

IES Institute of Pharmacy

Pharmacy

Part A : Institutional Information

1 Name and Address of the Institution

IES Institute of Pharmacy,
IES CAMPUS KALKHEDA RATIBAD MAIN ROAD BHOPAL (M.P.)462044, BHOPAL

2 Name and Address of Affiliating University

IES University Bhopal

3 Year of establishment of the Institution:

2017

4 Type of the Institution:

- University
 Deemed University
 Autonomous
 Affiliated
 Any other(Please Specify)

5 Ownership Status:

- Central Government
 State Government
 Grant In Aided
 Self financing
 Trust
 Society
 Section 25 Company
 Any Other(Please Specify)

6 Other Academic Institutions of the Trust/Society/etc., if any

Name of Institutions	Year of Establishment	Programs of Study	Location
IES College of Technology	2007	Engineering and Technology	Bhopal
IES Public School	2015	Primary and Secondary education	Bhopal

7 Details of all the programs being offered by the Institution under consideration:

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Pharmacy	UG	2017	2017	100	No	100	Applying first time	--	--	Yes	4
Diploma in Pharmacy	Diploma	2017	2017	60	No	60	Eligible but not applied	--	--	No	2
Pharmacy	PG	2022	2022	15	No	15	Not eligible for accreditation	--	--	No	2

8 Programs to be considered for Accreditation vide this application:

S No	Level	Discipline	Program
1	Under Graduate	Pharmacy	Pharmacy

9 Total number of employees

A. Regular* Employees (Faculty and Staff):

Items	2022-23		2021-22		2020-21	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Pharmacy (Male)	22	22	18	18	19	19
Faculty in Pharmacy (Female)	17	17	17	17	16	16
Faculty in Science & Humanities (Male)	02	02	03	03	03	03
Faculty in Science & Humanities (Female)	02	02	01	01	01	01
Non-teaching staff (Male)	17	17	13	13	13	13
Non-teaching staff (Female)	04	04	05	05	05	05

B. Contractual* Employees (Faculty and Staff):

Items	2022-23		2021-22		2020-21	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Pharmacy (Male)	0	0	0	0	0	0
Faculty in Pharmacy (Female)	0	0	0	0	0	0
Faculty in Science & Humanities (Male)	0	0	0	0	0	0
Faculty in Science & Humanities (Female)	0	0	0	0	0	0
Non-teaching staff (Male)	0	0	0	0	0	0
Non-teaching staff (Female)	0	0	0	0	0	0

10 Total number of Pharmacy students:

UG	<input checked="" type="checkbox"/> Shift1	<input type="checkbox"/> Shift2
PG	<input checked="" type="checkbox"/> Shift1	<input type="checkbox"/> Shift2
Diploma	<input checked="" type="checkbox"/> Shift1	<input type="checkbox"/> Shift2

UG Shift-1

Total number of Pharmacy students	2022-23	2021-22	2020-21
Total No. of Boys	362	372	334
Total No. of Girls	28	19	17
Total	390	391	351

PG Shift-1

Total number of Pharmacy students	2022-23	2021-22	2020-21
Total No. of Boys	1	0	0
Total No. of Girls	0	0	0
Total	1	0	0

Diploma Shift-1

Total number of Pharmacy students	2022-23	2021-22	2020-21
Total No. of Boys	102	106	103
Total No. of Girls	18	11	11
Total	120	117	114

11 Vision of the Institution:

To create pharmacy graduates in the field of pharmaceutical sciences through an effective teaching-learning process, to make them competent pharmacy professional with professional ethics for better employment

12 Mission of the Institution:

- M-1. To impart pharmaceutical knowledge to the students through effective teaching and learning process.
- M-2. To assure the availability of intellectual assets in terms of qualified faculties who are dedicated for the development of competent pharmacy graduates.
- M-3. To enhance human values in the students for the upliftment of society through motivational classes, industrial visits and extracurricular activities.
- M-4. To make competent students for higher studies at Global level and to develop entrepreneurial abilities in order to improve their employability.

13 Contact Information of the Head of the Institution and NBA coordinator, if designated:

Head of the Institution	
Name	Dr. Vinod Kumar Gauttam
Designation	Principal
Mobile No.	9285009752
Email ID	iespharmacy@iesbpl.ac.in

 NBA Coordinator, If Designated

Name	Dr. Jyotiram Sawale
Designation	Professor
Mobile No.	9691496304
Email ID	campus@iesbpl.ac.in

PART B: Criteria Summary

Criteria No.	Criteria	Total Marks	Institute Marks
1	VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES	50	50.00
2	PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES	150	150.00
3	COURSE OUTCOMES (COS) AND PROGRAM OUTCOMES (POS)	100	100.00
4	STUDENTS' PERFORMANCE	180	136.12
5	FACULTY INFORMATION AND CONTRIBUTIONS	175	145.48
6	FACILITIES	120	120.00
7	CONTINUOUS IMPROVEMENT	75	72.25
8	STUDENT SUPPORT SYSTEMS	50	50.00
9	GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES	100	100.00
	Total	1000	923

Part B

1 VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (50)

Total Marks 50.00

1.1 State the mission & vision (5)

Total Marks 5.00

Institute Marks : 5.00

Vision of the institute	To create pharmacy graduates in the field of pharmaceutical sciences through an effective teaching-learning process, to make them competent pharmacy professional with professional ethics for better employment	
Mission of the institute	<p>M-1. To impart pharmaceutical knowledge to the students through effective teaching and learning process.</p> <p>M-2. To assure the availability of intellectual assets in terms of qualified faculties who are dedicated for the development of competent pharmacy graduates.</p> <p>M-3. To enhance human values in the students for the upliftment of society through motivational classes, industrial visits and extracurricular activities.</p> <p>M-4. To make competent students for higher studies at Global level and to develop entrepreneurial abilities in order to improve their employability.</p>	
Vision of the Department	To create pharmacy graduates in the field of pharmaceutical sciences through an effective teaching-learning process, to make them competent pharmacy professional with professional ethics for better employment.	
Mission of the Department	Mission No.	Mission Statements
	M1	M-1. To impart pharmaceutical knowledge to the students through effective teaching and learning process.
	M2	M-2. To assure the availability of intellectual assets in terms of qualified faculties who are dedicated for the development of competent pharmacy graduates.
	M3	M-3. To enhance human values in the students for the upliftment of society through motivational classes, industrial visits and extracurricular activities.
	M4	M-4. To make competent students for higher studies at Global level and to develop entrepreneurial abilities in order to improve their employability.

1.2 State the Program Educational Objectives (PEOs) (5)

Total Marks 5.00

Institute Marks : 5.00

PEO No.	Program Educational Objectives Statements
PEO1	PEO1. Work as pharmacy professional in the area of manufacturing, marketing and pharmacists by applying fundamental and practical knowledge.
PEO2	PEO2. Engage in multidisciplinary works such as, higher education, or entrepreneurship by enhancement of in depth knowledge.
PEO3	PEO3. Provide real life solutions to Pharmaceutical problems by enhancing human values among the students and encourage them to follow ethical practices

1.3 Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders (15)

Total Marks 15.00

The Mission and Vision and PEOs have been published by using strengths, weaknesses, opportunities and challenges (SWOC) analysis in wide number platforms so that these get adequate publicity amongst the stakeholders. The vision and mission are exclusively explained to the newly enrolled students and their parents during orientation program. The alumni are updated about the Mission and Vision during alumni interaction. The statements are communicated to the industry/employers through introductory presentation during industrial visits, placement drives and other industry-institute interactions. Faculty and staff members recruited newly are also informed and explained about Mission and Vision and PEOs at the time of orientation program. In addition, the dissemination of PEOs to various stakeholders is also done through faculty meetings and Departmental Consultative Committee (DCC) meeting.

Various platforms where Vision & Mission and PEOs are disseminated are given as under:-

- Web-site of the institute
- News letters published by the institute: QUEST
- Admission brochure of the institute.
- Notice board of the Institute located at strategic places of the Institute.
- Display boards.
- Seminar hall.
- Class Room & Labs
- Course file of the Faculty
- Principal Office
- Staff rooms
- Department Library
- Lab Manuals

Particulars	Internal Stake Holders	External Stake Holders
Web-site of the institution	Yes	Yes
News Letters published by the Institution: QUEST	Yes	Yes
Admission brochure of the Institution	Yes	Yes
Handbook of the Institution	Yes	Yes

Table: 1.1 The Vision and Mission and PEOs are published

S.No.	Where published/disseminated	Target stakeholders
1	Institute website	Students, Parents, Faculty, Alumni, Industry, Management.
2	Annual Functions	Students, Parents, Faculty, Alumni, Industry
3	Display Boards / Notice Boards	Students, Faculty, Parents, Industry, Alumni, Employers, Management, Governing Body Members, Departmental Consultative Committee Members
4	Principal room, Faculty rooms, Laboratories, Seminar hall.	Students, Parents, Faculty

Table: 1.2 The Vision & Mission and PEOs are disseminated

1.4 State the process for defining the Vision & Mission and PEOs of the program (10)

Total Marks 10.00

A. Description of process involved in defining the Vision, Mission of the institute

The institute established Vision and Mission through consultative process involving stakeholders, faculty, industry persons and many other relevant areas considering scope and growth of the institute, future societal needs & also following points in view:

- Requirement of Academia
- Recruiters and Employers
- Stakeholders/Management
- Parents and Alumni
- Brainstorming sessions in faculty meetings
- Students and staff

Following process adopted in developing institute Vision and Mission statements:

- Step 1: Consideration of SWOC Analysis of the institute for finding Strength, Weakness, Opportunities and Challenges in Pharmacy domain.
- Step 2: Through discussions & deliberations with internal and external stakeholders, the institute drafted its Vision and Mission.
- Step 3: Conduction of Brain Storming session in DCC for drafting of Vision and Mission of the institute and carry forward to IQAC for its final approval.
- Step 4: IQAC endorsed the final vision and mission statements.

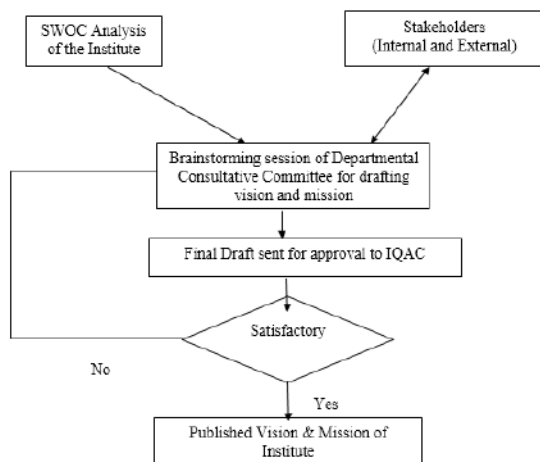


Figure 1.1: Process of Vision and Mission

B. Description of process involved in defining the PEOs of the program.

The program educational objectives (PEOs) were formulated / reviewed through a consultative process among faculty members, alumni representatives, Industry experts, Training experts and Departmental Consultative Committee (DCC).

The PEOs are established through the following steps:

- Step-1:** Consideration of Vision and Mission of the institute.
- Step-2:** Consideration of Feedback from Internal and External Stakeholders.
- Step-3:** Conduction of Brain Storming session in DCC for drafting PEOs of the institute and carry forward to IQAC for its final approval.
- Step-4:** IQAC reviewed and published the final PEOs.

