

Curriculum Structure Session (2023-2024 onwards)

Name of the Program: B.Sc.Certificate Program

Year: First

Semester: I (Pawas)

Course Code

Course Title

Contact
Hrs
per Week

Credits

Weightage (%)

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T

P

CW\$

MTE

ETE

Discipline Specific Core (DSC): (Select any Three subjects)

Botany

24BBO5101T	Diversity of Plant Kingdom	3	0	0	3	10	20	70
24BBO5101P	Botany Practical -I	0	0	2	1	--	--	100

Zoology

24BZO5101T	Biology of Non-Chordates	3	0	0	3	10	20	70
24BZO5101P	Non-Chordate Laboratory	0	0	2	1	--	--	100

Chemistry

24BCH5101T	Chemistry Paper -I	3	0	0	3	10	20	70
24BCH5101P	Chemistry Practical	0	0	2	1	--	--	100

Mathematics

24BMT5101T	Calculus and Optimization Techniques	3	0	0	3	10	20	70
24BMT5101P	Practical I Lab Work-Optimization Techniques	0	0	2	1	--	--	100

Physics

24BPH5101T	Mechanics & Oscillations	3	0	0	3	10	20	70
24BPH5101P	Physics Lab	0	0	2	1	--	--	100

Geography

24BGS5101T	Physical Geography- I (Geomorphology)	3	0	0	3	10	20	70
24BGS5101P	Practical Geography	0	0	2	1	--	--	100

Physical Education

24BPE5101T	History and Foundation of Physical Education-I	3	0	0	3	10	20	70
24BPE5101P	Practical	0	0	2	1	--	--	100

Computer Application

24BCS5101T	Computer Fundamentals & PC Software	3	0	0	3	10	20	70
24BCS5101P	Computer Fundamentals & PC Software Lab	0	0	2	1	--	--	100

Economics

24BES5101T	Micro Economics	4	0	0	4	10	20	70
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Geology

24BGL5101T	Earth System Science (ESS)	3	0	0	3	10	20	70
24BGL5101P	Geology Lab Earth System Sciences (ESS)	0	0	2	1	--	--	100

Discipline Specific Elective (DSE):

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Minor Subject

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Multidisciplinary Course (MDC):

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Ability Enhancement Course (AEC):

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Skill Enhancement Course (SEC):

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Pawas Semester I

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Value Added Course (VAC):								
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Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):								
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Total					24			

Summary: I Semester (Pawas)		Credits
S.N.	Particulars	
1.	Discipline Specific Core(DSC):	12
2.	Discipline Specific Elective (DSE):	00
3.	Minor Subject	02
4.	Multidisciplinary Course (MDC):	03
5.	Ability Enhancement Course (AEC):	02
6.	Skill Enhancement Course (SEC):	03
7.	Value Added Course (VAC):	02
8.	Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):	00
Total		24
\$CW (Class work): It would include attendance, class test/quiz test/assignments, ppt, play, learn by fun activities etc.		

Note: Minor subject can be selected as per the minor subjects given on University website, it must be different from Core subjects. In case of MDC/SEC/AEC/VAC: to be selected from the list of courses given on University website.

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Curriculum Structure Session (2023-2024 onwards)

Name of the Program: B.Sc. Certificate Program

Year: First

Semester: II (Vasant)

Course Code	Course Title	Contact Hrs per Week			Credits	Weightage (%)		
		L	T	P		CWS	MTE	ETE

Discipline Specific Core (DSC): (Select any Three subjects)

Botany

24BBO5201T	Cell Biology, Genetics and Plant Breeding	3	0	0	3	10	20	70
24BBO5201P	Botany Practical- II	0	0	2	1	--	--	100

Zoology

24BZO5201T	Comparative Anatomy and Development Biology of Vertebrates	3	0	0	3	10	20	70
24BZO5201P	Comparative Anatomy and Development Biology of Vertebrates Laboratory	0	0	2	1	--	--	100

Chemistry

24BCH5201T	Chemistry Paper -II	3	0	0	3	10	20	70
24BCH5201P	Chemistry Practical	0	0	2	1	--	--	100

Mathematics

24BMT5201T	Discrete Mathematics & Vector Calculus	3	0	0	3	10	20	70
24BMT5201P	Practical I Lab Work-Discrete Mathematics	0	0	2	1	--	--	100

Physics

24BPH5201T	Electromagnetism	3	0	0	3	10	20	70
24BPH5201P	Physics Lab	0	0	2	1	--	--	100

Geography

24BGS5201T	Physical Geography- II (Climatology and Oceanography)	3	0	0	3	10	20	70
24BGS5201P	Practical Geography	0	0	2	1	--	--	100

