



**UNIVERSITY**  
GWALIOR • MP • INDIA

“ CELEBRATING DREAMS ”

# **B. PHARM COURSE CURRICULUM**

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(2013-14 BATCH)

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# SCHEME OF TEACHING, EVALUATION AND CREDITS

## COURSE: B. PHARM (2013-14BATCH)

### SEMESTER – I

S. No.	Subject Name	Subject Code	Teaching Load / Week (Hrs)			Credits Allotted			Total Credits	Maximum Marks Allotted						Total Marks
			L	T	P	L	T	P		Theory			Practical			
										End Sem	Mid Sem#	CP	End Sem	PE	Int. Viva	
1	Professional Communication	PY1101	3	1	0	3	1	0	4	40	30	30	--	--	--	100
2	Computer Applications	PY1102	3	0	3	3	0	1	4	40	30	30	40	30	30	200
3	Pharmaceutical Chemistry – I (Inorganic)	PY1103	3	0	3	3	0	1	4	40	30	30	40	30	30	200
4	Pharmaceutical Chemistry – II (Physical)	PY1104	3	0	3	3	0	1	4	40	30	30	40	30	30	200
5	Pharmaceutics – I (Introduction to Pharmaceutics)	PY1105	3	0	3	3	0	1	4	40	30	30	40	30	30	200
6	Remedial Mathematics*	PY1106	3	1	0	3	1	0	4*	40	30	30	---	---	---	100
7	Remedial Biology*	PY1107	3	0	3	3	0	1	4*	40	30	30	40	30	30	200
<b>Total</b>									<b>24*</b>							<b>1000 / 1100**</b>

**REMARKS**

\* Students from Medical stream will study Remedial Mathematics and those from non-Medical stream will study Remedial Biology

\*\* Students studying Remedial Mathematics will have 1000 total marks / Students studying Remedial Biology will have 1100 total marks

# Average of two tests

CP – Class Participation; PE – Progressive Evaluation

### SEMESTER – II

S. No.	Subject Name	Subject Code	Teaching Load / Week (Hrs)			Credits Allotted			Total Credits	Maximum Marks Allotted						Total Marks
			L	T	P	L	T	P		Theory			Practical			
										End Sem	Mid Sem#	CP	End Sem	PE	Int. Viva	
1	Applied Mathematics and Biostatistics	PY2101	3	1	0	3	1	0	4	40	30	30	--	--	--	100
2	Human Anatomy, Physiology and Health Education - I	PY2102	3	0	3	3	0	1	4	40	30	30	40	30	30	200
3	Pharmaceutics – II (Physical Pharmacy)	PY2103	3	0	3	3	0	1	4	40	30	30	40	30	30	200
4	Pharmaceutical Chemistry – III (Organic)	PY2104	3	0	3	3	0	1	4	40	30	30	40	30	30	200
5	Pharmacognosy– I	PY2105	3	0	3	3	0	1	4	40	30	30	40	30	30	200
6	Environmental Studies and Disaster Management	PY2106	3	0	0	3	0	0	3	40	30	30	---	---	---	100
<b>Total</b>									<b>23</b>							<b>1000</b>

**REMARKS**

# Average of two tests

CP – Class Participation; PE – Progressive Evaluation

### SEMESTER – III

S. No.	Subject Name	Subject Code	Teaching Load / Week (Hrs)			Credits Allotted			Total Credits	Maximum Marks Allotted						Total Marks
			L	T	P	L	T	P		Theory			Practical			
										End Sem	Mid Sem <sup>#</sup>	CP	End Sem	PE	Int. Viva	
1	Unit Operations – I	PY3101	3	0	3	3	0	1	4	40	30	30	40	30	30	200
2	Human Anatomy, Physiology and Health Education – II	PY3102	3	0	3	3	0	1	4	40	30	30	40	30	30	200
3	Pharmaceutical Analysis – I	PY3103	3	0	3	3	0	1	4	40	30	30	40	30	30	200
4	Pharmaceutical Microbiology	PY3104	3	0	3	3	0	1	4	40	30	30	40	30	30	200
5	Pharmacognosy – II	PY3105	3	0	3	3	0	1	4	40	30	30	40	30	30	200
<b>Total</b>									<b>20</b>							<b>1000</b>

