

# Swami Vivekanand University, Sagar (M.P.)

As per model syllabus of U.G.C. New Delhi, drafted by  
Central Board of Studies and Approved by Higher  
Education and the Governor of M.P.



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**Faculty of Science**

**Syllabus & Prescribed Books**

**Subject- Chemistry**

**M.Sc. Semester Examination**

**2016-18**

**I to IV Semester**

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## COURSEWISE SCHEME

### I<sup>st</sup> SEMESTER

1. Course Code	: MSCCHE	6. Total Theory Marks	: 250
2. Course Name	: M.Sc. Chemistry	7. Total Practical	: 3
3. Total Theory Subject	: 5	8. Total Practical Marks	: 100
4. Compulsory Subject	: 4	9. Total Marks	: 350
5. Optional Subject	: 1	10. Minimum Passing Percentage	: 36

Sub. Code	Subject Name	Theory										Practical		Total	
		Paper					CC E		Total Marks		Max.	Min.	Max.	Min.	
1st	2nd	3rd	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.					
<b>Compulsory</b>															
MSCCHE 101	Inorganic Chemistry-I	42	0	0	42	15	8	3	50	18	0	0	50	18	
MSCCHE 102	Organic Chemistry-I	42	0	0	42	15	8	3	50	18	0	0	50	18	
MSCCHE 103	Physical Chemistry-I	42	0	0	42	15	8	3	50	18	0	0	50	18	
MSCCHE 104	Group theory & Spectroscopy-I	42	0	0	42	15	8	3	50	18	0	0	50	18	
<b>Optional Select any one</b>															
MSCCHE 105-A	Mathematics for Chemists (for Students without mathematics in B.Sc.)	42	0	0	42	15	8	3	50	18	0	0	50	18	
MSCCHE 105-B	Biology for Chemists (for Students without Biology in B.Sc.)	42	0	0	42	15	8	3	50	18	0	0	50	18	
<b>Compulsory</b>															
MSCCHE 106	<b>Practical-I</b> Inorganic Chemistry	0	0	0	0	0	0	0	0	0	33	12	33	12	
MSCCHE 107	<b>Practical-II</b> Organic Chemistry	0	0	0	0	0	0	0	0	0	33	12	33	12	
MSCCHE 108	<b>Practical-III</b> Physical Chemistry	0	0	0	0	0	0	0	0	0	34	12	34	12	



## COURSEWISE SCHEME

### II<sup>ND</sup> SEMESTER

1. Course Code	: MSCCHE	6. Total Theory Marks	: 250
2. Course Name	: M.Sc. Chemistry	7. Total Practical	: 3
3. Total Theory Subject	: 5	8. Total Practical Marks	: 100
4. Compulsory Subject	: 4	9. Total Marks	: 350
5. Optional Subject	: 1	10. Minimum Passing Percentage	: 36

Sub. Code	Subject Name	Theory										Practical		Total	
		Paper					CC E		Total Marks			Max.	Min.	Max.	Min.
		1st	2nd	3rd	Max.	Min.	Max.	Min.	Max.	Min.					
<b>Compulsory</b>															
MSCCHE 201	Inorganic Chemistry-II	42	0	0	42	15	8	3	50	18	0	0	50	18	
MSCCHE 202	Organic Chemistry-II	42	0	0	42	15	8	3	50	18	0	0	50	18	
MSCCHE 203	Physical Chemistry-II	42	0	0	42	15	8	3	50	18	0	0	50	18	
MSCCHE 204	Spectroscopy-II and Diffraction Methods	42	0	0	42	15	8	3	50	18	0	0	50	18	
<b>Optional</b>															
MSCCHE 205	Computers for Chemists	42	0	0	42	15	8	3	50	18	0	0	50	18	
<b>Compulsory</b>															
MSCCHE 206	<b>Practical-I</b> Inorganic Chemistry	0	0	0	0	0	0	0	0	0	33	12	33	12	
MSCCHE 207	<b>Practical-II</b> Organic Chemistry	0	0	0	0	0	0	0	0	0	33	12	33	12	
MSCCHE 208	<b>Practical-III</b> Physical Chemistry	0	0	0	0	0	0	0	0	0	34	12	34	12	