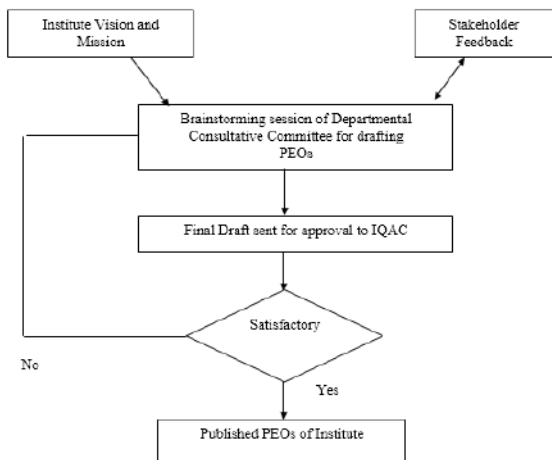


Figure 1.2: Flow Chart of defining PEOs

A. Preparation of a matrix of PEOs and elements of Mission statement.

PEO Statements	M1	M2	M3	M4
PEO1: Work as pharmacy professional in the area of manufacturing, marketing and pharmacists by applying fundamental and practical knowledge.	3	2	2	1
PEO2: Engage in multidisciplinary works such as, higher education, or entrepreneurship by enhancement of in depth knowledge.	2	2	2	3
PEO3: Provide real life solutions to Pharmaceutical problems by enhancing human values among the students and encourage them to follow ethical practices	1	2	3	2

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Table: 1.3 Mapping of PEOs with Mission of the institute

B. Justify the academic factors involved in achievement of the PEO's

PEOs	M1	M2	M3	M4
PEO-1	3	2	2	1
	Provide strong correlation with PEO1 as academic excellence is the objective with effective teaching learning process through the use of modern teaching aids, remedial & extra classes, extra lab hours, tutorial sessions, organization of Pharma related activities to develop professionals.	Strongly support to achieve PEO1, as the objective is to develop the ability among students to understand the concepts of pharmaceutical sciences which can be accomplished if graduates are facilitates understanding of technological advancements through best faculties and infrastructure.	Correlates with PEO1 through the participation of students in the management of various university activities like NCC, cultural, sports and other tech fests. The versatility and advanced skills of Pharmacy graduates are becoming increasingly valuable by crafting smarter solutions for safer, more efficient and impactful outcomes to contribute in different sectors of Pharmacy and related industries as per their needs.	Correlates with PEO1 Graduates apply their knowledge and technical competence in the field of pharmaceutical sciences along with the applications of broad field of Pharmaceutical science such as manufacturing, patient care, community health etc. Students are benefited by acquiring opted placement opportunities in manufacturing, marketing, chemists, medical coding industries or empowering knowledge to do higher education or an entrepreneur.
PEO-2	2	2	2	3
	Producing graduates with ability of problem solving, analyzing complex things and applying pharmaceutical principles by providing best teaching and learning environment through innovative teaching and modern practices in the field of Pharmaceutical Science.	Producing graduates with ability of problem solving, analyzing complex things and applying chemical, and other principles of Pharmaceutical science under the guidance and mentoring of qualified faculties to undergo entrepreneurship and advanced fields rather conventional field of the opportunity	Producing graduates with ability of handling societal issues related to healthcare issues, while involved in professional practices including health awareness camp, industrial visits, organizing, blood donation camp and industrial/hospital trainings	Graduates will have strong knowledge in pharmaceutical fundamental to get benefits in their career in MNCs or to continue their higher Studies and research or to become an entrepreneur by providing strong foundation in the core pharmaceutical sciences and research

PEO-3	1	2	3	1
	Graduates will have an ability of handling modern tools to design solutions for complex core problems in the field of Pharmaceutical Science by providing best teaching and learning environment through practical and laboratory research	Awareness is created among the students about the alternatives and various trends in the technology during classroom teaching, which brings about inquisitives in the students.	Graduates will have an ability of handling modern tools to design solutions in their core area for the need of Public domain and Social empowerment techniques by preparing the students with strong knowledge, attitude, and ethics to contribute a responsible role in the society	Graduates will have strong knowledge in core pharmaceutical science and technologies to get benefits in their career in MNCs or to become an entrepreneur by motivating the students in the aspects of professional ethics and leadership quality to serve the society

Table: 1.4 Justifications of Mapping of PEOs with Mission of the Department

PEO Statements	M1	M2	M3	M4
PEO1. Work as pharmacy professional in the area of manufacturing, marketing and pharmacists by applying fundamental and practical knowledge.	3	2	2	1
PEO2. Engage in multidisciplinary works such as, higher education, or entrepreneurship by enhancement of in depth knowledge.	2	2	2	3
PEO3. Provide real life solutions to Pharmaceutical problems by enhancing human values among the students and encourage them to follow ethical practices	1	2	3	2

2 PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES (150)

Total Marks 150.00

2.1 Program Curriculum (40)

Total Marks 40.00

1. B. Pharmacy is a Four Years (8 Semesters) Degree Program conducted in semesters. The Curriculum of B. Pharmacy is provided by the Rajiv Gandhi Proutyogiki Viswavidyalaya (RGPV), Bhopal (2017-18, 2018-19 and 2019-20 Batches), whereas the syllabus of 2020-21 batches onwards is prescribed and provided by IES University, Bhopal.
2. Choice Based Credit System (CBCS) is implemented by both the Universities.
3. Syllabus specifies number of lectures and practical in each course.
4. The Teaching & Examination Scheme specifies the duration and marks of both Internal and External Theory and Practical examination.
5. As per the Curriculum:
 - The internal exam constitutes continuous internal assessment comprising of periodic test and continuous evaluation.
 - The external exam constitutes end semester examination comprising of theory and practical.
6. As per the CBCS curriculum, the percentage of marks for end semester (External/University) examination and Internal examination is 75% and 25%, respectively.
7. All subjects/ courses are to be registered by the student in a semester to earn credits which shall be assigned to each subject/course in an L T P C (Lecture Periods: Tutorial Periods: Practical Periods: Credits)

Contents of Syllabus–Courses and Modes of Teaching (2017-18 & 2018-19)

Course code	Course title	Total number of contact hours				Credits/ Marks
		Lecture (L)	Tutorial (T)	Practical (P)	Total	
B. Pharmacy I Year (I Semester)						
BP101 T	Human Anatomy and Physiology - I	3	1	0	4	4
BP102 T	Pharmaceutical Analysis - I	3	1	0	4	4
BP103 T	Pharmaceutics-I	3	1	0	4	4
BP104 T	Pharmaceutical Inorganic Chemistry – I	3	1	0	4	4
BP105 T	Communication skill*	2	0	0	2	2
BP106 RBT /BP106 RMT	Remedial Biology/Remedial mathematics*	2	0	0	2	2
BP107 P	Human Anatomy and Physiology– I Lab	0	0	4	4	2
BP108 P	Pharmaceutical Analysis I Lab	0	0	4	4	2
BP109 P	Pharmaceutics-I Lab	0	0	4	4	2
BP110 P	Pharmaceutical Inorganic Chemistry–I Lab	0	0	4	4	2
BP111 P	Communication skill Lab*	0	0	2	2	1
BP112 P	Remedial Biology Lab*	0	0	2	2	1
B. Pharmacy I Year (II Semester)						
BP201 T	Human Anatomy and Physiology-II	3	1	0	4	4
BP202 T	Pharmaceutical Organic Chemistry–I	3	1	0	4	4
BP203 T	Biochemistry	3	1	0	4	4
BP204 T	Pathophysiology	3	1	0	4	4
BP205 T	Computer Application in Pharmacy*	3	0	0	3	3
BP206 T	Environmental Sciences*	3	0	0	3	3
BP207 P	Human Anatomy and Physiology-II Lab	0	0	4	4	2
BP208 P	Pharmaceutical Organic Chemistry–I Lab	0	0	4	4	2
BP209 P	Biochemistry Lab	0	0	4	4	2
BP210 P	Computer Application in Pharmacy Lab*	0	0	2	2	1
B. Pharmacy II Year (III Semester)						
BP301 T	Pharmaceutical Organic Chemistry–II	3	1	0	4	4
BP302 T	Physical Pharmaceutics–I	3	1	0	4	4
BP303 T	Pharmaceutical Microbiology	3	1	0	4	4
BP304 T	Pharmaceutical Engineering	3	1	0	4	4
BP305 P	Pharmaceutical Organic Chemistry-II Lab	0	0	4	4	2
BP306 P	Physical Pharmaceutics–I Lab	0	0	4	4	2
BP307 P	Pharmaceutical Microbiology Lab	0	0	4	4	2
BP308 P	Pharmaceutical Engineering Lab	0	0	4	4	2
B. Pharmacy II Year (IV Semester)						
BP401 T	Pharmaceutical Organic Chemistry–III	3	1	0	4	4
BP402 T	Medicinal Chemistry-I	3	1	0	4	3
BP403 T	Physical Pharmaceutics– II	3	1	0	4	4
BP404 T	Pharmacology–I	3	1	0	4	4
BP405 T	Pharmacognosy-I	3	1	0	4	4
BP406 P	Medicinal Chemistry-I Lab	0	0	4	4	2
BP407 P	Physical Pharmaceutics– II Lab	0	0	4	4	2
BP408 P	Pharmacology–I Lab	0	0	4	4	2

BP409 P	Pharmacognosy-I Lab	0	0	4	4	2
B. Pharmacy III Year (V Semester)						
BP501 T	Medicinal Chemistry-II	3	1	0	4	4
BP502 T	Industrial Pharmacy-I	3	1	0	4	4
BP503 T	Pharmacology – II	3	1	0	4	4
BP504 T	Pharmacognosy and Phytochemistry-II	3	1	0	4	4
BP505 T	Pharmaceutical Jurisprudence	3	1	0	4	4
BP506 P	Industrial Pharmacy-I Lab	0	0	4	4	2
BP507 P	Pharmacology – II Lab	0	0	4	4	2
BP508 P	Pharmacognosy and Phytochemistry-II Lab	0	0	4	4	2
B. Pharmacy III Year (VI Semester)						
BP601 T	Medicinal Chemistry – III	3	1	0	4	4
BP602 T	Pharmacology – III	3	1	0	4	4
BP603 T	Herbal Drug Technology	3	1	0	4	4
BP604 T	Biopharmaceutics and Pharmacokinetics	3	1	0	4	4
BP605 T	Pharmaceutical Biotechnology	3	1	0	4	4
BP606 T	Quality Assurance	3	1	0	4	4
BP607 P	Medicinal Chemistry – III Lab	0	0	4	4	2
BP607 P	Pharmacology – II Lab	0	0	4	4	2
BP608 P	Herbal Drug Technology	0	0	4	4	2
B. Pharmacy IV Year (VII Semester)						
BP701 T	Instrumental Method of Analysis	3	1	0	4	4
BP702 T	Industrial Pharmacy-II	3	1	0	4	4
BP703 T	Pharmacy Practice	3	1	0	4	4
BP704 T	Novel Drug Delivery System	3	1	0	4	4
BP705 P	Instrumental Method of Analysis Lab	0	0	4	4	2
BP706 PW	Project Work	0	0	12	12	6
B. Pharmacy IV Year (VIII Semester)						
BP801 T	Biostatistics and Research Methodology	3	1	0	4	4
BP802 T	Social and Preventive Pharmacy	3	1	0	4	4
BP806 ET	Quality Control and Standardization of Herbals	3	1	0	4	4
BP812 ET	Dietary Supplements and Nutraceuticals	3	1	0	4	4
BP813 PS	Practice School	0	0	12	12	6
Total		118	36	118	272	211⁵/212[#]

Contents of Syllabus Courses and modes of Teaching: AY 2019-20 onwards

Course code	Course title	Total number of contact hours				Credits/ Marks
		Lecture (L)	Tutorial (T)	Practical (P)	Total	
B. Pharmacy I Year (I Semester)						
BP101 T	Human Anatomy and Physiology - I	3	1	0	4	4
BP102 T	Pharmaceutical Analysis - I	3	1	0	4	4
BP103 T	Pharmaceutics-I	3	1	0	4	4
BP104 T	Pharmaceutical Inorganic Chemistry – I	3	1	0	4	4
BP105 T	Communication skill*	2	0	0	2	2
BP106 RBT /BP106 RMT	Remedial Biology/Remedial mathematics*	2	0	0	2	2
BP107 P	Human Anatomy and Physiology– I Lab	0	0	4	4	2
BP108 P	Pharmaceutical Analysis I Lab	0	0	4	4	2
BP109 P	Pharmaceutics-I Lab	0	0	4	4	2
BP110 P	Pharmaceutical Inorganic Chemistry–I Lab	0	0	4	4	2