**REMARKS**  
# Average of two tests  
CP – Class Participation; PE – Progressive Evaluation

### SEMESTER – IV

S. No.	Subject Name	Subject Code	Teaching Load / Week (Hrs)			Credits Allotted			Total Credits	Maximum Marks Allotted						Total Marks
			L	T	P	L	T	P		Theory			Practical			
										End Sem	Mid Sem <sup>#</sup>	CP	End Sem	PE	Int. Viva	
1	Pathophysiology of Common Diseases	PY4101	3	0	0	3	0	0	3	40	30	30	---	---	---	100
2	Unit Operations – II	PY4102	3	0	3	3	0	1	4	40	30	30	40	30	30	200
3	Biochemistry	PY4103	3	0	3	3	0	1	4	40	30	30	40	30	30	200
4	Pharmaceutical Analysis – II	PY4104	3	0	3	3	0	1	4	40	30	30	40	30	30	200
5	Pharmacognosy – III	PY4105	3	0	3	3	0	1	4	40	30	30	40	30	30	200
<b>Total</b>									<b>19</b>							<b>900</b>

**REMARKS**  
# Average of two tests  
CP – Class Participation; PE – Progressive Evaluation

## SEMESTER – V

S. No.	Subject Name	Subject Code	Teaching Load / Week (Hrs)			Credits Allotted			Total Credits	Maximum Marks Allotted						Total Marks
			L	T	P	L	T	P		Theory			Practical			
										End Sem	Mid Sem <sup>#</sup>	CP	End Sem	PE	Int. Viva	
1	Pharmaceutical Biotechnology	PY5101	3	0	3	3	0	1	4	40	30	30	40	30	30	200
2	Hospital Pharmacy	PY5102	3	0	0	3	0	0	3	40	30	30	---	---	---	100
3	Medicinal Chemistry – I	PY5103	3	0	3	3	0	1	4	40	30	30	40	30	30	200
4	Pharmacology – I*	PY5104	3	0	3	3	0	1	4	40	30	30	40	30	30	200
5	Pharmaceutical Industrial Management	PY5105	3	0	0	3	0	0	3	40	30	30	---	---	---	100
6	Collection and Preservation of Medicinal Plants <sup>##</sup>	PY5106	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>Total</b>									<b>18</b>							<b>800</b>

### REMARKS

# Average of two tests

CP – Class Participation; PE – Progressive Evaluation

\* **PY5104 Practical:** Software based experiments should be used instead of actual animal experiments wherever possible

**## PY5106:** During the semester break, the students will collect medicinal plants, prepare herbarium sheets and write monographs of plants. This will be evaluated in VIII Semester

## SEMESTER – VI

S. No.	Subject Name	Subject Code	Teaching Load / Week (Hrs)			Credits Allotted			Total Credits	Maximum Marks Allotted						Total Marks
			L	T	P	L	T	P		Theory			Practical			
										End Sem	Mid Sem <sup>#</sup>	CP	End Sem	PE	Int. Viva	
1	Pharmaceutical Jurisprudence and Intellectual Property Rights	PY6101	3	0	0	3	0	0	3	40	30	30	---	---	---	100
2	Chemistry of Natural Products	PY6102	3	0	3	3	0	1	4	40	30	30	40	30	30	200
3	Medicinal Chemistry – II	PY6103	3	0	3	3	0	1	4	40	30	30	40	30	30	200
4	Pharmacology – II*	PY6104	3	0	3	3	0	1	4	40	30	30	40	30	30	200
5	Pharmaceutical Technology – I	PY6105	3	0	3	3	0	1	4	40	30	30	40	30	30	200
6	Industrial Training**	PY6106	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>Total</b>									<b>18</b>							<b>800</b>

