



BENGAL SCHOOL OF TECHNOLOGY

Approved by Pharmacy Council of India, New Delhi

Affiliated to: Maulana Abul Kalam Azad University of Technology(MAKAUT)&

West Bengal State Council of Technical and Vocational Education and Skill Development (WBSCT&VE&SD)

Accredited by NAAC with "A" Grade, accredited by NBA for B. Pharm

Sugandha, Delhi Road, Near Chinsurah Railway Station, Dist: Hooghly-712 102, West Bengal

Course Objectives (CO):

Specific statements setting measurable expectations for learners, described either in terms of learning outcomes (what the learners are expected to learn), products or performance (what learners will produce as a result of a learning activity) or processes describing the focus of learning activities, along with application based interactive studies.

Program Objectives (PO):

They are the fixed achievable goals set up by the institute in accordance to the standard Accrediting body of the country after the completion of 4 years of B.Pharmacy course. There are a set of eleven POs (PO-1: Pharmacy Knowledge, PO-2: planning abilities, PO-3: Problem Analysis, PO-4: Modern tool uses, PO-5: Leadership skill, PO-6: Professional Identity, PO-7: Pharmaceutical ethics, PO-8: Communication, PO-9: Pharmacist & society, PO-10: Environment & Sustainability, PO-11: Lifelong learning) these classified to Program Specific Objectives and Program nonspecific objectives.

Both the COs and POs are enlisted / displayed in website and the link address is displayed in Notice Board. Students and teachers are asked to go through the link to get an idea about COs and POs. The COs are updated according to the changed syllabus needs if needed.

The program must include detailed explanations of the course and program articulation matrices, the methods of course delivery, the ways in which assessment instruments are applied to evaluate the impact of the course material, and the ways in which laboratory and project work contribute to the achievement of the course and program outcomes.

There are two ways to evaluate PO attainment:

Directly and Indirectly.

In essence, direct methods of assessment involve directly examining or observing students' knowledge or skills in relation to quantifiable performance indicators where we have 80% wages and in case of indirect attainment having 20% wages. The indirect attainment in PO is composed of "feedback system" specifically student feedback on teachers after each semester which is graded as 3, 2, 1 (<80% =3, 70-79%=2, 60-69%=1). CO attainment 70% marks calculated from university grades and 30% from the internal assessment scores where we calculate each and individual student's performance bases on our CO-PO rubrics matrix. The cutoff wages for qualify the attainment was 40% initially but later on we implemented this cutoff as 50% and 55% consecutively. After completing the same calculations for eight semesters we can ultimately get the total attainments of a 4years course curriculum.