BP111 P	Communication skill Lab*	0	0	2	2	1
BP112 P	Remedial Biology Lab*	0	0	2	2	1
B. Pharmacy I Year (II Semester)						
BP201 T	Human Anatomy and Physiology-II	3	1	0	4	4
BP202 T	Pharmaceutical Organic Chemistry-I	3	1	0	4	4
BP203 T	Biochemistry	3	1	0	4	4
BP204 T	Pathophysiology	3	1	0	4	4
BP205 T	Computer Application in Pharmacy*	3	0	0	3	3
BP206 T	Environmental Sciences*	3	0	0	3	3
BP207 P	Human Anatomy and Physiology-II Lab	0	0	4	4	2
BP208 P	Pharmaceutical Organic Chemistry-I Lab	0	0	4	4	2
BP209 P	Biochemistry Lab	0	0	4	4	2
BP210 P	Computer Application in Pharmacy Lab*	0	0	2	2	1
B. Pharmacy II Year (III Semester)						
BP301 T	Pharmaceutical Organic Chemistry-II	3	1	0	4	4
BP302 T	Physical Pharmaceutics-I	3	1	0	4	4
BP303 T	Pharmaceutical Microbiology	3	1	0	4	4
BP304 T	Pharmaceutical Engineering	3	1	0	4	4
BP305 P	Pharmaceutical Organic Chemistry-II Lab	0	0	4	4	2
BP306 P	Physical Pharmaceutics-I Lab	0	0	4	4	2
BP307 P	Pharmaceutical Microbiology Lab	0	0	4	4	2
BP308 P	Pharmaceutical Engineering Lab	0	0	4	4	2
B. Pharmacy II Year (IV Semester)						
BP401 T	Pharmaceutical Organic Chemistry-III	3	1	0	4	4
BP402 T	Medicinal Chemistry-I	3	1	0	4	3
BP403 T	Physical Pharmaceutics- II	3	1	0	4	4
BP404 T	Pharmacology-I	3	1	0	4	4
BP405 T	Pharmacognosy-I	3	1	0	4	4
BP406 P	Medicinal Chemistry-I Lab	0	0	4	4	2
BP407 P	Physical Pharmaceutics- II Lab	0	0	4	4	2
BP408 P	Pharmacology-I Lab	0	0	4	4	2
BP409 P	Pharmacognosy-I Lab	0	0	4	4	2
B. Pharmacy III Year (V Semester)						
BP501 T	Medicinal Chemistry-II	3	1	0	4	4
BP502 T	Industrial Pharmacy-I	3	1	0	4	4
BP503 T	Pharmacology - II	3	1	0	4	4
BP504 T	Pharmacognosy and Phytochemistry-II	3	1	0	4	4
BP505 T	Pharmaceutical Jurisprudence	3	1	0	4	4
BP506 P	Industrial Pharmacy-I Lab	0	0	4	4	2
BP507 P	Pharmacology - II Lab	0	0	4	4	2
BP508 P	Pharmacognosy and Phytochemistry-II Lab	0	0	4	4	2
B. Pharmacy III Year (VI Semester)						
BP601 T	Medicinal Chemistry - III	3	1	0	4	4
BP602 T	Pharmacology - III	3	1	0	4	4
BP603 T	Herbal Drug Technology	3	1	0	4	4
BP604 T	Biopharmaceutics and Pharmacokinetics	3	1	0	4	4
BP605 T	Pharmaceutical Biotechnology	3	1	0	4	4
BP606 T	Quality Assurance	3	1	0	4	4
BP607 P	Medicinal Chemistry - III Lab	0	0	4	4	2
BP607 P	Pharmacology - II Lab	0	0	4	4	2
BP608 P	Herbal Drug Technology	0	0	4	4	2
B. Pharmacy IV Year (VII Semester)						
BP701 T	Instrumental Method of Analysis	3	1	0	4	4
BP702 T	Industrial Pharmacy-II	3	1	0	4	4

BP703 T	Pharmacy Practice	3	1	0	4	4
BP704 T	Novel Drug Delivery System	3	1	0	4	4
BP705 P	Instrumental Method of Analysis Lab	0	0	4	4	2
BP706 PS	Practice School	0	0	12	12	6
B. Pharmacy IV Year (VIII Semester)						
BP801 T	Biostatistics and Research Methodology	3	1	0	4	4
BP802 T	Social and Preventive Pharmacy	3	1	0	4	4
BP806 ET	Quality Control and Standardization of Herbal Drugs	3	1	0	4	4
BP812 ET	Dietary Supplements and Nutraceuticals	3	1	0	4	4
BP813 PW	Project Work	0	0	12	12	6
Total		118	36	118	272	211[§]/212[#]

#Applicable ONLY for the students who have studied Mathematics/Physics/Chemistry at HSC and appearing for Remedial Biology (RB) course.

§Applicable ONLY for the students who have studied Physics/Chemistry/Botany/Zoology at HSC and appearing for Remedial Mathematics (RM) course.

* Non University Examination (NUE)

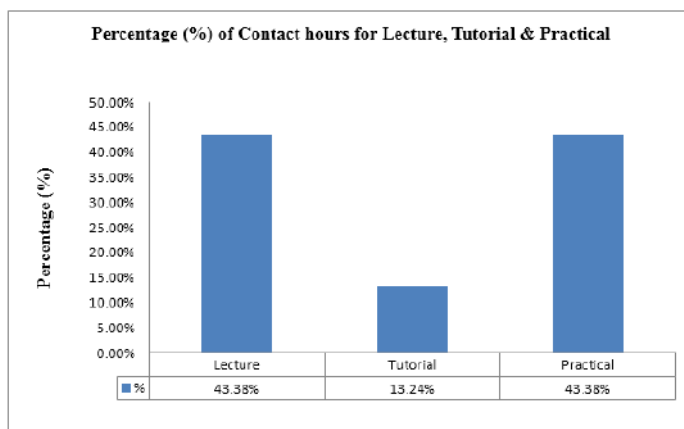


Figure 2.1 Percentage (%) of Contact hours for Lecture, Tutorial & Practical

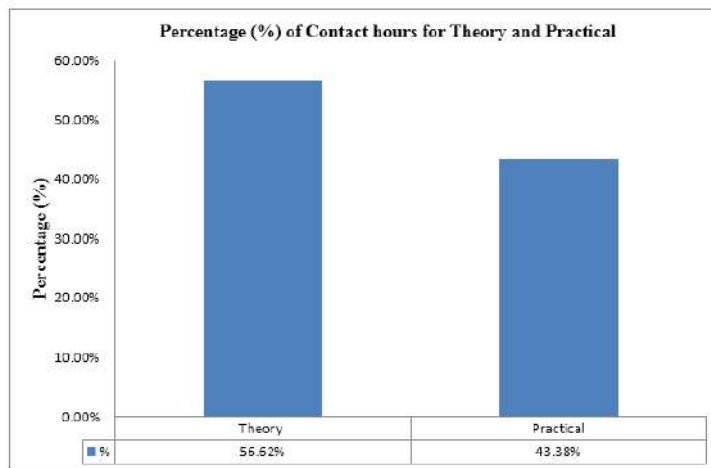


Figure 2.2 Percentage (%) of Contact hours for Theory and Practical

Core Pharmacy Courses against Program Outcomes

Semester-I

Human Anatomy and Physiology-I (BP101T):

Human Anatomy and physiology course is designed to impart basic knowledge required to understand the various disciplines of pharmacy which include anatomical features and physiological functioning of systems and organs of human body. The students acquire knowledge about the generating and transmitting nerve impulses. The course design provides significant understanding about the cardio-vascular system and blood physiology including thrombosis and embolism. The course ensures the ability to assimilate the concepts of cardio-vascular system and blood physiology. It also describes the anatomical features and functioning of Skeletal System and Peripheral Nervous System. It also helps in understanding both homeostatic mechanisms.

Pharmaceutical Analysis-I (BP102T):

Pharmaceutical analysis course is focus on basic understandings of calibration, accuracy, error, usually impact the result of any testing/analysis. Adequate contents are provided regarding principles and methodology involved in the various volumetric analyses based on titrations such as acid-base, oxidation and reduction reactions, iodometry, complexometric, precipitation, non-aqueous titration, etc. It provides insight to students to understand different types of error, their sources, acquire knowledge about principles and practice of gravimetric analysis. Further methodology of the preparation of solution of different strengths are discussed.

Pharmaceutics (BP103T):

This course provides insights on prescription including professional way of handling the prescription. The course deals with pharmaceutical calculations used for dose calculation to manufacturing of different types of dosage forms. It also explain the history of the profession of pharmacy, discuss method of preparation of different dosage forms. Different types of pharmaceutical incompatibilities and method of evaluation and identifications.

Pharmaceutical Inorganic Chemistry (BP104T):

Pharmaceutical inorganic chemistry course is focus to provide knowledge about different types of Inorganic compounds used as a Pharmaceuticals. The course provides the information on different quality control tests in limiting traces of impurities present in pharmaceuticals through limit tests. The complete understanding is illustrated about chemical reaction mechanisms involved in the preparation of pharmaceutical inorganic compounds. A significant amount of knowledge is provided regarding the uses and sources of different pharmaceutically active inorganic compounds. The course is also deal with the basic knowledge about Radiopharmaceuticals and their uses in diagnosis/treatment.

Communication Skills (BP105T):

In Communication skill theory course provides communication (verbal and non-verbal), and presentations. The details regarding the variation in the different form of English (spoken English vs written English; formal/informal English (one way/two way)) are included. The communicative English course enables students to acquire the knowledge about greetings, polite expressions, agreements and disagreements. The students develop their skills in the use of thesaurus, vocabulary development, construct of letters, responses, memos, circulars and notices. The training to develop skill in the preparation of scientific/technical report is another important aspect.

Remedial Mathematics (BP106RMT):

This course provides adequate training contents to the students (hands on experience) about various mathematical principles. The course gives insight on the execution of logarithms, trigonometry and differential calculus. Focus to illustrate the differential coefficient rules, differentiation of a sum, product and quotient of functions, differentiation from first principles, differentiation of implicit, geometrical, composite and inverse functions. The course also concentrates on the basic mathematical principles that are commonly used in biological testing such as integers, linear and non-linear graphs; 2D coordinates geometry, equation of line and circle.

Remedial Biology (BP106RBT):

Biology theory course concentrates on the morphology, histology, plant modifications, plant taxonomy and plant physiology. Plants belonging to the Apocynaceae, Solanaceae, Umbelliferae, Leguminosae, Scrophulariaceae and Rubiaceae families are included. The course provides adequate knowledge to the students regarding the mitosis and meiosis processes. Significant insight to the modifications in the roots, stems, barks, seeds, woods, leaf, flower and fruits are included.

Human Anatomy and Physiology-I Lab (BP107P):

Anatomy, physiology and health education laboratory course provides significant insights about histological features of the human tissues through permanent slides. It gives adequate knowledge to the students to identify the models and specimen of the human skeletal system and organs. Focus is made to acquire the knowledge on mechanisms and methodology involved in the determination of human blood group, hemoglobin content, bleeding time and clotting time. The practice to gain knowledge on mechanisms and methodology involved in the measurement of blood pressure, vital capacity and erythrocyte sedimentation rate (ESR) are provided.

Pharmaceutical Analysis – I Lab (BP108P):

Pharmaceutical analysis laboratory course focus on the principle and procedures of different limit tests. It gives exposure to students on standardized protocols and procedures for the assay of pharmaceutical API. Adequate exercises are provided regarding standardization of solutions of different strengths. Knowledge about the principles and methodology involved in the various volumetric analyses such as acid-base titration, oxidation-reduction titrations, iodometry, complexometric, precipitation and non-aqueous titration is imparted. It helps students to acquire knowledge about principles and practice of electro analytical methods.

