

**Govt. Holkar Science College Indore (M.P.)**  
**M.Sc. Pharmaceutical Chemistry Syllabus**  
**Choice Based Credit System (CBCS)**  
**CORE SUBJECT : PHARMACEUTICAL CHEMISTRY**  
**Year 2017 onward**

**Semester One**

Code	Theory/Practical	Teaching hours/week	Credit	Examination Scheme		
				External	Internal	Total
Core 1	Paper 1 [ PRINCIPLES OF INORGANIC PHARMACEUTICAL CHEMISTRY- I ]	4	4	75	25	100
Core 2	Paper 2 [ PRINCIPLES OF ORGANIC PHARMACEUTICAL CHEMISTRY- I ]	4	4	75	25	100
Core 3	Paper 3 [ PRINCIPLES OF PHYSICAL PHARMACY –I ]	4	4	75	25	100
Core 4	Paper 4 [ PHARMACEUTICAL ANALYSIS-I ]	4	4	75	25	100
Practical -1	Practical [ LAB COURSE –I ]	6	3	75	-	75
Practical-2	Practical [ LAB COURSE -II ]	6	3	75	-	75
Seminar	Seminar 1	1	1	-	25	25
	Seminar 2/Field trip/Ind. Visit.	1	1	-	25	25
		<b>30</b>	<b>24</b>			<b>600</b>

**Semester Two**

Code	Theory/Practical	Teaching hours/week	Credit	Examination Scheme		
				External	Internal	Total
Core 5	Paper 5 [ PRINCIPLES OF INORGANIC PHARMACEUTICAL CHEMISTRY –II ]	4	4	75	25	100
Core 6	Paper 6 [ PRINCIPLES OF ORGANIC PHARMACEUTICAL CHEMISTRY- II ]	4	4	75	25	100
Core 7	Paper 7 [ PRINCIPLES OF PHYSICAL PHARMACY-II ]	4	4	75	25	100
Core 8	Paper 8 [PHARMACEUTICAL ANALYSIS- II]	4	4	75	25	100
Practical-3	Practical [ LAB COURSE –I ]	6	3	75	-	75
Practical-4	Practical [ LAB COURSE –II ]	6	3	75	-	75
Seminar	Seminar 3	1	1	-	25	25
	Seminar 4/Field Trip/Ind. Visit etc	1	1	-	25	25
		<b>30</b>	<b>24</b>			<b>600</b>

### Semester Three

Code	Theory/Practical	Teaching hours/week	Credit	Examination Scheme		
				External	Internal	Total
Core 9	Paper 9 [ MEDICINAL CHEMISTRY ]	4	4	75	25	100
Core 10	Paper 10 [ CHEMISTRY OF NATURAL PRODUCTS ]	4	4	75	25	100
Elective 1	Paper 11 [ TOXICOLOGY ]	4	4	75	25	100
	OR Paper 11 [ PHARMACEUTICAL BIOTECHNOLOGY]	4	4			
Elective 2	Paper 12 [PHARMACOGNOSY]	4	4	75	25	100
	OR Paper 12 [ HOMEOPATHIC PHARMACY –I ]	4	4			
Open Elective 1 Inter-disciplinary	Paper 13 [OUT OF ANY GROUP EXCEPT HEALTH CHEMISTRY ]	4	4	75	25	100
Practical -5	Practical [ LAB COURSE –I ]	6	3	75	-	75
Practical -6	Practical [ LAB COURSE –II ]	6	3	75	-	75
		<b>32</b>	<b>26</b>			<b>650</b>

### Semester Four

Code	Theory/Practical	Teaching hours/week	Credit	Examination Scheme		
				External	Internal	Total
Core 11	Paper 13[ ADVANCED MEDICINAL CHEMISTRY ]	4	4	75	25	100
Core 12	Paper 14 [ MODERN ANALYTICAL TECHNIQUES ]	4	4	75	25	100
Elective 3	Paper 15 [ DRUG DESIGN ]	4	4	75	25	100
	OR Paper 15 [PHARMACOLOGY]	4	4	75	25	100
Elective 4	Paper 16 [BIOPHARMACEUTICS AND PHARMACOKINETICS]	4	4	75	25	100
	OR Paper 16 [ HOMEOPATHIC PHARMACY –II ]	4	4	75	25	100
	OR Project	4	4	75	25	100
Practical -7	Practical [ LAB COURSE –I ]	6	3	75	-	75
Practical -8	Practical [ LAB COURSE –II ]	6	3	75	-	75
Internship		4	4	50	50	100
		<b>34</b>	<b>28</b>			<b>650</b>
	<b>Total</b>	<b>100</b>	<b>100</b>			<b>2500</b>

**Note :-**

- 1- Minimum passing marks will be 40% for each Theory, Practical, CCE, Internship/Project.