

Competency Mapping with the Courses (Part I,

At BUEST

II & III) of Education Regulations 2020

(w.e.f. 2024-25)

								(36,10)	
Competencies		Pharmaceutical Chemistry	Pharmacognosy	Human Anatomy & Physiology	Social Pharmacy	Pharmacology	Community Pharmacy& Management	Biochemistry & Clinical Pathology	Pharmacotherapeutics
1. Review the Prescriptions	1	1	V	1		V	1	1	1
2. Dispense Prescription / Non-Prescription		1	1		V	V	1	1	1
Medicines									
3. Provide Patient Counselling / Education	1	1	1	1	1	1	1	1	1
4. Hospital and Community Pharmacy Management					1		1		
5. Expertise on Medications	1	1	1	1	1	1	1	1	1
6. Proficiency on Pharmaceutical Formulations	1	1	1			1			1
7. Entrepreneurship and Leadership							1		
8. Deliver Primary and Preventive Healthcare				1	1	V	1	1	1
9. Professional, Ethical and Legal Practice					1		1		1
10. Continuing Professional Development	1	1	1		1	1	1		1

The ER-2020 D. Pharm Syllabus has the following structure in every course. Though the theory and practical courses are not mutually exclusive, as per the Regulations, the theory and practical are to be considered as individual courses.

Scope: These are broader statements on the purpose of the course in the curriculum, key contents of the course that will contribute to the specific knowledge and or skill developments. The teacher is expected to orient the students about the scope of the particular course at the beginning and intermittently.

Course Objectives: The course objectives describe the key topics that are intended by the teacher to be covered in the course. In general, these are more specific than the scope and broader than the course outcomes. The teacher isexpected to discuss the objectives of the course with the students and break-down the course objectives into micro levels as objectives of a specific topic / objectives of a specific lecture, etc. Such an exercise shall make the students to understand the significance of the course / topic / lecture and enhance their attention on the course / topic / lecture.

Course Outcomes: The course outcomes are more specific than the course objectives describe that describe the abilities of the students to perform/act, upon successful completion of the course. Hence, conventionally the course outcomes are described with verbs that are measurable or observable actions. The teacher is expected to describe the desired outcomes of the particular course, so that the students shall understand the various assessment criteria, modalities, and parameters. This also serves as a broader guideline for the teachers for preparing the assessment plan. A well-structured assessment plan associated with the course outcomes shall enable to mapping with the professional competencies and their attainment levels that are attributed to the program outcomes.

Theory Courses: The theory courses basically provide concepts and explain the relationships between the concepts. Understanding of the theoretical courses enable the students to identify the problems in real life situation and make a plan for addressing such problems. Also, the theory course helps to understand what is not known and thus is the tool for accumulation of knowledge. The syllabus of the theory courses has been systematically and logically described as different chapters andthe minimum number of hours to be spent on teaching are mentioned chapter wise and course wise. The teachers shall further distribute the total hours of any given chapter among the sub-topics as required by the subject matter.

Baddi University of Emerging Sciences, Technology, Baddi, Solan, H.P. (India) **Practical Courses:** The practical courses are designed for applying the theoretical knowledge in the given experimental / simulated conditions. The practical courses deepen the understanding of theories, develop the skills, hone professional competencies, provide opportunities to observe, think and analyse problem solving methods. Further, they help to gain experience with the real things in practice. The teachers shall train the students in actual / simulated practical conditions.

Tutorials: The purpose of the tutorial hour is typically to engage the students in smaller groups in order to pay a closer attention on their learning process. This is an opportunity for the students to complete their assignments, develop specific skills, discuss any problems in the study topics in a less formal way. During the tutorial hour, the students shall exchange their ideas within the small group, and learn to accept constructive criticism and listen to others. Also, the tutorial hour enables the teachers to closely monitor the progress of the individual student and provide additional academic support to individuals, if necessary.

Assignments: The purpose the assignments are to encourage the students for self- directed learning. Further, the assignments will provoke critical thinking, enhance the skills such as literature search, data mining, data interpretation, report formatting, time-management, and written communication. This is also a mode of self- assessment for the student about the level of understanding of the concepts of a particular course. The teachers shall apply their knowledge and wisdom in choosing the assignment topics at a micro level in alignment with the topics given in the syllabus. The assignments shall be evaluated against a set of criteria. A typical format for the assessment of an assignment is given in Appendix -1.