Pharmaceutics- I Lab (BP109P):

The course is designed to provide exposure to the students towards principle and procedures involved in the manufacturing of different dosage forms including solid, liquid and semisolid. The course is also deals with the labeling and handling of the prescription with respect to dosage form. The students get exposure and training on dispensing of solution, syrup and other monophasic as well bi phasis liquid dosage forms.

Pharmaceutical Inorganic Chemistry Lab (BP110P):

Pharmaceutical inorganic chemistry laboratory course focus to help the students to appreciate the concept of quality control tests in limiting traces of impurities present in pharmaceuticals through limit tests. The complete understanding is illustrated about chemical reaction mechanisms involved in the preparation of pharmaceutical inorganic compounds. The course further designed to provide exposure towards different assays and standardization processes of drugs of inorganic origin.

Communication Skills Lab (BP111P):

In this course the students are given exposure towards different styles of both writing and verbal mode of communications in English. The students are provided with the exposure of clinically oriented services to the customer/patients. The course also deliver the basic contents associated with writing of reports, technical data, presentation of reports in public as well as a confidential ones.

Remedial Biology Lab (BP112P):

Biology laboratory course is designed to provide students adequate knowledge on the plant morphology and microscopical characteristics. The students gain the significant knowledge about the physiology of important organs of human body through the models. The students also provided the exposure towards testing procedures to detect blood related preliminary parameters.

Semester-II

Human Anatomy & Physiology-II (BP201T):

This course is designed to provide information on gross morphology, anatomy and physiology of various organs/tissue system. The course gives insight on function and mechanism of different signal/feedback mechanisms associated the release or functioning of different anatomical structures. The course gives information on different biochemical and physiologically active composition of blood and their significance and role in disease and diagnosis.

Pharmaceutical Organic Chemistry-I (BP202T):

Pharmaceutical organic chemistry theory course provides knowledge on classification and nomenclature systems of the organic compounds with special reference to medicinal use. The course also provides insight on structure, nomenclature, physical and chemical properties of organic compounds along with their pharmaceutical applications. The subject further discuss reaction mechanisms and orientation of principle reactions involved in the synthesis of organic compounds.

Bio-Chemistry (BP203T):

Biochemistry theory course is concerned with the types of biomolecules and their roles in different biochemical processes in the human cell. The course deliver the knowledge towards biochemical pathways involved in the production and utilization of biomolecules in human body. The kinetics and clinical applications of enzymes, isozymes and coenzymes are also focused. Biosynthesis of RNA and DNA, DNA repair mechanism and recombinant DNA processes are part of the course. Qualitative and quantitative analysis of blood components, urine components and their clinical significance are included.

Pathophysiology (BP204T):

The course is designed and focused on different pathological conditions of human. It provides the knowledge on causes, and body's response on different diseases. The course demonstrates mechanism of both communicable and non-communicable diseases. It also deals with approaches towards rationale and effective and safe medication delivery to the patients.

Computer Applications in Pharmacy (BP205T):

The students acquire significant insights about the memory chips, principles of operating systems. The appropriate measures to ensure students' knowledge about the operators, expressions, data input, output, control statements, library functions and arrays. The course introduces students to MS-word, MS-excel MS-power point and MS-access. Focus is given to provide information about the World Wide Web (www), hyper text manuscript language (html) and e-mail. The course deliver the basic information about scope of computer applications in Pharmacy and different computer applications and softwares used in Pharmacy to maintain records/demonstration of clinical process used in the diagnosis or the understanding of diseases.

Environmental Sciences (BP206T):

Environmental studies theory course describes the scope and importance of environmental studies, indicators for sustainable development and concepts of biodiversity and ecosystem diversity. It concentrates on environmental pollution, relevance of biotechnology and nanotechnology in sustainable development, solid and hazardous waste management, green house gas effects: climate change, global warming, ozone layer and ground water depletion. The course provides knowledge and significance of natural and renewable source of energy against non renewable source.

Human Anatomy & Physiology Lab-II (BP207P):

The lab of Human Anatomy and Physiology provides content on diagnosis of different parameters of normal blood, it includes Haemoglobin, ESR, WBC, RBs, blood groups etc. The course describes the anatomy of various organs/systems through different models, it includes skeletal system, male and female reproductive system. The course also allowed students to perform various experiments on collection of blood samples from Human and measurement of BP, blood sugar, etc.

Pharmaceutical Organic Chemistry- I Lab (BP208P):

The course is designed and listed with experimentation on different identification tests used to identify organic compounds and elements alongwith their principles. The experiments are designed in order to provide basics on the stereochemistry of the organic compounds with the help of models. The course is also provide with exposure to different identification tests of metals and elements.

Biochemistry Lab (BP209P):

In this course the experimentation on different biochemical parameters of blood and urine are designed and principle and procedures of the same are provided to the students. The course also provided the exposure on methods of preparation of standard buffer solutions. The course also give exposure and practical training to the students to perform enzyme based diagnosis of biochemical parameters.

Computer Applications in Pharmacy Lab (BP210P):

In this course the students are provided with experimentation and exposure on both theoretical concept and applicability of the basics of computers. It includes insight on bioinformatics, utilization of computers as a tool to be used to maintain data base of clinical studies. The experiments are also designed to provide basics on different softwares those are applicable in the field of pharmaceutical sciences.

Semester-III**Pharmaceutical Organic Chemistry-II (BP301T):**

The course is designed to give the description on stereochemistry of organic compounds. The content also shares the concept involved in the synthesis of Heterocyclic and other medicinally important organic compounds. The course further focuses on mechanism and orientation of organic reactions involved in synthesis and analysis of pharmaceuticals.

Physical Pharmaceutics-I (BP302T):

Physical pharmaceutics theory course focuses on the concepts of states of matter and solubility phenomem. Where it gives proper understanding on phase equilibria, thermodynamics, and colligative properties of solutions, pH and pharmaceutical buffers. The course provides principles involved in the formulations of different dosage forms. The concept of complexation and polymorphism and its role in formulation development is also considered.

Pharmaceutical Microbiology (BP303T):

Pharmaceutical microbiology theory course involves the exposure of students with microbiology techniques and microbes. The course ensures students to understand the biochemical reactions to identify organisms and staining techniques. The concepts of disinfections and sterilization techniques are included. The special emphasis is given to the principles and applications of immunogenetics, serology, bacterial toxins (exotoxins and endotoxins) and toxoids. The students are also getting exposure to cell culture techniques including different isolation, cultivation and identification of microbes.

Pharmaceutical Engineering (BP304T):

Pharmaceutical engineering-I theory course involves the topic on the construction of instruments, corrosion, unit operations and unit processes. The concepts of fluid flow and heat transfer (conduction, convection, radiation) are included. Humidification, dehumidification and air conditioning along with their applications in pharmacy are highlighted. The principles, applications and limitations of filtration and centrifugation are included. The subject further deals with fluid matrix including different types of flow of fluid and procedure involved in mixing.

Pharmaceutical Organic Chemistry-II Lab (BP305P):

The course deals with different experimentations including laboratory synthesis of organic compounds, concept of stereo modeling, estimation of elements in organic compounds samples. The students also exposed to several basic reactions used in organic chemistry.

Physical Pharmaceutics-I Lab (BP306P):

The component of the course includes different experiments on solubility including factors affecting solubility. The principle and application based experiments on complexation process, calibration of instruments and glasswares. The course also contains the in hand training on determination of physic-chemical properties and their effect on dosage form design.

Pharmaceutical Microbiology Lab (BP307P):

The course contains experiments on identification of different types of microbes; their morphological characteristics. The course also provides the exposure to students regarding different principle and procedures involved in the sterilization process. The students also get exposure towards different identifications tests for infectious diseases.

Pharmaceutical Engineering Lab (BP308P):

The course contains different experimentations on different instrumentation used in the pharmaceutical industries. The course also contains the procedure and principle involved in filtration, mixing, size reduction, etc and their application in pharmaceutical industry.

Semester IV**Pharmaceutical Organic Chemistry-III (BP401T):**

The course is in continuation with previous semester and deals with students exposure towards stereo chemistry of different organic compounds. The course also includes nomenclature, classification and synthesis of hetero-cyclic compounds along with its mechanism of action. The students will get theoretical exposure and content on significance of stereochemistry in medicine/pharmaceuticals.

Medicinal Chemistry-I (BP402T):

The course is designed to provide the knowledge to the students about medicinal structure and pharmacology of chemical substances. The SAR of different drugs are described, which will help the students to establish drug design or drug discovery concept. The course also contain information on synthesis of medicinal products. The course also provide contents on adverse effects, metabolic pathways, adverse effects followed by the consumption of the medicines.

Physical Pharmaceutics-II (BP403T):

The course deals with the basic properties of additives and API and their effects on dosage forms. The course deals with the theoretical components on different factors affecting during formulation of emulsions and suspensions. The technical concept of surface tension, dispersion, chemical kinetics, expiry date calculations are also discussed in the course. The principles of rheology, interfacial tensions and their impact on formulations preparation is also part of the syllabus.

Pharmacology-I (BP404T):

The course is designed to deliver pharmacological perspectives of different drugs including both pharmacodynamics and pharmacokinetic profiles of drugs used in different disease conditions. The course also provides the insight on receptors and systems involved in the therapeutic or other unwanted actions of the drugs in the body. The course deals with the contents on prevention and treatment of different diseases and also gives the insight on the action of the drug to produce the desired action in the body.

Pharmacognosy and Phytochemistry-I (BP405T):

Pharmacognosy and Phytochemistry theory course focus on the systematic description, classification, cultivation, collection, storage and therapeutic uses of crude drugs beside its History and scope. The course imparts the knowledge regarding the influence of exogenous and endogenous factors in the variability of drug constituents. Biosynthetic techniques, metabolic pathways, precursor-product sequence, competitive feeding and sequential analysis are also focused.

Medicinal Chemistry-I Lab (BP406P):

The course content provides exposure to students towards different synthesis exercises to prepare medicinal products. The testing procedure to confirm the completion of the process and different evaluation techniques. It provides adequate training to students to design and synthesis organic intermediates and the understanding regarding the principle and methodology involved in the synthesis of various medicinal compounds of diverse chemical categories. This course also deals with the purification and characterization of the synthesized compounds.

Physical Pharmaceutics-II Lab (BP407P):

The course offers training to the students to determine different physical properties those affects the formulation development of different dosage forms. The course also deals with preparation of different kind of solutions and evaluation of the effect of different additives in the manufacturing of dosage forms.

Pharmacology-I Lab (BP408P):

The course provides the basic and experimental training on different models of diseases. The software and simulation based experiments are also provided under the course so that students will understand the role of technology in pharmacology.

Pharmacognosy and Phytochemistry-I Lab (BP409P):

The course provides the insight on different methods of evaluations of crude drugs. The course also give exposure to students regarding both qualitative and quantitative examinations used to find out the quality of Raw drugs.

Semester V**Medicinal Chemistry-II (BP501T):**

The course describes the correlation and basic concept between chemical and its pharmacological activities. The course deals with metabolic pathways and adverse effects of the drugs beside its therapeutic activities. The utilization of SAR to design new drugs/drug discovery is also focused area of this subject. The analysis method of different medicinal products are also described herein this course.

Industrial Pharmacy-I (BP502T):

The course describes different types of dosage forms from conventional to Novel Drug Delivery system, including its manufacturing process. Role of different evaluation techniques, their principles and procedures involved in the quality control of dosage forms.

Pharmacology-II (BP503T):

The Pharmacology-II course is designed to deliver the basic knowledge on pharmacology and its correlation with other medical sciences. The course also deals with different drugs and their Mechanism of action in several disease conditions.

Pharmacognosy and Phytochemistry-II (BP504T):

The course describes the composition, chemistry and commercial applications of phytochemicals. It includes the detailed description of different biosynthetic pathways used for secondary metabolite productions. The course also focuses on different separation, isolation and spectral techniques to be used as a tool for standardization as well characterization of secondary metabolites of medicinal plants.