Physical Education

24BPE5201T	History and Foundation of Physical Education-II	3	0	0	3	10	20	70
24BPE5201P	Practical	0	0	2	1	--	--	100

Computer Application

24BCS5201T	Programming with C	3	0	0	3	10	20	70
24BCS5201P	Programming with C Lab	0	0	2	1	--	--	100

Economics

24BES5201T	Indian Economy	4	0	0	4	10	20	70
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Geology

24BGL5201T	Mineral Science	3	0	0	3	10	20	70
24BGL5201P	Geology Lab Mineral Science	0	0	2	1	--	--	100

Discipline Specific Elective (DSE):

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Minor Subject

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Multidisciplinary Course (MDC):

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Ability Enhancement Course (AEC):

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Skill Enhancement Course (SEC):

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Vasant Semester II

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Value Added Course (VAC):									
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Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):									
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Total					24				

Summary: II Semester (Vasant)		Credits
S.N.	Particulars	
1.	Discipline Specific Core (DSC):	12
2.	Discipline Specific Elective (DSE):	00
3.	Minor Subject	02
4.	Multidisciplinary Course (MDC):	03
5.	Ability Enhancement Course (AEC):	02
6.	Skill Enhancement Course (SEC):	03
7.	Value Added Course (VAC):	02
8.	Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):	00
Total		24
\$CW (Class work): It would include attendance, class test/quiz test/assignments, ppt, play, learn by fun activities etc.		

Note: Minor subject can be selected as per the minor subjects given on University website, it must be different from Core subjects. In case of MDC/SEC/AEC/VAC: to be selected from the list of courses given on University website.

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Curriculum Structure Session (2023-2024 onwards)

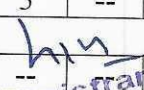
Name of the Program: B.Sc. Certificate Program

Year: Second

Semester: III (Pawas)

Course Code	Course Title	Contact Hrs per Week			Credits	Weightage (%)		
		L	T	P		CW\$	MTE	ETE
Semester: III (Pawas)								
Discipline Specific Core (DSC): (Select any Three subjects)								
Botany								
24BBO6301T	Taxonomy and Economic Botany	3	0	0	3	10	20	70
24BBO6301P	Botany Practical- III	0	0	2	1	--	--	100
Zoology								
24BZO6301T	Cell and Molecular Biology	3	0	0	3	10	20	70
24BZO6301P	Cell and Molecular Biology Laboratory	0	0	2	1	--	--	100
Chemistry								
24BCH6301T	Chemistry Paper -III	3	0	0	3	10	20	70
24BCH6301P	Chemistry Practical	0	0	2	1	--	--	100
Mathematics								
24BMT6301T	Real Analysis And Numerical Analysis - I	3	0	0	3	10	20	70
24BMT6301P	Practical I Lab Work-Numerical Analysis - I	0	0	2	1	--	--	100
Physics								
24BPH6301T	Optics	3	0	0	3	10	20	70
24BPH6301P	Physics Lab	0	0	2	1	--	--	100
Geography								
24BGS6301T	Human Geography	3	0	0	3	10	20	70
24BGS6301P	Practical Geography	0	0	2	1	--	--	100
Physical Education								
24BPE6301T	Anatomy And Physiology Of Exercise	3	0	0	3	10	20	70
24BPE6301P	Practical	0	0	2	1	--	--	100
Computer Application								
24BCS6301T	Database Management System	3	0	0	3	10	20	70
24BCS6301P	DBMS Lab	0	0	2	1	--	--	100
Economics								
24BES6301T	Macro Economics	4	0	0	4	10	20	70
Geology								
24BGL6301T	Petrology and Ore Genesis	3	0	0	3	10	20	70
24BGL6301P	Geology Lab Petrology and Ore Genesis	0	0	2	1	--	--	100
Discipline Specific Elective (DSE):								
---	---	--	--	--	--	--	--	--
Minor Subject								
---	---	--	--	--	4	--	--	--
Multidisciplinary Course (MDC):								
---	---	--	--	--	3	--	--	--
Ability Enhancement Course (AEC):								
---	---	--	--	--	2	--	--	--
Skill Enhancement Course (SEC):								
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Value Added Course (VAC):								
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Seminar/Internship/Apprenticeship/Project/Community Outreach (SVA/PTC)								

Pawas Semester III


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	Total				24		

Summary: III Semester (Pawas)		Credits
S.N.	Particulars	
1.	Discipline Specific Core (DSC):	12
2.	Discipline Specific Elective (DSE):	00
3.	Minor Subject	04
4.	Multidisciplinary Course (MDC):	03
5.	Ability Enhancement Course (AEC):	02
6.	Skill Enhancement Course (SEC):	03
7.	Value Added Course (VAC):	00
8.	Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):	00
Total		24
\$CW (Class work): It would include attendance, class test/quiz test/assignments, ppt, play, learn by fun activities etc.		

