


# North Maharashtra University, Jalgaon

## Equivalent Courses

S.Y.B.Sc. GEOGRAPHY	
Semester III	
Old Courses	New Courses
Gg 231: Paper I : Physical Geography of Maharashtra	Physical Geography of India (Paper II) sem. III
Gg 232: (A) Environmental Geography	Environmental Geography - I (Paper I) sem. III
Semester IV	
Gg 241: Economic Geography of Maharashtra	Economic Geography of India (Paper II) sem. IV
Gg 242: (B) Environmental Geography	Environmental Geography - II (Paper I) sem. IV
Gg 203: (Practical-Annual Pattern): Study of SOI Topographical maps, Weather images and Surveying	Practical course based on Annual Pattern

  
Prof. Dr. V. J. Patil  
B.O.S Member  
in  
Geography

**North Maharashtra University,  
Jalgaon**

**S.Y. B.Sc. Environmental Sciences Syllabus  
Semester I and II Equivalence**

<b>Sem I and II New June 2016</b>	<b>Sem I and II Old June 2013</b>	<b>Remark</b>
Envi: 211 - Ecology	Envi: 211 - Ecology	Title of the paper not changed
Envi: 212 - Environmental Microbiology	Envi: 212 - Environmental Microbiology	Title of the paper not changed
Envi: 221 - Social environment and their conservation	Envi: 221 - Social environment and their conservation	Title of the paper not changed
Envi: 222 - Applied and Industrial Microbiology	Envi: 222 - Applied and Industrial Microbiology	Title of the paper not changed
Envi: 213 - Laboratory Course Based on Theory Papers	ENVI 203 : Practical Course based on theory (Annual Pattern)	Code of the paper changed (Semester Pattern)
Envi: 223 - Laboratory Course Based on Theory Papers		Code of the paper changed (Semester Pattern)

  
Chairman BOS in Environment Science

(Prof. S.T. Ingle)

North Maharashtra University, Jalgaon

S.Y.B.Sc. Geology Syllabus

Semester III and IV Equivalence

Semester III Theory and Practical

Sem III New-June 2016	Sem.III Old-June-2013	Title of Paper
GL 231 Mineralogy	GL211 Mineralogy	As it is
GL 232 Principles of Stratigraphy	GL 212 Principles of Stratigraphy	As it is
GL 203 Practical Based on Sem III Course ( SEM Wise)	GL 203 Practical Based on Sem III and IV Course ( Annual Practical)	Sem. III New-June 2016( SEM Wise Practical) & Sem.III Old-June-2013 ( Annual Practical)

Semester IV Theory and Practical

Sem.IVNew-June 2016	Sem.IV Old-June-2013	Title of Paper
GL 241 Petrology	GL 221 Petrology	As it is
GL 242 Structural Geology	GL 222 Structural Geology	As it is
GL 204 Practical Based on Sem IV Course ( SEM Wise)	GL 203 Practical Based on Sem III and IV Course ( Annual Practical)	Sem IV New-June 2016( SEM Wise Practical) Sem.IV Old-June-2013 ( Annual Practical)

Dr. S. N. Patil.

*S.N.P.*  
12/1/18

**SYBSc Computer Science  
Equivalence List**

Sr. No.	SYBSc (June 2013)	SYBSc ( June 2016) (60:40)
1	COMP-211 (40:10) Data Structure - I	COMP-211 (60:40) Data Structure - I
2	COMP-212(40:10) Programming in C++ I	COMP-212(60:40) OOAD & Introduction to C++
3	COMP-221(40:10) Data Structure - II	COMP-221(60:40) Data Structure - II
4	COMP-222(40:10) Programming in C++ II	COMP-222(60:40) Programming in C++
5	COMP-203 (80:20) Practical Course Annual	COMP-223(60:40) Practical Course

**TYBSc Computer Science (Semeter I)  
Equivalence List**


Sr. No.	TYBSc (June 2014)	TYBSc ( June 2017) (60:40)
1	UG-CS-311 (40:10) System Programming	UG-CS-311(60:40) System Programming
2	UG-CS-312 (40:10) Advanced DBMS	UG-CS-312(60:40) Database Management System
3	UG-CS-313 (40:10) Software Engineering	UG-CS-313 (60:40) Software Engineering
4	UG-CS-314 (40:10) Computer Aided Graphics	UG-CS-314(60:40) Computer Aided Graphics
5	UG-CS-315 (40:10) V. B. NET	UG-CS-315 (60:40) Programming in VB.NET
6	UG-CS-316 A (40:10) Programming in C# UG-CS-316 B (40:10) Java Programming – I	UG-CS-316A (60:40) Programming in C# UG-CS-316 B(60:40) JAVA Programming – I
7	UG-CS-LAB-301 (80:20) Lab on System Programming & SQL server 2008	UG-CS-LAB-304(60:40) Lab on MS SQL Server
8	UG-CS-LAB-302 (80:20) Lab on V.B.NET, Computer Aided Graphics & Internet Computing	UG-CS-LAB-302(60:40) Lab on Programming in VB.NET, Computer Aided Graphics
9	UG-CS-LAB-303 A (80:20) Lab on C# & ASP.NET UG-CS-LAB-303 B Lab on JAVA Programming –I & II	UG-CS-LAB-306 A(60:40) Lab on ASP.NET UG-CS-LAB-306 B(60:40) Lab on Java Programming-II