Pharmaceutical Jurisprudence (BP505T):

Pharmaceutical Jurisprudence course deals with pharmaceutical legislation policies, ethics, Acts and their amendments in India. It provides comprehensive knowledge about the pharmacy Act 1948, consumer protection Act 1986, Narcotic and psychotropic substances Act 1985, Drugs and cosmetics Act 1940 and drugs and cosmetic rules 1945. Medicinal and toilet preparations Act 1955, drugs and magic remedies) act 1954, prevention of food adulteration Act 1954, the factories Act 1948 and the amendment also covered. The legal aspects of the manufacture, sale, distribution, import and export of drugs are included in schedules. Specific labeling and packing requirements are covered for all categories of drugs & cosmetics.

Industrial Pharmacy-I Lab (BP506P):

The course contains the information on different dosage forms and their formulation process. Physicochemical properties of various dosage forms. The course also offers training on different identification tests and analysis method that ensure the ability enhancement of students to evaluate different dosage forms.

Pharmacology-II Lab (BP507P):

The course provides the content of training on physiological systems of different organs through simulated experiments. The content also sufficiently provide the information on working of different drugs on different organs through bioassay models using softwares.

Pharmacognosy and Phytochemistry- II Lab (BP508P):

The course ensures the practical training of the students on different analytical methods used to identify quality and adulteration of the drug/herb samples. The course also deals with the training on different extraction procedure used to obtain therapeutically active phytochemicals.

Semester-VI**Medicinal Chemistry-III (BP601T):**

The course is designed to provide information and knowledge to students regarding modern software and tools used in the field of drug discovery. The course also describe the relationship between structure and therapeutic potential of drugs. The students get exposure of different chemicals of therapeutic potentials from natural as well synthetic process. The component of the course also helps student to understand the principles of different style of classification of medicinal drugs on the basis of their mechanism, structure along with therapeutic activities.

Pharmacology-III (BP602T):

The course deals with study and insight on different parameters those affects the pharmacological activity of any drug substances. It describes the fate of drugs in the body including ADME at cellular and sub cellular levels. The course also contains the information about different kind of poison and their treatment. Further information and knowledge on the prevention and treatment of different diseases are the part of this course.

Herbal Drug Technology (BP603T):

The course is designed to identify and discuss on different scopes and requirements of herbal drug industries. The course also describe different guidelines for the evaluation of herbal drugs, herbal cosmetic, natural additives. The course provides GMP guidelines to ensure the quality products development by the industry.

Biopharmaceutics and Pharmacokinetics (BP604T):

The course describes the basic concepts of ADME, it also includes the description of compartment models and their utility to understand the concept of release profile and ADME. The course deals with the calculation based computing of bioavailability and bioequivalence of drugs. The course provides the contents on calculation those have connection with pharmacokinetic parameters.

Quality Assurance (BP605T):

The course is designed to give information and knowledge on different documentation based systems used by the industries to assure every single product manufactured/service provided by them. In this course different guidelines provided by various agencies those regulates the production and sale in respective countries. The course also provides the content on quality certification programs, tools and documentation in the industries.

Pharmaceutical Biotechnology (BP606T):

The course provides the content on different diagnostic procedures of diseases based on microbial/enzymatic assays. The course mainly deals with the immunity principle and preparation of biological products including recombinant and fermentation based technology. The course also provides insight on scientific applications of biotechnology in the field of genetic engineering.

Medicinal chemistry- III Lab (BP607P):

The course is designed to provide basic knowledge and exposure towards drug discovery and drug designing. It illustrate effect of various physic-chemical parameters in drug designing. It also cover theory and procedures to be used while operating modern tools for the synthesis of drugs in the lab.

Pharmacology III Lab (BP608P):

The course offers the content on practical training of students towards different routes of drug administration, blood withdrawal techniques, dose calculation for animal studies. Different guidelines to carry out animal studies and associated ethical issues during animal handling are deals by the course.

Herbal Drug Technology Lab (BP609P):

In this course student get practical exposure on different analytical techniques used to identify or check the quality of Raw drugs and formulation as well. The course also provides content on testing protocols to determine traces of solvents like aldehyde, phenolics and alcohols.

Semester-VII

Instrumental Methods of Analysis (BP701T):

The course provides knowledge about the various instrumentations involve in the separation and identification techniques of raw material to finished goods/drugs. The separation techniques include paper, thin-layer (TLC) and column chromatography. The students also determine related principles of drug solutions through colorimeter, UV-spectrophotometer, etc.

Industrial Pharmacy-II (BP702T):

The course provides the content on laws and acts that regulates pharmaceutical industries. The course also give insight on responsibilities of professionals who are willing to work on regulatory and quality management systems of the pharmaceutical industries.

Pharmacy Practice (BP703T):

The course is designed to make student aware of role and responsibilities of the pharmacist in hospital management and patient care system. The student is also get information on Adverse drug reactions and interactions. Beside this, monitoring of patients with the help of different techniques and records are also considered as a core area of the course.

Novel Drug Delivery System (BP704T):

The course contains the information and knowledge about NDDS, its classifications, development approaches and different techniques used in NDDS. The course also discuss about different polymers usually prefer to formulate NDDS. The course gives insight on different process and methods of evaluation of NDDS along with its application as a drug carrier and their application as a bioavailability enhancers.

Instrumental Methods of Analysis Lab (BP705P):

The course is designed to develop the analytical skills of the students. The course is focus on modern instrumentations and developments in the field of analysis. The course provides hands on training and practical exposure related to several modern separation techniques. The course also provides exposure on uses of modern instrumentation in the routine analysis of pharmaceutical products.

Project Work (BP706PW):

The course is designed to provide practical training and exposure to the real time challenges and issues facing by industry or hospital or other related field. Student is allowed to work independently under the guidance of senior faculties and supervisor of Industry/hospital.

Semester-VIII

Biostatistics and Research Methodology (BP801T):

This course is designed to provide basic information on statistics and methods of data collection, different steps of research. Different styles and methods of result presentation through graphs, table and bar diagram. The course also contain information on different softwares and methods can be used to present results in effective manner.

Social and Preventive Pharmacy (BP802T):

The course provides the insight on different health issues and how to handle them. The course describes different policies in India and around the globe to address health issues. The course also focuses on the awareness program run by government under National Health Program category. The role of pharmacists in the implementation of health related program are other area of this course.

Quality Control and standardization of Herbals (BP806ET):

The course deals with the guidelines of quality control and method of evaluation of herbs. The course describes the principle and procedures of analytical techniques used to standardize herbal drugs. The course also contains the information on documentations required to file new drug applications or registration of drugs.

Dietary Supplements and Nutraceuticals (BP812ET):

The course deals with the sources and role of herbs and minerals as a supplement. The content related to production, quality control and legal issues with the use or recommendation of Dietary supplements and Nutraceuticals. The course also highlights the applications of Dietary supplements and Nutraceuticals in the management of life style disorders/diseases.

Practice School (BP813PS):

The course is designed to give practical exposure and information about different regulatory and real time exposure with problems encountered during regulatory filing, green audit and many more.

Compliance of the curriculum for attainment of POs

The syllabus contents are delivered with the aid of effective audio-visual and multimedia elements and interactive teaching. In addition, to generate interest and enthusiasm among students, innovative teaching and learning techniques are followed in both theory lectures and practical sessions. These include making of charts and models, giving assignments/projects to students based on their area of interest and organizing competitions during practical. Also weaker students are given additional support by arranging remedial classes for them and by personally getting the University question papers of the concerned subjects solved from them.

Course attainments and programme attainments are calculated after completion of all the courses of each semester.

The contents of each theory subject are well defined and the experiments are specified for each laboratory component. The university included an important component such as an assignment, projects and seminars etc. Innovative teaching and learning techniques are followed in both theory and practical. It includes chart preparation, giving assignments, projects and seminar. Weaker students are given additional support by taking remedial classes and tests papers are solved from them. Each faculty determined the level of their courses studying the elements of POs (Programme outcome).

The COs and POs mapping were performed, the weak areas were pointed out and probable gaps were identified. COs are revived by faculty members faculty members to determine which component of POs was either not mapped or meet to level 1 only. Faculty focus on either level 1 of introductory nature was adequate or the institutes need to develop more beyond syllabus topic to improve the level. For developing content beyond the syllabus the feedback from alumina and industry (Training and Placement Department) were discuss thoroughly. Demands of pharmaceutical industries were assessed on internet searching and analyzed the same. Internal Quality Assurance Cell (IQAC) and subject expert had been conducted to review the syllabus provided by university to detect the gap.

Finally the content beyond the syllabus which is to be taught to make corrective action for bridging the gaps were thoroughly discussed and finalized.

Course-PO matrix of courses for all four years of study												
S. No.	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
1	COBP 101	2.75	2.00	3.00	2.25	-	1.00	1.00	3.00	1.50	-	1.75
2	COBP 102	3.00	2.00	3.00	3.00	2.00	2.00	2.50	2.00	2.00	2.00	2.00
3	COBP 103	3.00	3.00	2.25	3.00	2.00	2.00	3.00	2.00	2.00	2.00	3.00
4	COBP 104	3.00	2.00	2.75	2.50	2.00	2.75	2.00	1.50	2.00	2.25	3.00
5	COBP 105	-	2.75	2.00	2.00	2.50	2.75	2.00	3.00	2.50	2.00	2.50
6	COBP 106RB	2.75	3.00	2.00	2.00	2.00	2.00	2.00	1.50	2.00	2.00	2.75
7	COBP 106RM	3.00	3.00	3.00	3.00	1.50	2.50	1.50	3.00	2.50	3.00	3.00
8	COBP 107	3.00	2.00	3.00	2.25	3.00	3.00	2.50	3.00	2.00	3.00	2.50
9	COBP108	2.50	2.75	3.00	3.00	2.50	2.00	3.00	2.00	2.50	2.00	3.00
10	COBP109	3.00	2.50	1.50	3.00	2.50	2.50	2.50	2.00	2.00	3.00	2.50
11	COBP110	3.00	2.75	3.00	3.00	2.50	2.00	2.50	2.00	2.00	2.00	3.00
12	COBP 111	-	2.75	2.00	2.00	2.50	2.75	2.00	3.00	2.50	2.00	2.50
13	COBP112RB	3.00	3.00	3.00	3.00	1.50	2.50	2.50	3.00	2.50	3.00	3.00
14	COBP201	3.00	2.00	3.00	2.25	2.75	2.00	2.50	3.00	3.00	6.50	3.00
15	COBP202	3.00	2.00	3.00	2.25	-	1.00	1.00	3.00	1.50	-	1.75
16	COBP203	3.00	3.00	2.75	3.00	2.50	3.00	2.00	2.25	3.00	3.00	2.75
17	COBP204	3.00	3.00	3.00	2.75	2.00	3.00	2.50	3.00	3.00	2.50	2.00
18	COBP205	2.00	2.50	3.00	3.00	2.50	3.00	2.00	3.00	2.50	3.00	3.00
19	COBP206	2.00	3.00	2.75	2.50	2.00	3.00	2.00	2.25	2.00	3.00	3.00
20	COBP207	3.00	2.00	3.00	2.25	2.75	2.00	2.50	3.00	3.00	6.50	3.00
21	COBP208	3.00	3.00	3.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.50
22	COBP209	3.00	3.00	2.75	3.00	2.50	3.00	2.00	2.25	3.00	3.00	2.75
23	COBP210	2.00	2.50	3.00	3.00	2.50	3.00	2.00	3.00	2.50	3.00	3.00
24	COBP301	3.00	2.00	2.00	1.50	1.50	2.25	3.00	1.50	2.50	2.00	3.00
25	COBP302	3.00	3.00	2.00	2.50	2.00	2.00	2.00	1.50	2.50	1.75	2.75
26	COBP303	2.50	2.50	2.00	2.00	1.50	2.50	3.00	2.00	3.00	3.00	2.50
27	COBP304	3.00	3.00	2.50	2.00	1.50	2.50	2.50	2.25	2.50	2.75	3.00
28	COBP305	3.00	3.00	2.50	1.67	-	-	1.50	-	1.50	-	1.50
29	COBP306	3.00	3.00	2.00	2.50	2.00	2.00	2.00	1.50	2.50	1.75	2.75
30	COBP307	3.00	2.00	2.50	3.00	2.50	3.00	2.50	2.50	2.75	2.75	2.00
31	COBP308	3.00	3.00	2.50	2.00	1.50	2.50	2.50	2.25	2.50	2.75	3.00
32	COBP401	3.00	3.00	3.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.50
33	COBP402	2.75	2.25	2.50	2.00	2.00	2.75	2.50	2.00	2.00	2.50	3.00
34	COBP403	3.00	3.00	2.25	3.00	2.00	2.00	3.00	2.00	2.00	2.00	3.00
35	COBP404	2.00	2.00	3.00	3.00	2.50	3.00	2.50	2.00	2.50	2.75	2.50
36	COBP405	2.75	2.25	1.00	2.00	-	-	1.50	-	1.25	-	1.50
37	COBP406	3.00	3.00	3.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.50
38	COBP407	3.00	3.00	2.25	3.00	2.00	2.00	3.00	2.00	2.00	2.00	3.00
39	COBP408	2.00	2.00	3.00	3.00	2.50	3.00	2.50	2.00	2.25	2.75	2.50