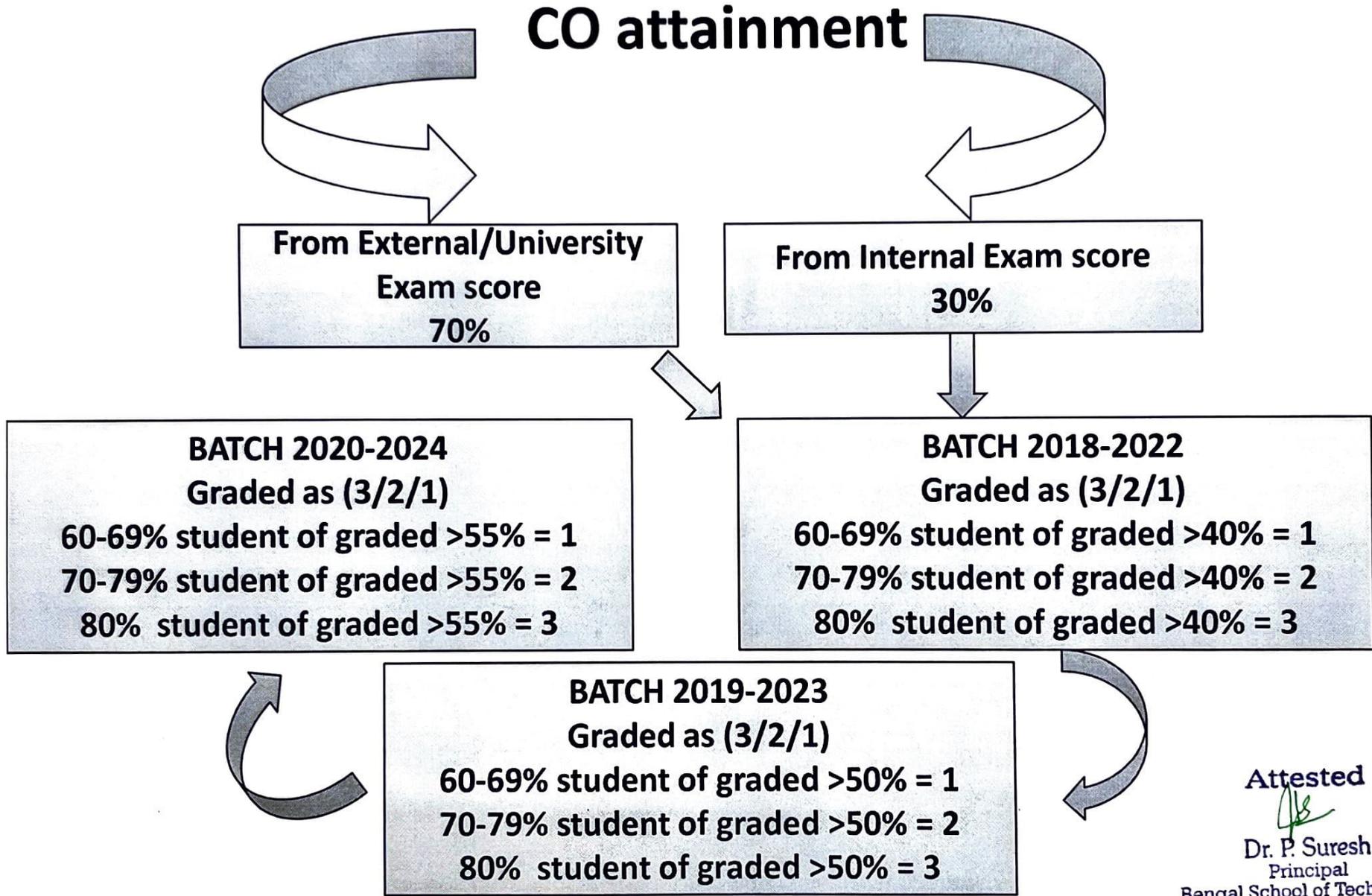

Atanu Chatterjee
Criteria Coordinator


IQAC Coordinator


Principal

