signature)
27.2.15

প্রফেসর ডা. জ. ম. মনিরুল ইসলাম
আইডি: নং-০৪৬৪২
রসায়ন বিভাগ
জাতীয় বিশ্ববিদ্যালয়, রাজশাহী।

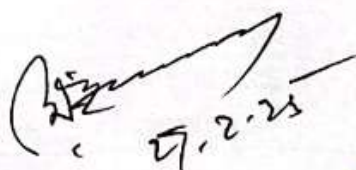
National University

Subject: Chemistry
Syllabus for Four Year B.Sc. Honours Course
Effective from the Session: 2013-2014

Year wise Paper, Marks and Credit distribution

SECOND YEAR

Paper Code	Paper Title	Marks	Credits
222801	Physical Chemistry-II	100	4
222803	Organic Chemistry	100	4
222805	Chemistry of the Representative Elements	100	4
222806	Quantitative Inorganic Analysis (Practical)	100	4
222707	Physics-III (Electricity and Modern Physics)	100	4
222708	Physics-IV (Physics Practical)	50	2
223707	Calculus-II	100	4
223708	Math Lab (Practical)	50	2
	Total =	700	28
221109	English (Compulsory)	100	Non-Credit


7.2.25

বিশ্বজ্ঞান জি.ম. মণিরুল ইসলাম
অফিস: নং-০৪৬৪২
শিক্ষণাধিকার
স্বাক্ষর: অধ্যাপক, সাজলুই

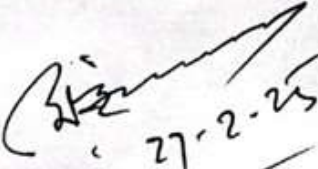
National University

Subject: Chemistry
Syllabus for Four Year B.Sc. Honours Course
Effective from the Session: 2013-2014

Year wise Paper, Marks and Credit distribution

THIRD YEAR

Paper Code	Paper Title	Marks	Credits
232801	Physical Chemistry-III	100	4
232803	Stereochemistry	100	4
232805	Advanced Concepts of Atomic Structure and Chemical Bonding	100	4
232807	Coordination Chemistry and Organometallic Chemistry	100	4
232809	Fundamentals of Analytical Chemistry	100	4
232811	Industrial Chemistry	100	4
232813	Agricultural Chemistry	100	4
232814	Physical Chemistry Practical	50	2
232816	Organic Chemistry Practical (Detection & Preparation)	50	2
	Total =	800	32


27-2-25

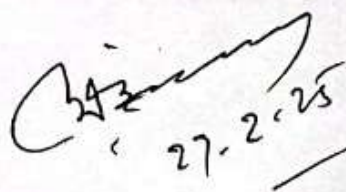
প্রফেসর আ.জ.ম. মনিরুল ইসলাম
আইডি: ৯২-০৪৬৪২
কম্পিউটার বিভাগ
জাতীয় বিশ্ববিদ্যালয়, ঢাকা-১২০৮

National University
Subject: Chemistry
Syllabus for Four Year B.Sc. Honours Course
Effective from the Session: 2013-2014

Year wise Paper, Marks and Credit distribution

FOURTH YEAR

Paper Code	Paper Title	Marks	Credits
242801	Physical Chemistry-IV	100	4
242803	Selected Topics in Organic Chemistry	100	4
242805	Selected Topics in Inorganic Chemistry	100	4
242807	Nuclear Chemistry	100	4
242809	Organic Polymers	100	4
242811	Reaction Mechanism	100	4
242813	Separation Techniques	100	4
242815	Chemical Spectroscopy	100	4
242816	Practical Chemistry (Organic)	50	2
242818	Practical Chemistry (Industrial)	50	2
242820	Viva-voce	100	4
	Total =	1000	40


27-2-25

প্রফেসর ডা. জ. ম. মনিরুল ইসলাম
আইডি: নং-০৪৬৪১
রসায়ন বিভাগ
জাতীয় বিশ্ববিদ্যালয়, ঢাকা



GRADING SYSTEM		
Numerical grade	Letter Grade	Grade Point
80% and Above	A+	4.00
75% to less than 80%	A	3.75
70% to less than 75%	A-	3.50
65% to less than 70%	B+	3.25
60% to less than 65%	B	3.00
55% to less than 60%	B-	2.75
50% to less than 55%	C+	2.50
45% to less than 50%	C	2.25
40% to less than 45%	D	2.00
Below 40%	F	0.00

Lett: NU/Con/Certi/Trans/2204/2022/00074015(1)