40	COBP409	3.00	3.00	2.00	2.00	2.25	2.25	2.75	2.00	3.00	2.75	3.00
41	COBP501	2.00	2.00	2.33	2.50	-	1.00	-	-	1.50		1.75
42	COBP502	3.00	3.00	2.50	3.00	2.00	2.75	2.50	2.00	2.00	2.50	3.00
43	COBP503	2.50	2.25	3.00	3.00	2.25	3.00	2.50	2.00	2.50	2.50	2.50
44	COBP504	3.00	3.00	2.00	2.00	2.25	2.25	2.75	2.00	3.00	2.75	3.00
45	COBP505	2.25	2.00	1.25	-	2.00	2.75	2.50	2.50	3.00	-	2.00
46	COBP506	3.00	3.00	2.00	3.00	2.00	2.75	2.50	2.00	2.00	2.50	3.00
47	COBP507	3.00	2.00	3.00	3.00	2.25	3.00	2.50	2.00	2.50	2.50	2.50
48	COBP508	3.00	3.00	2.00	2.00	2.25	2.25	2.75	2.00	3.00	2.75	3.00
49	COBP601	3.00	2.00	1.00	2.25	-	1.50	1.00	1.00	1.25		2.00
50	COBP602	2.00	2.00	3.00	3.00	2.50	3.00	2.50	2.00	2.25	2.75	2.50
51	COBP603	3.00	3.00	2.00	2.50	2.25	2.25	2.75	2.00	3.00	2.75	3.00
52	COBP604	2.50	2.50	3.00	3.00	1.75	1.75	1.50	2.50	2.50	2.50	1.75
53	COBP605	3.00	2.00	2.00	3.00	2.00	2.50	2.50	2.75	2.75	2.00	2.50
54	COBP606	3.00	2.00	2.50	3.00	2.75	3.00	2.50	2.75	2.75	3.00	2.00
55	COBP607	2.50	2.00	2.50	2.00	2.00	2.75	2.50	2.00	2.00	2.50	3.00
56	COBP608	2.25	2.25	3.00	3.00	2.50	2.75	2.25	2.50	2.50	2.75	2.75
57	COBP609	3.00	3.00	2.50	2.50	2.25	2.50	2.75	2.00	3.00	2.75	3.00
58	COBP701	3.00	2.75	3.00	3.00	2.50	2.50	2.00	2.50	1.50	2.00	1.75
59	COBP702	3.00	2.00	3.00	1.00		1.00	1.50		1.50		1.75
60	COBP703	2.50	2.00	3.00	2.25	1.75	1.75	2.50	2.50	2.75	2.50	2.50
61	COBP704	3.00	2.00	2.00	2.00	2.50	2.50	2.00	2.50	2.75	2.00	2.00
62	COBP705	3.00	2.00	2.75	3.00	2.50	2.50	2.00	2.50	1.50	2.00	1.50
63	COBP706	3.00	2.00	3.00	3.00	3.00	2.50	2.00	2.50	2.00	1.50	3.00
64	COBP801	1.50	1.00	2.25	2.00	-	1.25	1.75	3.00	1.00	-	1.50
65	COBP802	3.00	2.75	2.50	2.00	2.50	2.75	2.75	2.50	3.00	3.00	3.00
66	COBP803	3.00	3.00	2.00	2.50	2.25	2.25	2.75	2.00	3.00	2.75	3.00
67	COBP804	3.00	3.00	2.50	2.50	2.25	2.50	2.75	2.00	3.00	2.75	3.00
68	COBP805	2.50	2.00	3.00	2.25	2.50	2.75	2.50	2.50	2.75	2.50	2.50
Average			2.78	2.50	2.52	2.50	2.21	2.42	2.28	2.28	2.33	2.61
Percentage (%)			92.68	83.33	83.99	83.29	73.61	80.56	76.12	75.91	77.70	86.86

Table 2.1 Course-PO matrix of courses for all four years of study

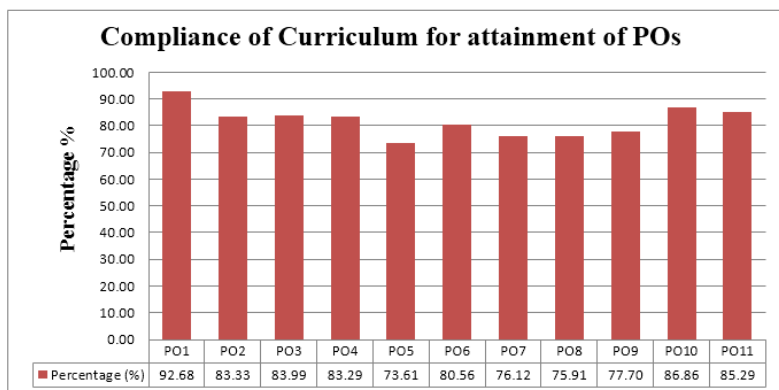


Figure 2.3 Compliance of Curriculum for attainment of POs

Program Outcomes

1. **Pharmacy Knowledge:** Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.
2. **Planning Abilities:** Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines.
3. **Problem analysis:** Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.
4. **Modern tool usage:** Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.
5. **Leadership skills:** Understand and consider the human reaction to change, motivation issues, leadership and team-building when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and well-being.
6. **Professional Identity:** Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).
7. **Pharmaceutical Ethics:** Honour personal values and apply ethical principles in professional and social contexts. Demonstrate behavior that recognizes cultural and personal variability in values, communication and lifestyles. Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.
8. **Communication:** Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.
9. **The Pharmacist and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.
10. **Environment and sustainability:** Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
11. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. Self- assess and use feedback effectively from others to identify learning needs and to satisfy these needs on an ongoing basis.

Implementation Process:

Identified content beyond the syllabus (theory and lab work), if any would be conducted in classroom and laboratory by the subject teachers and guest lecture are also arranged to bridge the gap to meet content beyond the syllabus.

Effectiveness of this process would be analysed through feedback from the students and their performance in examination

2022-23

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	No of students Present	Relevance to POs
1	Significance of	Time is devote	06/10/2022	Mr. Mayank Goyal	83	3
2	Process of dial	The topic was	13/10/2022	Mr. Mayank Goyal	83	5
3	Role of nanop	Seminar was g	02/09/2022	Students	79	5,6
4	Neurological di	Seminar was g	03/10/2022	Students	68	2,5
5	Herbal formula	Seminars giver	23/08/2022	Students	71	2,5,11
6	HPLC Practica	Demonstration	18/08/2022	RB Sciences, Bhopal	63	3,4
7	Latest develop	Seminars were	10/09/2022	Students	59	2,5,11

2021-22

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	No of students Present	Relevance to POs
1	Stability testing	Seminar was a	28/01/2022	Mr. Prabhat Jain, Scan Lab	83	3,11
2	Sampling meth	(fundamentals	20/12/2021	Mr. Prabhat Jain, Scan Lab	83	4,9
3	Alternative syst	Seminar was c	07/03/2022	Dr. Rajesh Urmale, Princip	78	9
4	Biochemical te	Extra practical	26/02/2022	Dr. Sameer Sapra	89	9
5	Rules governin	Covered in Spe	13/03/2022	Dr. Sameer Sapra	89	1,3
6	Plantation Driv	Plantation	26/01/2022	Dream Bhopal Green Bhop	87	10
7	Concepts of st	Practice sessic	04/07/2021	Dr. Sima Singh	57	4
8	Safe Disposal	Expert talk (We	15/12/2021	Mr. Sachin Gandhi Healthc	100	7,10
9	Functioning of	Guest lecture v	19/05/2022	Dr. Rajesh yadav Dy. Gene	65	3,7
10	Role and Resp	Guest lecture v	29/03/2022	Mr. K.C. Sharma, EX. Senic	70	3,7
11	Challenges in t	Guest lecture v	11/03/2022	Mr. Aayush Goswami, COO	71	3,11
12	Modern Instrun	Guest lecture v	03/07/2021	Ms. Neha Sharma Operatio	78	11
13	Software used	Demonstration	13/07/2021	Dr. Sima Singh	79	4
14	No hands on e	Handling of ani	23/04/2022	PBRI, Bhopal	59	7

2020-21

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	No of students Present	Relevance to POs
1	Advances in Ni	Webinar was A	06/12/2020	Students	71	3,5
2	Importance of	Guest lecture v	01/01/2021	Dr. Sunil Gupta, Senior Scie	70	4
3	Screening metl	Guest lecture	18/03/2021	Dr. N. Ganesh, Head, Sr. S	81	9,11

2.1.3 Adherence to Academic Calendar (10)

Institute Marks : 10.00

In the beginning of every academic year, an academic calendar is prepared with an objective to plan the academic activities to be undertaken in the coming year based on the University circular. It is finalized by the Departmental Consultative Committee in consultation with the Principal and other committee members. The calendar specifies the assignments, unit tests, sessional examination and external examinations schedules. The planned dates are subject to change as per the University circular related to examinations. The teaching plan is prepared adhering to the academic calendar and given to the students in the beginning of the semester. Other activities including various cultural events, extra and co-curricular events, health campaigns and sports events are also planned in advance.