**TYBSc Computer Science (Semeter II)  
Equivalence List**

Sr. No.	TYBSc (June 2014)	TYBSc ( June 2017) (60:40)
1	UG-CS-321 (40:10) Operating System	UG-CS-321(60:40) Operating System
2	UG-CS-322 (40:10) SQL Server 2008	UG-CS-322(60:40) MS SQL Server
3	UG-CS-323 (40:10) Internet Computing	UG-CS-323 (60:40) Internet Programming using PHP
4	UG-CS-324 (40:10) Theoretical Computer Science	UG-CS-324(60:40) Theoretical Computer Science
5	UG-CS-325 (40:10) Basics of Microprocessor and Computer Network	UG-CS-325(60:40) Computer Network
6	UG-CS-326 A (40:10) ASP.NET UG-CS-326 B (40:10) Java Programming – II	UG-CS-326 A(60:40) Web Programming using ASP.NET UG-CS-326 B (60:40) JAVA Programming – II

**NOTE: (40:10) indicate External 40 Internal 10 Marks Pattern.**

**(80:20) indicate External 80 Internal 20 Marks Pattern**

  
 27/01/18  
 (S.R. Kolhe)

## SYBSc Information Technology

### Equivalence List

Sr. No.	SYBSc (June 2013)	SYBSc ( June 2016) (60:40)
1	IT-211 (40:10) Data Structure - I	IT-211 (60:40) Data Structure - I
2	IT-212(40:10) Web Programming - I	IT-212(60:40) Programming in C#
3	IT-221(40:10) Data Structure - II	IT-221(60:40) Data Structure - II
4	IT-222(40:10) Visual Basic Programming 6.0 – II	IT-222(60:40) Web Programming using ASP.NET
5	IT-203 (80:20) Practical Course	IT-223(60:40) Practical Course

## TYBSc Information Technology (Semeter I)

### Equivalence List

Sr. No.	TYBSc (June 2014)	TYBSc ( June 2017) (60:40)
1	UG-IT-311 (40:10) Database Management System	UG-IT-312 (60:40) Database Management System
2	UG-IT-312 (40:10) System Programming	UG-IT-311 (60:40) System Programming
3	UG-IT-313 (40:10) Data Communication	UG-IT-313 (60:40) Data Communication
4	UG-IT-314 (40:10) JAVA Programming -I	UG-IT-316 (60:40) JAVA Programming -I
5	UG-IT-315 (40:10) Cyber Law and IT ACT	UG-IT-325 (60:40) Cyber Law and IT ACT
6	UG-IT-316 (40:10) Programming in PHP	UG-IT-315(60:40) Internet Programming using PHP
7	UG-IT-LAB-301 (80:20) Java Programming - I & II	UG-IT-LAB-306(60:40) Lab on JAVA Programming - II
8	UG-IT-LAB-302 (80:20) Programming in PHP & Linux Operating System	UG-IT-LAB-302(60:40) Lab on Internet Programming Using PHP
9	UG-IT-LAB-303 (80:20) System Programming & SQL Server 2008	UG-IT-LAB-304(60:40) Lab on MS SQL Server

## TYBSc Information Technology (Semeter II)

### Equivalence List

Sr. No.	TYBSc (June 2014)	TYBSc ( June 2017) (60:40)
1	UG-IT-321 (40:10)SQL Server - 2008	UG-IT-322 (60:40) MS SQL Server
2	UG-IT-322 (40:10)Operating System	UG-IT-321 (60:40) Operating System
3	UG-IT-323 (40:10)Computer Network and Security	UG-IT-323 (60:40) Computer Network & Security
4	UG-IT-324 (40:10)JAVA Programming - II	UG-IT-326 (60:40) JAVA Programming - II
5	UG-IT-325 (40:10)Software Engineering	UG-IT-314(60:40) Software Engineering
6	UG-IT-326 (40:10)Linux Operating System	UG-IT-324(60:40) Automata Theory, Languages, and Computation

**NOTE:** (40:10) indicate External 40 Internal 10 Marks Pattern.

(80:20) indicate External 80 Internal 20 Marks Pattern

  
 27/01/18  
 (C.S.R. Kolhe)

## Equivalence: Theory and Practicals

Class: S. Y. B. Sc.