ACADEMIC TRANSCRIPT

Name of the Student : IMTIAZ AHAMAD
 Father's Name : MD. MARFAT HOSEN
 Mother's Name : ROKSHANA BEGUM
 Name of Institution : RAJSHAHI COLLEGE, RAJSHAHI
 Entry Qualification : HSC (HIGHER SECONDARY CERTIFICATE EXAMINATION) OR EQUIVALENT
 Degree Conferred : BACHELOR OF SCIENCE
 Discipline/Subject : CHEMISTRY
 Duration of Course : 04 (Four) Year (Honours)
 Examination Roll No. : 2087685
 Registration No. : 17228121009
 Session : 2017-18
 Year of Passing : 2022
 Earned Credit : 128 Out of 128
 CGPA : 3.43 Out of 4.00

Academic Attainments

YEAR	COURSE CODE	COURSE TITLE	CREDIT	LETTER GRADE	YEAR GPA
1ST	211501	HISTORY OF THE EMERGENCE OF INDEPENDENT BANGLADESH	4	B+	3.16
	212707	PHYSICS-I	4	B+	
	212709	PHYSICS-II	2	A	
	212801	PHYSICAL CHEMISTRY-I	3	C+	
	212803	FUNDAMENTALS OF ORGANIC CHEMISTRY	3	A-	
	212805	FUNDAMENTALS OF INORGANIC CHEMISTRY	3	A-	
	212806	CHEMISTRY PRACTICAL: QUALITATIVE INORGANIC ANALYSIS, INORGANIC PREPARATIONS	3	A+	
	213709	FUNDAMENTALS OF MATHEMATICS	4	C+	
	213711	CALCULUS-I	2	C	
2ND	222707	PHYSICS-III (ELECTRICITY AND MODERN PHYSICS)	4	B+	3.57
	222708	PHYSICS-IV (PHYSICS PRACTICAL)	2	A+	
	222801	PHYSICAL CHEMISTRY-II	4	B+	
	222803	ORGANIC CHEMISTRY	4	B+	
	222805	CHEMISTRY OF THE REPRESENTATIVE ELEMENTS	4	A	
	222806	QUANTITATIVE INORGANIC ANALYSIS (PRACTICAL)	4	A-	
	223707	CALCULUS-II	4	A+	
	223708	MATH LAB (PRACTICAL)	2	A+	
3RD	232801	PHYSICAL CHEMISTRY-III	4	A-	3.41
	232803	STEREOCHEMISTRY	4	A-	
	232805	ADVANCED CONCEPTS OF ATOMIC STRUCTURE AND CHEMICAL BONDING	4	A-	
	232807	COORDINATION CHEMISTRY AND ORGANOMETALLIC CHEMISTRY	4	A+	
	232809	FUNDAMENTALS OF ANALYTICAL CHEMISTRY	4	C+	
	232811	INDUSTRIAL CHEMISTRY	4	B+	
	232813	AGRICULTURAL CHEMISTRY	4	B	
	232814	PHYSICAL CHEMISTRY PRACTICAL	2	A+	
4TH	232816	ORGANIC CHEMISTRY PRACTICAL	2	A+	3.53
	242801	PHYSICAL CHEMISTRY-IV	4	A-	
	242803	SELECTED TOPICS IN ORGANIC CHEMISTRY	4	A	
	242805	SELECTED TOPICS IN INORGANIC CHEMISTRY	4	A-	
	242807	NUCLEAR CHEMISTRY	4	A-	
	242809	ORGANIC POLYMERS	4	B	
	242811	REACTION MECHANISM	4	A-	
	242813	SEPARATION TECHNIQUES	4	B+	
	242815	CHEMICAL SPECTROSCOPY	4	A-	
	242816	PRACTICAL CHEMISTRY (ORGANIC)	2	A+	
2ND	221109	ENGLISH (NON CREDIT)			PASS



NUPC 20- 0974214

National University
Bangladesh



PROVISIONAL CERTIFICATE

Bachelor of Science

This is to certify that Imtiaz Akhamad
Son/Daughter of Md. Karfat Hosen
and Rokshana Begum
of Rajshahi College, Rajshahi
obtained Bachelor of Science (Honours) degree
in Chemistry under National University in the examination
of 2022 with CGPA 3.43 out of 4.00.

National University, Bangladesh.

Date of Issue: January 07, 2025

22N2E28W050490



Roll No. : 2087685

Regn.No. : 17228121009

Session. : 2017-18

N.B. This provisional certificate must be surrendered at the time of taking delivery of original certificate.

Controller of Examinations

**Board of Intermediate and Secondary Education Rajshahi
Bangladesh**

RBCC Serial No. 170-001860

Serial No. RB 15- 0224262



Roll No. 100890

Registration No. 1212606448/2015-16

Code & Centre 102 - Rajshahi-2

Higher Secondary Certificate Examination - 2017

This is to certify that

Imtiyaz Ahamad

son/daughter of

Md. Marfat Hosen and Rokshana Begum
of

Rajshahi Govt. City College, Rajshahi

duly passed the Higher Secondary Certificate Examination in
Science group

held in the month of April- May, 2017 securing GPA 4.83 in the scale of 5.00 .