IES INSTITUTE OF PHARMACYSM

BHOPAL

(Approved by PCI, New Delhi)

		IES INSTITUTE OF PHARMACY, BHOPAL (Academic Calendar 2022-23)				
		Odd Semester			Even Semester	
1	Commencement of academic session	10 th Nov, 2022 (Ist Sem)	22 nd Aug 2022 (IIIrd Sem)	25 th July, 2022 (V & VII Sem)	1 st Mar, 2023 (II & IV Sem)	7 th Feb, 2023 (VI, VIII Sem)
2	Industrial Visit	19 th Sept, 2022 (IIIrd Sem)			22 nd Jan, 2023 (VIth Sem) 21 st Jan, 2023 (VIIIth Sem) 26 th Feb, 2023 (IInd Sem)	
3	Orientation program	14 th to 19 th Nov, 2022			---	
4	Teachers day celebration	05 th Sep, 2023				
5	1 st Assignment submission	(I Sem) 03 rd Dec, 2022	(III Sem) 10 th Sep, 2022	(V & VII Sem) 05 th Aug, 2022	20 th Mar, 2023	14 th Feb, 2023
6	1 st Unit test	12 th Dec, 2022	12 th Sep, 2022	09 th Aug, 2022	21 st March 2023	15 th Feb, 2023
7	National seminar/workshop	01 st - 07 th Sept, 2022			17 th to 19 th Feb, 2023	
8	II nd Assignment submission	24 th Dec, 2022	26 th Sept, 2022	02 nd Sept, 2022	24 th Apr, 2023	21 th Feb, 2023
9	2 nd Unit Test	26 th Dec, 2022	29 th Sept, 2022	05 th Sept, 2022	25 th April, 2023	25 th Feb, 2023
10	I st Mid semester test (theory & practical)	02 nd to 07 th Jan, 2023	14 th Oct, 2022	12 th Sept, 2022	15 th to 20 th May, 2023	27 th Feb to 04 th Mar, 2023
11	III rd Assignment submission	23 rd Jan, 2023	19 th Oct, 2022	22 nd Sep, 2022	25 th May, 2023	10 th Apr, 2023
12	3 rd Unit test	25 th Jan, 2023	04 th Nov, 2022	28 th Sep, 2022	26 th May, 2023	11 th Apr, 2023
13	IV th Assignment submission	20 th Feb, 2023	09 th Nov, 2022	18 th Oct, 2022	29 th May, 2023	17 th Apr, 2023
14	4 th Unit test	27 th Feb, 2023	14 th Nov, 2022	20 th Oct, 2022	31 st May, 2023	20 th April, 2023
15	II nd Mid semester test (theory & practical)	20 th to 25 th Feb, 2023	01 st Dec, 2022	01 st Nov, 2022	01 st to 06 th Jun, 2023	15 th to 20 th May, 2023
16	Completion of syllabus	08 th Apr, 2023	12 th Dec, 2022	10 th Nov, 2022	10 th Jun, 2023	24 th May, 2023
17	Last date for practical record submission	08 th Apr, 2023	12 th Dec, 2022	10 th Nov, 2022	12 th Jun, 2023	24 th May, 2023
18	V th Assignment submission	12 th Apr, 2023	12 th Dec, 2022	10 th Nov, 2022	13 th Jun, 2023	26 th May, 2023
19	5 th Unit Test	16 th Apr, 2023	15 th Dec, 2022	17 th Nov, 2022	13 th Jun, 2023	29 th May, 2023
20	External examination (practical & theory)	As per IES University	As per IES University	As Per RGPV Schedule	As per IES University/RGPV schedule	
21	End semester break	15 days break after end semester examinations				

[Signature]
Principal
11/07/2022
IES Institute of Pharmacy
BHOPAL (M.P.)

IES Campus, Ratibad Main Road, Bhopal - 462044, Contact : 9713118967, 9285009756
Web :- www.iop.co.in, www.iesuniversity.ac.in, Email : iespharmacy@iesbpl.ac.in

Apart from basic teaching requirements, the Department has adopted various initiatives to improve instructional pedagogy methods for the attainment of POs. The faculty members are oriented towards Outcome based Education (OBE) and are actively utilizing the OBE to cater the learning need of students by innovative methods. The faculty of department adopts various innovative Teaching & Learning methodologies to create the best learning environment for students. These methodologies include traditional black board teaching, presentations, video lecturing, collaborative learning methods etc. as given below.

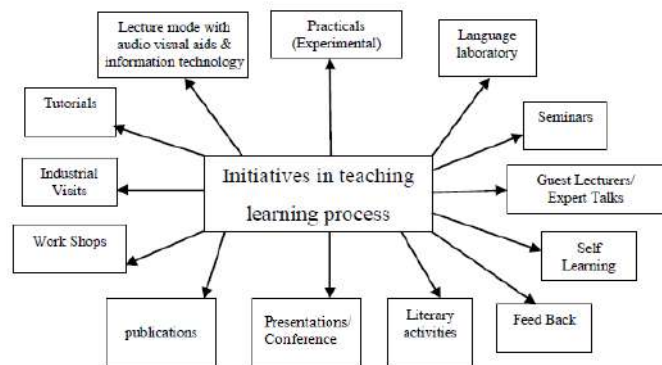


Figure 2.2: Different initiatives in teaching and learning process.

1. Improved/Innovative Classroom Teaching learning method

- The faculty use chalk and board and audio-visual aids in teaching.
- Students are encouraged to actively interact during the lecture hour by getting the doubts clarified.
- Further, students are also encouraged to give seminars/presentations relevant to the subjects which add to their presentation and communication skills.
- Revising the topics covered in the previous class through simple questions and answers at the beginning of each class
- Repeating important points in each class
- Use pedagogy like TPS (Think Pair Share) activity in Tutorial class.
- Revision of syllabus before examinations
- Identifying uniqueness of each student, understanding the variations among students
- Equal attention on the student, his strengths and limitations, along with the subject matter
- Effective counselling based on the student's individual social and financial background.
- Motivating students to set multiple career goals to sustain their interest in the learning process.
- Assigning complex design problems individually to enhance the problem skills of students
- Giving assignments to the students on topics beyond curriculum.

2. Improvement through Project-based learning

During pre-final year, the students are encouraged to carry out minor projects and in the final year major projects are executed under the guidance of faculty. The aim of project based learning is:

- Exposing students to real world through Examples
- Presenting the real life engineering problems.
- Implementing the solutions of engineering problems using models and charts for better subject understanding.
- Providing exposure to real world of Engineering by taking students to on-going projects within and outside the campus
- Building entrepreneurship skills

3. Improvement through Computer-assisted learning

The department is equipped with sufficient number of computers, LCD projectors, internet facility, application software and system software which are effectively used for teaching and learning.

- E-boards
- Use of e-resources.
- Using electronic presentations (PPT) on difficult topics for better understanding.
- Use of e-learning - resources from *National Programme on Technology Enhanced Learning (NPTEL)*.
- Presenting videos which show the recent technologies.
- PPT is incorporated as an item in Course Plan in all subjects wherever relevant
- The Google classroom is an innovative tool which is very effectively used in our campus for every course. Faculty members add all students to it before commencement of every semester for every course. They also upload course plans, course materials, video lectures, question banks etc. It helps the students to come prepared to the class. The tools in the Google class room facilitate online assessment of students, which can be used to measure the outcomes of each course.

4. Guest Lectures:- Guest lectures are organized by industry and academic experts which provide industry exposure, entrepreneurship skills and exposure for higher studies to the students beyond the class room learning and curriculum.

5. Special Classes:- Communication skill classes are organized for the students, news paper distribution, and online test is conducted for placement preparation.

6. Expert Lectures:- T&P classes are organized, Experts lectures from industry and academia are invited to deliver lectures on the latest trends and thrust areas to improve the employability of students.

Impact analysis of Initiatives and Implementation of Improving Quality of Teaching and Learning

The following are the positive outcomes observed after adopting the innovative TLP:

- Improved attendance of students for every class.
- Active participation of students in OBE (Outcome Based Education) activities.
- New view points and new project ideas are derived in class.
- Better bonding between students and faculty.
- Appreciation from the parents.
- Better outcome in terms of projects.

C. Implementation of Mentor teaching-learning system: Methodology to support slow learner students and encourage bright students

Department adopts Mentor Teaching Learning system to support slow learner and bright students equally. Mentoring is to support and encourage students to manage their own learning so that they may maximize their potential, develop their skills, improve their performance and become the person they want to be. Mentoring is a powerful personal development and empowerment tool. It is an effective way of helping students to progress in their careers and is becoming increasingly popular as its potential is realized. Faculty members are assigned with the responsibility of mentorship. Each mentor is allotted with 10-15 students. In first year, students on the basis of their percentage are grouped into two categories: students below 60% marks in 12th board are classified as slow learner students and students above 60% as brighter students. From second year onwards the students who secure less than 5-CGPA in their Continuous Assessment or with more than 2 backlogs are identified and considered as academically weak students. Others are considered as academically bright students. Weak students are given counselling for their career guidance. Bright students are encouraged to take up new challenges time to time. The parents are also informed about the progress report like result, attendance and performance of the students. The students needing improvement are groomed not only for improving academic performance, but also given opportunity to showcase their skills through events, competitions etc and this helps to improve academic performance also.

1. Assistance for slow learner students:

- Mentors from time to time follow their progress and counsel them to attend the classes
- Subject handling Faculty members conduct remedial classes.
- Faculty members inculcate theoretical concepts through model specimen/charts/ video lectures/ online lectures.
- Confidence is boosted by motivating them to participate in sports, NCC, NSS and other activities.
- Slow learners are supported in difficult areas of learning; like encouraging students to sharpen their listening, writing skills and improving communication skills.

2. Encouraging bright students

- Students securing First and Second rank in end semester examination are awarded with certificate of merit.
- Student securing 100% attendances are also awarded by certificate.
- Students are motivated for attending workshops, seminars and technical contests.
- Students are encouraged to undergo Industrial Internships.

Impact analysis of Initiatives and Implementation of Mentor Teaching-Learning system

- Based on the extra care/ initiatives taken for weak students their academic performance improves.
- Students participated in various activities and performed outstandingly in various national level technical and nontechnical contests.
- Improvement is seen in the assessment of weaker students.

D. Initiatives and Implementation of improving quality of class room teaching

Teaching-Learning process is crucial part of outcome based education and implements/employs as the set of activities engaging with students to enable them to acquire the knowledge, skills and attitudes.

Following basic and primary activities adopted :

1. Providing Infrastructure, E-boards, projectors, well equipped labs /Procurement of Quality Equipment
 2. Faculty Recruitment
 3. Academic calendar/Adherence to Academic calendar
- Subjects allotment
 - Time Table
 - Course File
 - Quality lecture notes
 - Lesson Plan
 - Instruction Delivery
 4. Continuous Evaluation
 5. Review of Syllabus Coverage
 6. End Semester Exams, class tests, unit tests, presentations, quiz etc.
 7. Results Analysis
 8. Assessment of CO-Nonattainment/Action for unattainedCOs/POs/PSOs
 9. Faculty Annual Appraisal

A. Process for internal semester question paper setting and evaluation and effective process implementation

The assessments are designed in a relevant manner in order to ensure that the learner achieves the intended learning outcomes. Thus, the evaluation of assessment tasks with regards to both content and form is necessary. Our Institution has well-defined guidelines for question paper setting and preparing key points for answers with mark distribution. While setting question papers the following guidelines are kept in mind and strictly adhered to enhance quality.

The department conducts two internal assessment tests in one semester before appearing in the final exam for each course. This procedure enhances the confidence level for the students to prepare for the end term exam and also provides a better understanding in the respective course.

- The department conducts two mid semester tests in one semester for a maximum of 30 marks each.
- Mid semester 1 covers 50% coverage of COs and remaining 50% coverage of COs is covered in mid semester 2.
- Duration of the test is 1.5 hours and question papers are set in such manner that it makes the students to learn time management.
- The question papers are prepared based on course outcomes. Each question is mapped with the corresponding course outcome.
- While setting the question paper previous university exam papers are taken into consideration.
- The HOD/Exam coordinator review the Mid semester exam question paper for validation with respect to COs and Bloom's taxonomy of learning objectives before submission in the exam section.
- If any question paper is not satisfying, then it is not accepted and resent to the faculty for improving the quality of questions level.
- Marks are recorded in the exam cell after valuation and are finally considered for calculation of internal marks.
- The valued answer scripts are shared with the students.
- Average of the two assessments marks is chosen in mid semester examination (MSE) at the time of awarding internal marks.

Process of Question paper setting

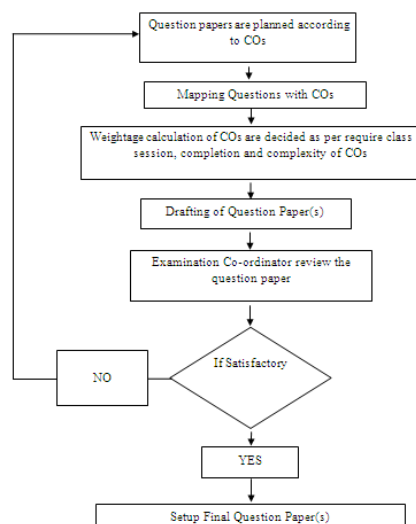


Figure 2.5 Question paper setting Process

B. Process to ensure questions from outcomes/ learning levels perspective

- Direct attainment of COs is determined from the performances of students in 25% of Internal Evaluation (IE) and 75% of Semester End Examination (SEE)
- 25% of Internal Evaluation (IE) is calculated from 60% of Mid Semester Examination and 40% of Attendance/Assignment/theory quizzes.
- For assessment of Mid Semester Examination marks, two Mid Semester are conducted and final marks is considering as an average of two mid marks. Mid semester 1 covers 50% coverage of COs and remaining 50% coverage of COs is covered in mid semester 2.
- Mid Semester Examination includes Objective, short answer and long answer type questions with respect to COs.
- The examination section reviews the Mid semester exam question paper on the above basis.
- If any question paper is not satisfying, then it is not accepted and resent to the faculty for improving the quality of questions level.