Dr. P. Suresh
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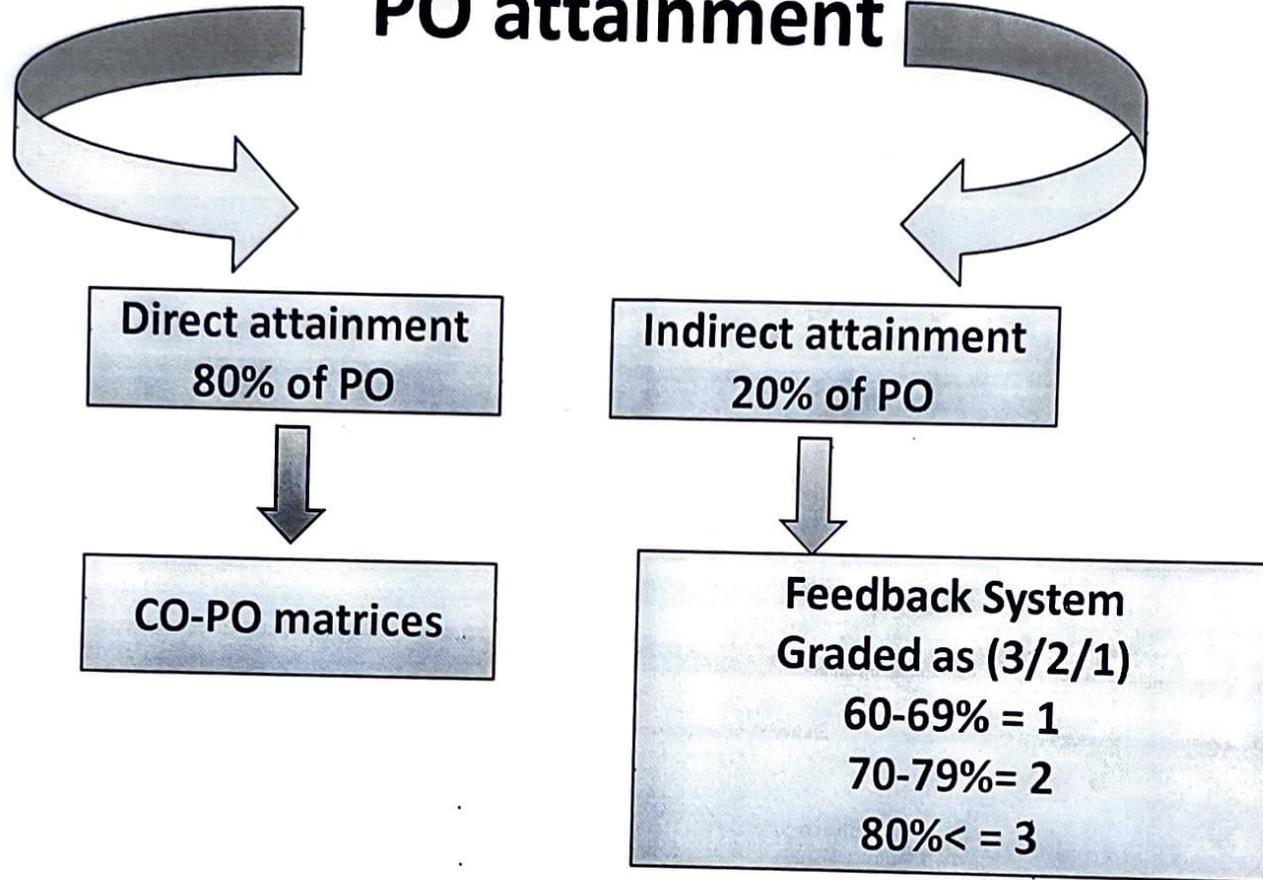
CO attainment