[Signature]
১০/০৫/১৭
মোঃ আব্দুল গামাল
জায়েদ হি. মোঃ আব্দুল
মদন মোঃ আব্দুল (সিনিয়র)
সিনিয়র অফিসার, রাজশাহী।

Date of passing: *Rajshahi, July 23, 2017.*

[Signature]
Controller of Examinations

Note: This Certificate is issued without any alteration or erasure.

Board of Intermediate and Secondary Education Rajshahi Bangladesh

Serial No. RB 16 **0050748**



HIGHER SECONDARY CERTIFICATE EXAMINATION - 2017

Letter Grade	Class Interval(%)	Grade Point
A+	80 - 100	5
A	70 - 79	4
A-	60 - 69	3.5
B	50 - 59	3
C	40 - 49	2
D	33 - 39	1
F	0 - 32	0

Rolls: 170-001860

ACADEMIC TRANSCRIPT

Name of Student : *Tmtiaz Ahamad*
 Father's Name : *Md. Marfat Rosen*
 Mother's Name : *Rokshana Begum*
 Name of Institution : *1075 - Rajshahi Govt. City College, Rajshahi*
 Name of Centre : *102 - Rajshahi-2*
 Roll No. : *100890* Registration No. : *1212606448/2015-16*
 Group : *Science* Type : *Regular*

Sl.No.	Name of Subjects	Marks Obtained	Letter Grade	Grade Point	GPA (Without additional subj.)	GPA
1	Bangla	169	A+	5	4.50	4.83
2	English	110	B	3		
3	Physics	157	A	4		
4	Chemistry	159	A+	5		
5	Higher Mathematics	162	A+	5		
6	Information & Communication Technology	088	A+	5		
Additional subject :						
7	Biology	157	A	4	GP Above 2 2.00	

Date of publication of results: Rajshahi, July 23, 2017.

Controller of Examinations

**Board of Intermediate and Secondary Education Rajshahi
Bangladesh**

RBCC Serial No. 150-003532

Serial No. RB 14- 4250143



Roll No. 102014

Registration No. 1212606448/2013-14

Centre 103 - Rajshahi - C

Secondary School Certificate Examination - 2015

This is to certify that

Imtiyaz Ahamad

son/daughter of

Md. Marfat Hosen and Rokshana Begum
of

Rajshahi Shikka Board Model School And College, Rajshahi
duly passed the Secondary School Certificate Examination in
Science group

held in the month of February-March, 2015 securing GPA 5.00 in the scale of 5.00.

The date of his/her birth is

Twelfth December Nineteen Hundred Ninety Nine.

Date of passing: Rajshahi, May 30, 2015.

SKZed
Controller of Examinations

07/02/15
মোঃ আব্দুল মোমেন
জাতি ডি.সি. নং-০১৫৮১১
অফিসে উপস্থিত (স্বাক্ষর)
রাজশাহী সন্থক, রাজশাহী।

Note: This Certificate is issued without any alteration or erasure.

Board of Intermediate and Secondary Education Rajshahi Bangladesh

Serial No. RB 14 **4372648**



SECONDARY SCHOOL CERTIFICATE EXAMINATION - 2015

Rolls: 150-003532

Letter Grade	Class Interval	Grade Point
A+	80 - 100	5
A	70 - 79	4
A-	60 - 69	3.5
B	50 - 59	3
C	40 - 49	2
D	33 - 39	1
F	0 - 32	0

ACADEMIC TRANSCRIPT

Name of Student : *Imtiaz Ahamad*
 Father's Name : *Md. Marfat Hosen*
 Mother's Name : *Rokshana Begum*
 Date of Birth : *12/12/1999*
 In Words : *Twelfth December Nineteen Hundred Ninety Nine*
 Institution : *2400 - Rajshahi Shikka Board Model School And College, Rajshahi*
 Centre : *103 - Rajshahi - 6*
 Roll No. : *102014* Registration No. : *1212606448/2013-14*
 Group : *Science* Type : *Regular*

Sl.No.	Name of Subjects	Letter Grade	Grade Point (GP)	GPA (Without Additional Subject)	Grade Point Average(GPA)
1	Bangla	A+	5	5.00	5.00
2	English	A+	5		
3	Mathematics	A+	5		
4	Bangladesh and Global Studies	A+	5		
5	Islam and Moral Education	A+	5		
6	Physics	A+	5		
7	Chemistry	A+	5		
8	Biology	A+	5		
9	Physical Education, Health & Sports	A+	5		
Additional Subject :					
10	Higher Mathematics	A+	5	GP Above 2 3.00	

Date of publication of results: Rajshahi, May 30, 2015

S. K. Azad
 Controller of Examinations