Note: Minor subject can be selected as per the minor subjects given on University website, it must be different from Core subjects. In case of MDC/SEC/AEC/VAC: to be selected from the list of courses given on University website.

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Curriculum Structure Session (2023-2024 onwards)									
Name of the Program: B.Sc. Certificate Program									
Year: Second							Semester: IV (Vasant)		
Course Code	Course Title	Contact Hrs per Week			Credits	Weightage (%)			
		L	T	P		CW\$	MTE	ETE	
Discipline Specific Core (DSC): (Select any Three subjects)									
Botany									
24BBO6401T	Plant Physiology and Biochemistry	3	0	0	3	10	20	70	
24BBO6401P	Botany Practical- IV	0	0	2	1	--	--	100	
Zoology									
24BZO6401T	Mammalian Physiology and Biochemistry	3	0	0	3	10	20	70	
24BZO6401P	Mammalian Physiology and Biochemistry Laboratory	0	0	2	1	--	--	100	
Chemistry									
24BCH6401T	Chemistry Paper -IV	3	0	0	3	10	20	70	
24BCH6401P	Chemistry Practical	0	0	2	1	--	--	100	
Mathematics									
24BMT6401T	Differential Equations And Numerical Analysis-II	3	0	0	3	10	20	70	
24BMT6401P	Practical I Lab Work-Numerical Analysis-II	0	0	2	1	--	--	100	
Physics									
24BPH6401T	Thermodynamics and statistical Physics	3	0	0	3	10	20	70	
24BPH6101T	Physics Lab	0	0	2	1	--	--	100	
Computer Application									
24BCS6401T	Internet & Web programming	3	0	0	3	10	20	70	
24BCS6401P	Internet & Web programming Lab	0	0	2	1	--	--	100	
Geography									
24BGS6401T	Economics and Resource Geography	3	0	0	3	10	20	70	
24BGS6401P	Practical Geography	0	0	2	1	--	--	100	
Physical Education									
24BPE6401T	Management And Methods Of Physical Education	3	0	0	3	10	20	70	
24BPE6401P	Practical	0	0	2	1	--	--	100	
Economics									
24BES6401T	Economy of Rajasthan	4	0	0	4	10	20	70	
Geology									
24BGL6401T	Paleontology and Stratigraphy	3	0	0	3	10	20	70	
24BGL6401P	Geology Lab Paleontology and Stratigraphy	0	0	2	1	--	--	100	
Discipline Specific Elective (DSE):									
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Minor Subject									
---	---	--	--	--	2	--	--	--	
Multidisciplinary Course (MDC):									
---	---	--	--	--	3	--	--	--	
Ability Enhancement Course (AEC):									
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Skill Enhancement Course (SEC):									
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Value Added Course (VAC):									
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Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):									
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Total					24				

Summary: I Semester (Pawas)		Credits
S.N.	Particulars	
1.	Discipline Specific Core (DSC):	12
2.	Discipline Specific Elective (DSE):	00
3.	Minor Subject	04
4.	Multidisciplinary Course (MDC):	00
5.	Ability Enhancement Course (AEC):	02
6.	Skill Enhancement Course (SEC):	00
7.	Value Added Course (VAC):	02
8.	Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):	00
Total		20
SCW (Class work): It would include attendance, class test/quiz test/assignments, ppt, play, learn by fun activities etc.		

Note: Minor subject can be selected as per the minor subjects given on University website, it must be different from Core subjects. In case of MDC/SEC/AEC/VAC: to be selected from the list of courses given on University website.

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Curriculum Structure Session (2023-2024 onwards)

Name of the Program: B.Sc. Program

Year: Third

Semester: V (Pawas)

Course Code

Course Title

Contact
Hrs
per Week

Credits

Weightage (%)

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CW\$

MTE

ETE

Discipline Specific Core (DSC): Will be same as selected in first semester

Botany

24BBO7501T Plant Anatomy, Embryology and Ecology

3

0

0

3

10

20

70

24BBO7501P Practical-I

0

0

2

1

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100

Zoology

24BZO7501T Microbiology, Immunology and Biotechnology

3

0

0

3

10

20

70

24BZO7501P Zoology Laboratory

0

0

2

1

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100

Chemistry

24BCH7501T Metal Complexes, Spectroscopy, Organometallic Compounds and Phase Equilibrium