Attested

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PO attainment

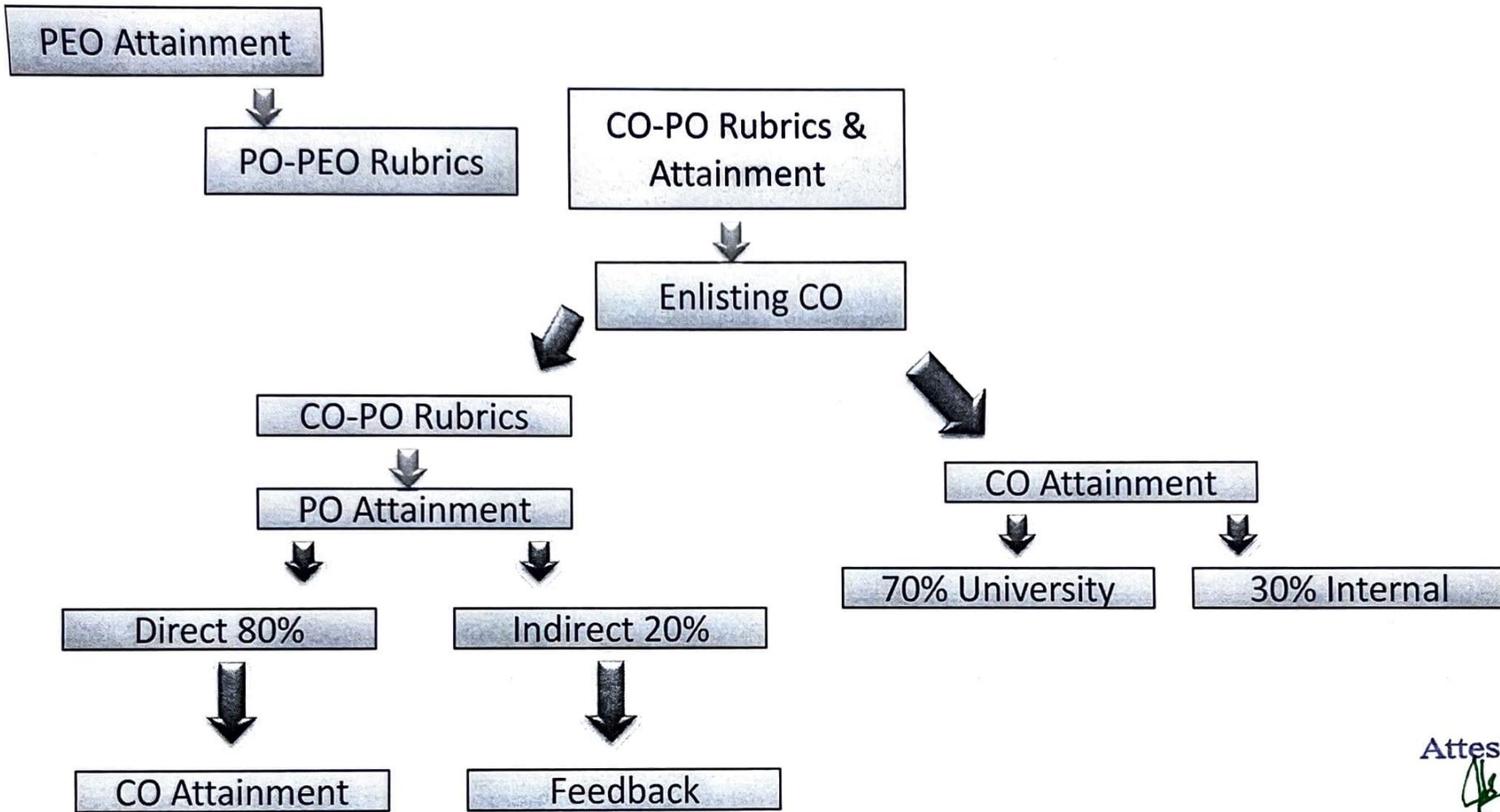


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Establishment of correlation between CO-PO



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CO ASSESSMENT PROCESS

The assessment process used together the data upon which the evaluation of course outcome is based is as follows:

1. University semester examination.
2. Set of Internal questions & performance of the students.
3. Laboratory tests.
4. Viva-voce.
5. Assignment evaluation.

ATTAINMENT OF COURSE OUTCOME:

Correlation level: 1=slight (low)

Correlation level: 2=Moderate (medium)

Correlation level: 3=Substantial (High)

As per curriculum prescribed by MAKAUT weightages of end semester exam marks & internal exam marks were considered and it was decided to calculate the CO attainment as 70% weightages of the university End Term examination and 30% weightages to the Internal Examination.

Example: 70% of 3 + 30% of 3

$$= 2.1 + 0.9$$

$$= 3$$

Attested



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Evaluation of Programme Outcome (PO) Target value set up

After detailed study & course development strategy analysis, our Institutional IQAC cell proposed few **Programme outcome (PO) attainment target level** for to enhance the attainment quality of programme, so that we can trace out the shortfall in study design, course flaws as well as students output in the final semester. Depending upon the final result our faculty member evaluates the **PO level** whether final **PO attainment target level** satisfied or not. If any unachieved target is identified; proper action will be taken thereof.

- The set up level of **PO attainment target** will be taken as 60% of maximum attainment score 3 (As 3 is taken as 100%) in the scale of 3/2/1.
- Institute is assigning the target level for the first time in this session of 2018-2022 (4 Yr batch), we are capturing attainment score 2 in 3/2/1 scale as 100%.
- As per IQAC decision the PO target value for 2019-2023 will be 3 as 100%.
(Meeting no 21 at 5/12/2022)
- After successfully satisfied of all the attainment target level, Institutional Internal Quality assurance cell (IQAC) will increase PO target by 20% of the previous batch target value.
- If the attainment level is not reached/Satisfied the PO target value will remain unchanged as previous batch.

Example:

- ✓ If we take PO target value 60% of maximum attainment level 3 it will be 1.8.
- ✓ If all the experimental POs (from PO1 to PO 11) attainment will exceeds the value 1.8 then from the next year the target value will increased by 20% of 1.8 which is 0.36 and final PO target value will be $(1.8+0.36)= 2.16$.


Criteria Coordinator


IQAC Coordinator


Principal

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Visit: www.bstpharmacy.in

Courses offered: D.Pharm, B. Pharm, M. Pharm (Pharmaceutics), M. Pharm (Pharmacology)



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The Total attainment for the batch 2020-2024