## COURSEWISE SCHEME III<sup>rd</sup> SEMESTER

1. Course Code	: MSCCHE	6. Total Theory Marks	: 250
2. Course Name	: M.Sc. Chemistry	7. Total Practical	: 3
3. Total Theory Subject	: 5	8. Total Practical Marks	: 100
4. Compulsory Subject	: 4	9. Total Marks	: 350
5. Optional Subject	: 1	10. Minimum Passing Percentage	: 36

Sub. Code	Subject Name	Theory										Practical		Total	
		Paper					CCE		Total Marks		Max.	Min.	Max.	Min.	
		1st	2nd	3rd	Max.	Min.	Max.	Min.	Max.	Min.					
<b>Compulsory</b>															
MSCCHE 301	Application Of Spectroscopy-I	42	0	0	42	15	8	3	50	18	0	0	50	18	
MSCCHE 302	Photochemistry	42	0	0	42	15	8	3	50	18	0	0	50	18	
MSCCHE 303	Environmental Chemistry	42	0	0	42	15	8	3	50	18	0	0	50	18	
<b>Optional Select any one</b>															
MSCCHE 304-A	Polymers	42	0	0	42	15	8	3	50	18	0	0	50	18	
MSCCHE 304-B	Heterocyclic chemistry	42	0	0	42	15	8	3	50	18	0	0	50	18	
<b>Compulsory</b>															
MSCCHE 305	<b>Practical-I</b> Inorganic Chemistry	0	0	0	0	0	0	0	0	0	33	12	33	12	
MSCCHE 306	<b>Practical-II</b> Organic Chemistry	0	0	0	0	0	0	0	0	0	33	12	33	12	
MSCCHE 307	<b>Practical-III</b> Physical Chemistry	0	0	0	0	0	0	0	0	0	34	12	34	12	



## COURSEWISE SCHEME

### IV<sup>th</sup> SEMESTER

1. Course Code	: MSCCHE	7. Total Practical	: 3
2. Course Name	: M.Sc. Chemistry	8. Total Practical Marks	: 100
3. Total Theory Subject	: 5	9. Project Marks	: 50
4. Compulsory Subject	: 4	10. Total Marks	: 400
5. Optional Subject	: 1	11. Minimum Passing Percentage	: 36
6. Total Theory Marks	: 250		

Sub. Code	Subject Name	Theory										Practical		Total	
		Paper					CCE		Total Marks			Max.	Min.	Max.	Min.
		1st	2nd	3rd	Max.	Min.	Max.	Min.	Max.	Min.					
<b>Compulsory</b>															
MSCCHE 401	Application Of Spectroscopy-II	42	0	0	42	15	8	3	50	18	0	0	50	18	
MSCCHE 402	Solid State Chemistry	42	0	0	42	15	8	3	50	18	0	0	50	18	
MSCCHE 403	Biochemistry	42	0	0	42	15	8	3	50	18	0	0	50	18	
<b>Optional Select any one</b>															
MSCCHE 404-A	Analytical Chemistry	42	0	0	42	15	8	3	50	18	0	0	50	18	
MSCCHE 404-B	Pesticites & Glass Industries	42	0	0	42	15	8	3	50	18	0	0	50	18	
<b>Compulsory</b>															
MSCCHE 405	<b>Practical-I</b> Inorganic Chemistry	0	0	0	0	0	0	0	0	0	33	12	33	12	
MSCCHE 406	<b>Practical-II</b> Organic Chemistry	0	0	0	0	0	0	0	0	0	33	12	33	12	
MSCCHE 407	<b>Practical-III</b> Physical Chemistry	0	0	0	0	0	0	0	0	0	34	12	34	12	
MSCCHE 408	<b>Project Work</b>	0	0	0	0	0	0	0	50	18	0	0	50	18	