### REMARKS

# Average of two tests

CP – Class Participation; PE – Progressive Evaluation

\* **PY6104 Practical:** Software based experiments should be used instead of actual animal experiments wherever possible

**\*\*Industrial Training:** The total duration of industrial training is 2 Months / 400 Hrs. To be attended at the end of 6<sup>th</sup> and 7<sup>th</sup> Semesters, in two phases, during end-semester vacations; At the end of 8<sup>th</sup> Semester, the students have to submit a report and make a presentation, which will be evaluated by the external examiner.

## SEMESTER – VII

S. No.	Subject Name	Subject Code	Teaching Load / Week (Hrs)			Credits Allotted			Total Credits	Maximum Marks Allotted						Total Marks
			L	T	P	L	T	P		Theory			Practical			
										End Sem	Mid Sem <sup>#</sup>	CP	End Sem	PE	Int. Viva	
1	Medicinal Chemistry – III	PY7101	3	0	3	3	0	1	4	40	30	30	40	30	30	200
2	Pharmacology – III*	PY7102	3	0	3	3	0	1	4	40	30	30	40	30	30	200
3	Pharmaceutical Technology – II	PY7103	3	0	3	3	0	1	4	40	30	30	40	30	30	200
4	Biopharmaceutics and Pharmacokinetics	PY7104	3	0	3	3	0	1	4	40	30	30	40	30	30	200
5	Herbal Drug Technology	PY7105	3	0	3	3	0	1	4	40	30	30	40	30	30	200
6	Industrial Training Evaluation**	PY6106	---	---	---	---	---	---	4	---	---	---	50	---	50	100
<b>Total</b>									<b>24</b>							<b>1100</b>

**REMARKS**

# Average of two tests

CP – Class Participation; PE – Progressive Evaluation

\* **PY7102 Practical:** Software based experiments should be used instead of actual animal experiments wherever possible

\*\***Industrial Training Evaluation:** Industrial training evaluation will be based on the report submitted, internal viva and presentations made by the students in the end semester examination.

## SEMESTER – VIII

S. No.	Subject Name	Subject Code	Teaching Load / Week (Hrs)			Credits Allotted			Total Credits	Maximum Marks Allotted						Total Marks
			L	T	P	L	T	P		Theory			Practical			
										End Sem	Mid Sem <sup>#</sup>	CP	End Sem	PE	Int. Viva	
1	Instrumental Methods of Analysis	PY8101	3	0	3	3	0	1	4	40	30	30	40	30	30	200
2	Novel Drug Delivery Systems	PY8102	3	0	3	3	0	1	4	40	30	30	40	30	30	200
3	Quality Control and Quality Assurance	PY8103	3	0	3	3	0	1	4	40	30	30	40	30	30	200
4	Industrial Pharmacognosy	PY8104	3	0	3	3	0	1	4	40	30	30	40	30	30	200
5	Clinical Pharmacy	PY8105	3	0	0	3	0	0	3	40	30	30	---	---	---	100
6	Collection and Preservation of Medicinal Plants	PY5106	---	---	---	---	---	4	4	---	---	---	50	---	50	100
<b>Total</b>									<b>23</b>							<b>1000</b>

**REMARKS**

# Average of two tests

CP – Class Participation; PE – Progressive Evaluation

### PROJECT BASED LEARNING / ASSIGNMENTS FOR CONTINUOUS EVALUATION

Project based learning will be evaluated after submission of project report and successful presentation of the same before duly constituted committee. Along with project based learning, assignments may also be given for continuous evaluation of the student. Such assignments may be based on Multiple Choice Questions / Quizzes / Class tests, which are evaluated and the answer sheets will be preserved along with the marks list.