Subject : Botany

Paper	Old Course (W.E.F. From 2013-14)	Paper	New Courses (to be implemented from June 2016)
BOT.-231	Morphology and Taxonomy of Angiosperms	BOT.-232	Morphology of Angiosperms
BOT.-232	Plant Physiology	BOT.-241	Plant Physiology
SEM-II			
BOT.-241	Plant Anatomy	BOT.-242	Taxonomy of Angiosperms
BOT.-242	Applied Botany	BOT.-231	Bryophytes and Pteridophytes
PRACTICAL			
BOT:203	Based on BOT.-231, BOT.-232, BOT.-241 and BOT.- 242	BOT:233	Based on BOT.231, BOT.-232,
		BOT: 243	Based On BOT.-241 and BOT.- 242

## S Y B Sc CHEMISTRY EQUIVALANCE

Syllabus to be Implemented from 2016-2017

Name of Subject (old)	Subject Code OLD[80:20]	Name of Equivalent Subject (New)	Subject Code NEW [60:40]
<b>Semester III</b>			
Physical and Inorganic Chemistry	CH 231	Physical and Inorganic Chemistry	CH 231
Organic and Analytical Chemistry	CH-232	Organic and Analytical Chemistry	CH-232
<b>Semester IV</b>			
Physical and Inorganic Chemistry	CH-241	Physical and Inorganic Chemistry	CH-241
Organic and Analytical Chemistry	CH-242	Organic and Analytical Chemistry	CH-242
Chemistry Practical (Annual)	CH-203	Chemistry Practical	CH-233* OR CH-243**

\* If Practical Examination held in October Equivalent subject is CH-233

\*\* If Practical Examination held in March Equivalent subject is CH-243

## North Maharashtra University, Jalgaon

### S.Y. B.Sc. Geoinformatics Syllabus Semester III and IV Equivalence (With Effect from June 2016)

New Course	Old Course
GEOI 231 Introduction to C++ and OOP - I	GEOI 211 Introduction to Geo-Sciences I
GEOI 232 Introduction to Geoscience	GEOI 212 Geomorphology and Tectonics
GEOI 241 Introduction to C++ & OOP - II	GEOI 221 Introduction to Geo-Sciences II
GEOI 242 Introduction to Remote Sensing	GEOI 222 Basic Concepts In Remote Sensing
GEOI 233 Lab course based on GEOI 231 & GEOI 232	GEOI 203 Practical Course
GEOI 243 Lab course based on GEOI 241 & GEOI 242	



## New Equivalences

The equivalences for old courses of S. Y. B. Sc. Mathematics are given as follows:

Sem	Old Course (June 2013)	New equivalent course (June 2016)
I	MTH : 231 – Advanced Calculus	MTH : 231 – Calculus of Several Variables
	MTH : 232(A) – Topics in Algebra	MTH : 232(A) – Algebra
	MTH : 232(B) – Computational Algebra	MTH : 232(B) – Theory of Groups
II	MTH : 241 – Complex Analysis	MTH : 241 – Complex Variables
	MTH : 242(A) – Topics in Differential Equations	MTH : 242(A) – Differential Equations
	MTH : 242(B) – Differential Equations and Numerical Methods	MTH : 242(B) – Differential and Difference Equations
	MTH : 203 – Practical Course based on MTH-231, MTH-232, MTH-241, MTH-242	MTH : 233 – Practical Course based on MTH-241, MTH-242 & MTH : 243 – Practical Course based on MTH-241, MTH-242

**List of Equivalent courses for S. Y. B. Sc. (Physics):**

Old course		Equivalent new course	
PHY-231	Waves and Oscillations	PHY-231	Waves and Oscillations
PHY-232 (A)	Electronics- I	PHY-232 (A)	Electronics- I
PHY-232 (B)	Instrumentation -I	PHY-232 (B)	Instrumentation -I
PHY-241	Modern Physics	PHY-241	Modern Physics
PHY-242	Optics	PHY-242	Optics
PHY-203	Practical course	PHY-233	Practical course-I
		PHY-243	Practical course-II

## Equivalence: Theory and Practicals

Class: S. Y. B. Sc.