3

0

0

3

10

20

70

24BCH7501P Chemistry Practical

0

0

2

1

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100

Mathematics

24BMT7501T Complex Analysis

3

0

0

3

10

20

70

24BMT7501P Practical

0

0

2

1

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100

Physics

24BPH7501T Electronics and Solid State Physics

3

0

0

3

10

20

70

24BPH7501P Physics Lab

0

0

2

1

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100

Geography

24BGS7501T Geography – Geography of India

3

0

0

3

10

20

70

24BGS7501P Practical Geography

0

0

2

1

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100

Physical Education

24BPE7501T Physical Education – Health Education

3

0

0

3

10

20

70

24BPE7501P Practical

0

0

2

1

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100

Computer Application

24BCS7501T Computer Application – DTP

3

0

0

3

10

20

70

24BCS7501P Practical- DTP Lab

0

0

2

1

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100

Economics

24BES7501T Introduction to International Trade, Development and Public Economics

4

0

0

4

10

20

70

Geology

24BGL7501T Geology – Photogeology and Remote Sensing

3

0

0

3

10

20

70

24BGL7501P Geology Practical– Geology Lab

0

0

2

1

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100

Discipline Specific Elective (DSE):

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Minor Subject

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Multidisciplinary Course (MDC):									
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Ability Enhancement Course (AEC):									
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Skill Enhancement Course (SEC):									
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Value Added Course (VAC):									
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Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):									
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Total					20				

Summary: V Semester (Pawas)		Credits
S.N.	Particulars	
1.	Discipline Specific Core(DSC):	12
2.	Discipline Specific Elective (DSE):	00
3.	Minor Subject	04
4.	Multidisciplinary Course (MDC):	00
5.	Ability Enhancement Course (AEC):	00
6.	Skill Enhancement Course (SEC):	00
7.	Value Added Course (VAC):	00
8.	Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):	04
Total		20
\$CW (Class work): It would include attendance, class test/quiz test/assignments, ppt, play, learn by fun activities etc.		

Note: Minor subject can be selected as per the minor subjects given on University website, it must be different from Core subjects. In case of MDC/SEC/AEC/VAC: to be selected from the list of courses given on University website.

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Curriculum Structure Session (2023-2024 onwards)

Name of the Program: B.Sc. Program

Year: Third

Semester: VI (Pawas)

Course Code	Course Title	Contact Hrs per Week			Credits	Weightage (%)		
		L	T	P		CW\$	MTE	ETE

Discipline Specific Core (DSC): Will be same as selected in first semester

Botany

24BBO7601T	Microbiology, Plant Pathology and Biotechnology	3	0	0	3	10	20	70
24BBO7601P	Practical -II	0	0	2	1	--	--	100

Zoology

24BZO7601T	Ecology and Animal Behaviour	3	0	0	3	10	20	70
24BZO7601P	Zoology Laboratory	0	0	2	1	--	--	100

Chemistry

24BCH7601T	Organometallics, Group Theory, Heterocyclics, Biochemistry, and Quantum Chemistry	3	0	0	3	10	20	70
24BCH7601P	Chemistry Practical	0	0	2	1	--	--	100

Mathematics

24BMT7601T	Algebra	3	0	0	3	10	20	70
24BMT7601P	Practical	0	0	2	1	--	--	100

Physics

24BPH7601T	Quantum Mechanics and Spectroscopy	3	0	0	3	10	20	70
24BPH7601P	Physics Lab	0	0	2	1	--	--	100

Geography

24BGS7601T	Geography--Man and Natural Environment	3	0	0	3	10	20	70
24BGS7601P	Practical Geography	0	0	2	1	--	--	100

Physical Education

24BPE7601T	Physical Education – Test and Measurement	3	0	0	3	10	20	70
24BPE7601P	Practical	0	0	2	1	--	--	100

Computer Application

24BCS7601T	Computer Application – Python Programming	3	0	0	3	10	20	70
24BCS7601P	Practical- Python Lab	0	0	2	1	--	--	100

Economics

24BES7601T	Economic - History of Economic Thought	4	0	0	4	10	20	70
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Geology

24BGL7601T	Geology – Mining and Economic Geology	3	0	0	3	10	20	70
24BGL7601P	Practical- Geology Lab	0	0	2	1	--	--	100

Discipline Specific Elective (DSE):

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Minor Subject

Vasant Semester VI

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Multidisciplinary Course (MDC):								
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Ability Enhancement Course (AEC):								
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Skill Enhancement Course (SEC):								
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Value Added Course (VAC):								
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Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):								
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Total					20			

Summary: VI Semester (Pawas)		Credits
S.N.	Particulars	
1.	Discipline Specific Core(DSC):	12
2.	Discipline Specific Elective (DSE):	00
3.	Minor Subject	08
4.	Multidisciplinary Course (MDC):	00
5.	Ability Enhancement Course (AEC):	00
6.	Skill Enhancement Course (SEC):	00
7.	Value Added Course (VAC):	00
8.	Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):	00
Total		20
\$CW (Class work): It would include attendance, class test/quiz test/assignments, ppt, play, learn by fun activities etc.		

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