CO-PO TOTAL ATTAINMENT 2020- 2024 BATCH

Course	Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
PHARMACEUTICAL ANALYSIS	PT 100	3	3	3	2	0	3	3	1	2	1	3
HUMAN ANATOMY AND PHYSIOLOGY	PT 101	3	0	2	2	0	2	2	2	2	2	3
PHARMACEUTICAL INORGANIC CHEMISTRY	PT 102	3	3	2	2	0	3	3	1	2	1	3
PHARMACEUTICS-I	PT 103	2	1	2	2	1	1	1	2	2	2	3
PATHOPHYSIOLOGY	PT 104	3	0	3	3	1	1	1	3	3	2	3
BIOCHEMISTRY	PT 104	3	1	1	2	0	3	2	1	3	3	3
PHARMACEUTICAL ORGANIC CHEMISTRY-I	PT 105	3	3	3	1	0	3	2	1	2	1	3
HAP-II	PT 105	3	0	3	3	0	2	2	2	3	2	3
PHARMACEUTICAL ORGANIC CHEMISTRY-II	PT 104	1	3	3	2	0	3	2	1	2	2	3
PHARMACEUTICAL MICROBIOLOGY	PT 109	1	2	2	2	1	2	1	2	2	2	3
PHYSICAL PHARMACEUTICS-I	PT 106	3	2	3	3	1	1	1	2	3	1	3
PHARMACEUTICAL ENGINEERING	PT 107	2	2	3	3	1	2	1	1	2	1	3
MEDICINAL CHEMISTRY-I	PT 108	3	2	3	3	1	1	1	2	3	1	3
PHARMACOLOGY & PHYTOCHEMISTRY-I	PT 111	3	2	3	3	1	1	1	2	3	1	3
PHARMACEUTICAL ORGANIC CHEMISTRY-III	PT 104	3	2	2	0	1	2	1	1	2	3	3
PHARMACOLOGY-I	PT 108	3	0	2	1	0	0	2	1	2	1	3
PHYSICAL PHARMACEUTICS-II	PT 109	3	2	3	3	1	1	1	2	3	1	3
PHARMACOLOGY & PHYTOCHEMISTRY-II	PT 111	2	1	2	2	1	1	1	1	2	1	2
INDUSTRIAL PHARMACY-I	PT 112	3	2	2	0	0	0	0	0	0	0	3
MEDICINAL CHEMISTRY-II	PT 108	3	2	3	3	0	3	2	1	2	2	3
PHARMACEUTICAL JURISPRUDENCE	PT 116	2	1	1	2	2	1	2	1	2	2	2
PHARMACOLOGY-II	PT 108	3	0	3	1	0	0	2	2	3	2	3
PHARMACEUTICAL QUALITY ASSURANCE	PT 611	3	2	3	1	2	1	3	2	3	2	3
BIOPHARMACEUTICS AND PHARMACOKINETICS	PT 616	2	1	2	1	1	2	1	1	2	1	2
MEDICINAL CHEMISTRY-III	PT 613	2	2	2	2	0	3	2	1	2	2	3
HERBAL DRUG TECHNOLOGY	PT 612	2	1	1	2	2	1	2	1	2	2	2
PHARMACOLOGY-III	PT 618	3	0	2	1	0	3	2	1	2	1	3
PHARMACEUTICAL BIOTECHNOLOGY	PT 619	3	2	3	2	1	1	1	2	3	1	3
Instrumental Methods of Analysis	PT 714	2	1	1	1	0	2	1	1	1	1	2
Industrial Pharmacy II	PT 716 A	2	2	2	2	1	1	1	2	2	1	2
Novel Drug Delivery System	PT 716 B	1	1	1	1	0	1	0	1	1	0	1
Pharmacy Practice	PT 718	3	2	3	3	1	1	1	2	3	1	3
Pharma Marketing Management(Elective)*	PT 610 A	2	3	3	2	3	3	2	3	2	1	3
Advanced Instrumentation Techniques(Elective)*	PT 610 C	2	1	1	2	0	0	0	0	0	0	2
Biostatistics and Research Methodology	PT 617	2	0	2	1	1	1	2	1	1	1	1
Social and Preventive Pharmacy	PT 618	3	1	2	3	2	3	3	3	3	3	3
Average attainment		2.5556	1.4722222	2.2777778	2	0.7222222	1.65	1.5277778	1.4722222	2.1388889	1.4166667	2.6944444
80% of Average attainment (direct attainment)		2	1	2	2	1	1	1	1	2	1	2
20 % of Average attainment (Indirect Attainment)		0.5	0.3	0.5	0.4	0.1	0.2	0.2	0.2	0.3	0.2	0.5
Total attainment		1.7	1.0	1.7	1.7	0.8	1.0	1.0	1	1.7	1	1.7

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