Subject : Zoology

Paper	Old Course (W.E.F. From 2013-14)	Paper	New Courses (to be implemented from June 2016)
Semester I			
ZOO 231	Nonchordates – II	ZOO 231	Nonchordates – II
ZOO 232	Mammalian Histology	ZOO 232	Medical Zoology
Semester II			
ZOO 241	Chordates – II	ZOO 241	Chordates – II
ZOO 242	Mammalian Physiology	ZOO 242	Applied Zoology
PRACTICAL			
ZOO 203	Based on ZOO 231, ZOO 232, ZOO 241 and ZOO 242	ZOO 233	Based on ZOO 231 and ZOO 232
		ZOO 243	Based On ZOO 241 and ZOO 242

# Equivalence of Paper for S. Y. B. Sc. Microbiology

North Maharashtra University, Jalgaon

		Equivalence from S. Y. B.Sc. Microbiology w. e. f. June 2016	
Subject Code	Theory Paper June 2013	Subject Code	Theory Paper June 2016
MB 211	Fundamental Biochemistry	MB 231	Fundamental Biochemistry
MB 212	Genetics and Immunology	MB 241	Genetics and Immunology
MB 221	Microscopy and Microbial Ecology	MB 232	Microscopy and Microbial Ecology
MB 222	Basic Microbial Biotechnology	MB 242	Basic Microbial Biotechnology

W9)

(NOD Microbiology)

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Director, SLS  
(Ex. Chairman BOS Life Sci)

Director  
School of Life Sciences,  
North Maharashtra University



### S.Y.B.Sc. (Biochemistry) Equivalence

Old Syllabus (w.e.f. June 2013) (Pattern 40:10) Practical Annual	New Syllabus (w.e.f. June 2016) (Semester Pattern 60:40) Practical Semester
BC-231 : Food Biochemistry - I	BC-231 : Food Biochemistry – I
BC-241 : Food Biochemistry -II	No Equivalence (BC-241) Continue
BC-232 : Human Physiology - I	BC-232 : Human Physiology – I
BC-242 : Human Physiology - II	BC-242 : Human Physiology – II
BC-203 : Practical Course	BC 233 and BC 243 : Practical Courses



(Dr. B. R. Kavimandan)

School of Life Sciences  
North Maharashtra University, Jalgaon  
Paper Equivalence for Old Course 2013

**S.Y.B Sc. Biotechnology**

Equivalent/Alternative theory courses in new syllabus for theory courses from old syllabus

Sr. No.	Old Syllabus w.e.f. 2013		Equivalent Paper from New Syllabus W.e.f. 2016-17	
	Paper No. (Subject Code)	Title	Paper No. (Subject Code)	Title
<b>Semester – I</b>				
01.	BT-211	Cell Biology and Basic Metabolism	BT-231	Cell Biology and Metabolism
02.	BT-212	Molecular Biology	BT-232	Molecular Biology
<b>Semester – II</b>				
03.	BT-221	Basic Techniques for Biotechnology	BT-241	Biophysics
04.	BT-222	Immunology and bioprocess technology	BT-242	Immunology and bioprocess technology
<b>Practical Course (annual)</b>				
05.	BT-203	Practical course in Biotechnology	BT-243	Practical course in Biotechnology

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Ex. chairman  
Bos Life Sciences

Director

School of Life Sciences,  
North Maharashtra University

HoD - Biotechnology

NORTH MAHARASHTRA UNIVERSITY, JALGAON

S.Y.B.Sc. Electronics

Equivalence of Courses

Semester	Paper No.	Paper Code	Title of the Course as per Syllabus wef June 2013	Paper Code	Title of the equivalent course as per Syllabus wef June 2016
I	I	ELE - 231	Analog Circuits and Applications	ELE - 231	Analog Circuits and Applications
	II	ELE - 232	Instrumentation	ELE - 232	Instrumentation
	--	---	---	ELE - 233	Practical Course - I
II	I	ELE - 241	Linear Integrated Circuits & Applications	ELE - 241	Linear Integrated Circuits & Applications
	II	ELE - 242	8085 Microprocessor	ELE - 242	8085 Microprocessor
	III	ELE - 203	Practical Course (Annual)	ELE - 243	Practical Course - II

Equivalence of old and new papers [S.Y. B.Sc. Statistics]

Old paper (with effect from June 2013)	New paper (with effect from June 2016)
ST 231: PROBABILITY DISTRIBUTIONS-I	ST 231: PROBABILITY DISTRIBUTIONS-I
ST 232: STATISTICAL METHODS-I	ST 232: STATISTICAL METHODS-I
ST 241: PROBABILITY DISTRIBUTIONS-II	ST 241: PROBABILITY DISTRIBUTIONS-II
ST 242: STATISTICAL METHODS-II	ST 242: STATISTICAL METHODS-II
ST 203: STATISTICS PRACTICALS	ST 233: LAB COURSE IN STATISTICS -I and ST 243: LAB COURSE IN STATISTICS -II