Field Visits: The purpose of field visits is to provide a real-world experience to the students. The field visits will help them to realize that what they learn within the walls of the classroom / laboratory can help them solve the problems they see in the world around them. Also, this is helpful to the teachers to widen their horizons of knowledge and broadening the scope of the syllabus. Every student shall submit a report describing their objectives, experience, learning points, etc. pertaining to the field trip, in the typical format given in Appendix-2.

Recommended Books: For each course, a list of recommended books is given in the syllabus. The list shall be considered as an important and common resource for the teaching-learning process, but not the complete list. It is always encouraged to use the latest edition of the books specified. Further, the teachers and students are encouraged to explore more primary, secondary, and tertiary resources as required.

Practical Training: The goal of the practical training for the students is to provide a real-time, supervised experience on the professional tasks emphasised in their course of study. Further, it helps them to apply their acquired knowledge and skills in the professional working environment. The practical training intensively prepares the students with adequate competencies and qualifications required for the career opportunity in the future.

Thus, the ER 2020 D.Pharm syllabus is designed to nurture the students in all the three domains of Bloom's Taxonomy viz. cognitive (knowledge), affective (attitude) and psychomotor (skills). Further, it also provides ample of scope to the students for different learning styles viz. visual, auditory and kinaesthetic, i.e., 'see, hear and do'.

The summary of the curriculum, courses and other activities and their metrics across the ER-2020 D.Pharm program (Part I, II & III) are given here.

Criteria	Metrics
Number of subject areas (considering both theory & practical together)	11
Number of theory courses	11
Number of practical courses	10
Number of theory hours	825
Number of practical hours	600
Number of practical training hours	500
Number of tutorial hours	275
Number of course outcomes for theory courses	45
Number of course outcomes for practical courses	40
Number of courses which have given assignments	9
Number of assignment topics given	75
Number of assignments reports each student shall submit	27
Number of courses which have field visit	5
Number of field visit reports each student shall submit	9
Number of professional competencies	10

ER-2020 D.Pharm Syllabus – First Year

S.	Course	Name of the	Total	Total	Theory /	Tutorial
No.	Code	Course	Theory /	Tutorial	Practical	Hours
			Practical	Hours	Hours	per
			Hours		per	Week
					Week	
1.	ER20-11T	Pharmaceutics –	75	25	3	1
		Theory				
2.	ER20-11P	Pharmaceutics –	75	-	3	-
		Practical				
3.	ER20-12T	Pharmaceutical	75	25	3	. 1
		Chemistry – Theory				
4.	ER20-12P	Pharmaceutical	75	-	3	-
		Chemistry —				
		Practical				
5.	ER20-13T	Pharmacognosy –	75	25	3	1
		Theory				
6.	ER20-13P	Pharmacognosy –	75	-	3	-
		Practical				
7.	ER20-14T	Human Anatomy &	75	25	3	1
		Physiology —				
		Theory				
8.	ER20-14P	Human Anatomy &	75	-	3	-
		Physiology –				
		Practical				
9.	ER20-15T	Social Pharmacy –	75	25	3	1
		Theory				
10.	ER20-15P	Social Pharmacy –	75	-	3.	_
		Practical				

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ER-2020 D.Pharm Syllabus – Second Year

S.	Course	Name of the Course	Total	Total	Theory /	Tutorial
No.	Code		Theory /	Tutorial	Practical	Hours
			Practical	Hours	Hours	per
			Hours		per	Week
					Week	
1.	ER20-21T	Pharmacology –	.75	25	3	1
		Theory				
2.	ER20-21P	Pharmacology –	50	-	2	_
		Practical				
3.	ER20-22T	Community Pharmacy&	75	25	3	1
		Management — Theory				
4.	ER20-22P	Community Pharmacy&	75	-	3	_
		Management — Practical				
5.	ER20-23T	Biochemistry & Clinical	75	25	3	1
		Pathology – Theory				
6.	ER20-23P	Biochemistry & Clinical	50	-	2	-
		Pathology – Practical				
7.	ER20-24T	Pharmacotherapeutics	75	25	3	1
		- Theory				
8.	ER20-24P	Pharmacotherapeutics	25		1	-
		- Practical				
9.	ER20-25T	Hospital & Clinical	75	25	3	1
		Pharmacy – Theory				
10.	ER20-25P	Hospital & Clinical	25	<u> </u>	1	-
		Pharmacy – Practical				
11.	ER20-26T	Pharmacy Law &	75	25	3	1
		Ethics				

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Guidelines for the conduct of theory examinations

Eligibility for appearing at the Diploma in Pharmacy Part-I examination:

Only such candidates who produce certificate from the Head of the Academic institution in which he /she has undergone the Diploma in Pharmacy Part-I course, in proof of his /her having regularly and satisfactorily undergone the course of study by attending not less than 75% of the classes held both in theory and in practical separately in each subject shall be eligible for appearing at the Diploma in Pharmacy (Part-I) examination.

Eligibility for appearing at the Diploma in Pharmacy Part-II examination:-

Only such candidates who produce certificate from the Head of the academic institution in which he/she has undergone the Diploma in Pharmacy Part-II course, in proof of his /her having regularly and satisfactorily undergone the Diploma in Pharmacy Part-II course by attending not less than 75% of the classes held both in theory and in practical separately in each subject shall be eligible for appearing at the Diploma in Pharmacy (Part-II) examination.

Sessional Examinations

There shall be two or more periodic sessional (internal assessment) examinations during each academic year. The duration of the sessional exam shall be 90 minutes. The highest aggregate of any two performances shall form the basis of calculating the sessional marks. The scheme of the question paper for theory sessional examinations shall be as given below.

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I. Long Answers (Answer 3 out of 4)	$3 \times 5 = 15$
II. Short Answers (Answer 5 out of 6)	$5 \times 3 = 15$
III. Objective type Answers (Answer all 10 out of 10)	10 x 1 =10
(Multiple Choice Questions / Fill-in the Blanks /One	
word OR one Sentence questions)	

Total = 40 marks

Internal assessment: The marks secured by the students out of the total 40 shall bereduced to 20 in each sessional, and then the internal assessment shall be calculated based on the best two averages for 20 marks.

Final Board / University Examinations

The scheme of the question paper for the theory examinations conducted by the examining authority (Board / University) shall be as given below. The duration of the final examination shall be 3 hours.

I. Long Answers (Answer 6 out of 7)	=	$6 \times 5 = 30$
II. Short Answers (Answer 10 out of 11)	=	$10 \times 3 = 30$
III. Objective type Answers (Answer all 20)	=	$20 \times 1 = 20$
(Multiple Choice Questions / Fill-in the Blanks /		
One word OR one Sentence questions)		

Total = 80 marks

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Guidelines for the conduct of practical examinations

Sessional Examinations

There shall be two or more periodic sessional (internal assessment) practical examinations during each academic year. The duration of the sessional exam shall be three hours. The highest aggregate of any two performances shall form the basis of calculating the sessional marks. The scheme of the question paper for practical sessional examinations shall be as given below.

	Total =	80 marks
IV. Practical Record Maintenance	=	10
III. Viva voce	=	10
II. Experiments	=	50*
I. Synopsis		10

^{*} The marks for the experiments shall be divided into various categories, viz. major experiment, minor experiment, spotters, etc. as per the requirement of the course.

Internal assessment: The marks secured by the students out of the total of 80 shall be reduced to 10 in each sessional, and then the internal assessment shall be calculated based on the best two averages for 10 marks from the sessional andother 10 marks shall be awarded as per the details given below.

Actual performance in the sessional examination		= 10 marks
Assignment marks (Average of three)		= 5 marks*
Field Visit Report marks (Average for the reports)		= 5 marks ^{\$}
	Total	= 20 marks

^{*, \$} Only for the courses given with both assignments and field visit/s

Note:

- 1. For the courses having either assignments or field visit/s, the assessments of assignments or field visit/s shall be done directly for 10 marks and added to the sessional marks.
- 2. For the courses not having both assignment and field visit, the whole 20 marks shall be calculated from the sessional marks.

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Final Board / University Examinations

The scheme of the question paper for the practical examinations conducted by the examining authority (Board / University) shall be as given below. The duration of the final examination shall be 3 hours.

I. Synopsis		=	10
II. Experiments		=	60*
III. Viva voce		=	10
	T	otal =	80 marks

^{*} The marks for the experiments shall be divided into various categories, viz. major experiment, minor experiment, spotters, etc. as per the requirement of the course.