One of the example of question paper with the following COs

CO1: Determine Impurity in inorganic compounds by different Methods.

CO2: Describe history and basics of inorganic pharmaceutical drug products.

CO3: Classify inorganic pharmaceuticals on the basis of uses and properties

CO4: Demonstrate radiopharmaceuticals on the basis of properties and uses.

Enrollment No. _____

IES INSTITUTE OF PHARMACY BHOPAL
1 SEMESTRAL EXAMINATION NOVEMBER 2022

Semester: B Pharmacy 1 semester

Max marks 30

Subject: INORGENIC CHEMISTRY

Time: 1:30 Hrs

Subject Code: BP 104T

Note: 1. Paper is divided into three parts

Section A: Multiple choice Questions. Attempt all questions. 10 X 1 = 10

Section B: Short answers Type Questions. Attempt all questions. 2 X 5 = 10

Section C: Long answers Type Questions. Attempt all questions. 1 X 10 = 10

SECTION A		
Multiple Choice Questions. Attempt all questions. 10X1=10		
Q. No.	Question	CO Achieved
1	1. Impurities in pharmaceutical preparation possibly due to which source (a) Raw material (b) Manufacturing process (c) Chemical instability (d) All of the above	CO1
2	2. In Bronsted-Lowry concept acid is (a) proton donor (b) electron donor (c) proton acceptor (d) electron acceptor	CO1
3	3. Strong acid is (a) Cr^{2+} (b) Hg^{2+} (c) I^{-} (d) Cs^{+}	CO1
4	4. Limit test for iron purple color is due to formation of (a) Ferric sulphate (b) Electron pair acceptor (c) Proton acceptor (d) Electron acceptor	CO1
5	5. According to Lewis concept acid is (a) Electron pair acceptor (b) Electron pair donor (c) Proton acceptor (d) Electron acceptor	CO1
6	6. What is the full form of pH? (a) Positive hydrogen (b) Potential Hydrogen (c) Positron (d) Proton of hydrogen	CO1

7	7. Buffers react with _____ ions. (a) hydrogen, hydroxyl (b) magnesium, calcium (c) potassium (d) sodium	CO1
8	8. Buffers usually contain _____ with its conjugate (a) weak base, base (b) strong base, acid (c) weak acid, base (d) weak acid, acid	CO1
9	9. Impurities in pharmaceutical preparation may be due to following sources: (a) Raw material (b) Manufacturing process (c) Chemical instability (d) All of the above	CO1
10	10. In the limit test of arsenic, the arsenic gas produced on reduction of _____ with nascent hydrogen. (a) Arsenic acid (b) Arsenous acid (c) Arsenic trichloride (d) None of these	CO1
SECTION B		
Short Answers Type Questions. Attempt any two questions. 2x5=10		
1	1. Acid (Bronsted-lowry concept)	CO2
2	2. Base (Bronsted-lowry concept)	CO2
3	3. Buffer in pharmaceutical system	CO1
SECTION C		
Long Answers Type Questions. Attempt any one question. 1x10=10		
1	1. Describe sources and types impurities in pharmaceutical substances.	CO2
2	2. Explain buffer equation.	CO2

2.2.3 Quality of Students projects (15)

Institute Marks : 15.00

The syllabus include research activity by the undergraduate students in IV year VII semester, therefore we have started this activity which can inspire them to think analytically, utilize the scientific principles and solve the given problem.

To execute this research activity, all the fourth year students were given a mini research project under the guidance of respective faculty members. The project was research based. The research work was done in the college in the span of three months. The selection criteria for mini research project was,

1. It should be cost effective
2. Safe and eco-friendly

After the lab work, students submitted a report in a spiral bound form. The students presented their work in the form of seminar and were evaluated by one external examiner deputed by the university. As the criteria for evaluation were Project Sustainability, Quality of Research, Presentation and Defence, the quality of these projects was evaluated based on its reflection on various Program Outcomes like PO1, PO2, PO3, PO5 and PO8. From the results, it was observed that maximum students identified and understood the problem given to them. They tried their best to solve the project and apply the available scientific knowledge to interpret the data efficiently. Simultaneously it was observed that some students could present the data well and defend their work in a proper technical manner.

Process of project identification: Based on the advancement in pharmaceutical sciences, and gaps identified in the syllabus, a few topics are identified by the teachers. Each teacher gives 5 topics of his/her speciality. A pool of 70 topics of all specializations – pharmaceuticals, pharmaceutical chemistry, pharmacognosy, pharmacology and pharmaceutical analysis are collected. The topics cover wide range of components, product, research, review, applications of pharmaceutical sciences, pharmacopoeial standards, safety, ethics etc. In addition, students are given a chance to select their own topic in consultation with the teacher (facilitator). These topics were displayed on the notice board and allowed the selection. The topic, student name, facilitator name and date of seminar presentation are finalized and displayed in the notice board.

Continuous monitoring: The students interact with teachers and begin the process. Throughout the period, the teacher facilitates the student in achieving the desired objectives, in terms of verifying the authenticity of the materials, organizing and written document. In addition, the students also prepare PowerPoint presentations, which will be moderated by the teacher for approval to oral presentation. The time duration of the presentation scheduled is 30 minutes (20 minutes for presentation and 10 minutes for open discussion) for each student.

Evaluation: The written document (project writing and assignment) will be evaluated by two teachers. During the oral presentation, two teachers along with all students will witness the proceedings. The student is encouraged to use audio visual aids and blend of teaching aids. The oral presentation is evaluated by two teachers. Finally each student is given a 'word' grade.

List of Top Five Projects

Academic Session: 2021-22

S No	Enrollment	Name of Student	Topic	Guide
1	0554PY181007	ABRAR ANSARI	Formulation, development of rapidly dissolving films containing anti-histaminic drug	Dr Jyotiram Sawale
2	0554PY181008	ADARSH PRATAP RAO	Formulation and Evaluation of colon targeted drug delivery systems	Dr Sameer Sapra
	0554PY181013	AJAY KUSHWAH	Vacuum Dryer and Freeze Dryer.	Dr. Gaurav Jain
4	0554PY181015	AMAN RAJ	Viscosity-Imparting Agents in Disperse Systems	Dr. Gaurav Jain
5	0554PY181027	CHANDAN KUMAR YADAV	Dissolution improvement of weakly soluble drugs using hot melt Extrusion Technology.	Dr. Sima Singh
6	0554PY181028	DEEPAK	Dissolution rate Enhancement of Glimepiride and olanzapine by spray drying technique.	Dr. Vivek Chourasiya

Academic Session: 2020-21

S No	Enrollment	Name of Student	Topic	Guide
1	0544PY171001	Abhishek kumar	Development of lipodic drug delivery system for bioavailability improvement of the poorly water soluble antihypertensive drug	Dr. Jyotiram Sawale
2	0544PY171002	Abhishek patel	Formulation, development of rapidly dissolving films containing anti-histaminic drug	Dr. Sameer Sapra
3	0544PY171006	Aman prajapati	Formulation and Evaluation of colon targeted drug delivery systems	Dr. Gaurav Jain
4	0544PY171007	Anand kumar maurya	Formulation, development and evaluation of controlled drug delivery of analgesics via novel routes	Dr. Sima Singh
5	0544PY171008	Arif afashar	Drug-induced diseases and Teratogenicity	Mr. Phool Singh
6	0544PY171009	Arman ali	Introduction to drying processes – Study of Tray Dryers: fluidized Bed Dryer.	Mr. Mayank Goyal

2.2.4 Initiatives related to Industry and/or Hospital interaction (20)

Institute Marks : 20.00

Initiatives: Institute always strives to impart education of international standards as envisaged in the mission statement.

In addition to the regular compliance to the RGPV, Bhopal and IES University, Bhopal approved syllabus, several initiatives have been taken to foster the growth of the students.

With an aim to provide hands-on training to the pharmacy students on recent technologies using commercially viable machineries, equipment, sophisticated process, validated documents, job training, career opportunities, campus recruitments, innovative idea generation Programs and awards, in the premises of Institute.

The institute is equipped with modern equipment and instruments required in the UG research projects. Students and faculty members have an easy access to the research facilities available in the institute.

Students and staff are regularly avail quality lectures from the highly experienced industry professionals. It gives an idea about the recent challenges the corporate are facing and can approach the industry. It keeps them updated on the current industrial trends and creates ample of job opportunities for them.

They also learn how to make their methodologies tangible in real life situations. Stepping beyond a merely theoretical approach, they need to put across the skills with the help of their faculties to transfer ideas and strategies into practice. It is a win-win situation to both the Institute and Industry with such novel ideas in place.

The college has also established active interactions with other leading Pharma Industries for imparting industrial training to III Year B. Pharmacy students. It also organizes Industrial Visits and facilitates campus placement drives for the Final Year B. Pharmacy students.

The has signed Memorandum of Understanding with pharmaceutical and Nutraceutical industries and to facilitate activities such as placement drives, health campaigns etc. undertaken by the college.

Implementation details: All the students are led by the faculty to visit industrial exhibition held in May, 2022 at Bittan Market, Bhopal. This expo has built up the updating of analytical instruments and machineries used in pharmaceutical manufacturing. A list of advanced topics covered under guest lecturers as well as industrial visits made for last three years is given below.

Expert Sessions:

S. No	Academic Year	Date	Title	Resource Person (Name, Designation, Organization)
1	2021-22	06/05/2022	Career opportunities in Pharmacy	Dr. Akhilesh Singhai, Director, LNCT School of Pharmacy, LNCT University, Bhopa
2	2021-22	12/05/2022	Challenges and scope in medical writing	Dr. Abhishek Budhiraja, Senior consultantMedical Writing, RWE,IQVIA
3	2021-22		Nurturing professional for 4.0 Pharma Industry	Dr. Neha Sharma Career Coach and Marketing head, Modern laboratories, Indore
4	2021-22	11/3/2022	Industry Academia Collaboration: Need of the hour for India	Mr. Aayush Goswami, COO Hind Pharma, Bhopal
5	2021-22	19/05/2022	What Industry expect from Fresher	Dr. Rajesh Yadav Dy. General Manager QA Zydus Lifescience Ltd, Goa
6	2021-22	15/12/2021	Webinar on Safe Drug Disposal Awareness	Mr. Sachin Gandhi Founder Healthcopeia Foundation, New Delhi
7	2020-21	15 /02/21	Interplay Between Gut – Brain – Heart Axis and Metabolic Syndrome	Dr Rajeev Taliyan Asso. Professor Dept. of Pharmacy Birla Institute of Technology and Science Pilani Rajasthan

8	2020-21	06/02/2021	Global Trend Of Clinical Research	Dr. Ashish Singh Parihar Medical Writer CBCC Global Research LLP, Ahmadabad
9	2020-21	9/4/2021	Generic Drug Development : Current Scenario and future	Dr. Subhash Pandey Principal Advisor and council Member
10	2020-21	12/12/2020	Successful Interview and Essential Qualities Needs for Pharmacy Graduates	Mr. Prasad Bhagwat, Soft Skill Trainer, Pune
11			Role of Conventional Approach's Towards New Product Development	Akshat Sharma
12	2020-21	29/09/20	Prevention of Heart Disease	Dr. Ajay Sharma
13	2020-21	7/9/2020	Nutrition and immunity boosting during corona pandemic	Dr. Dipti Bhargava
14	2019-20	09/06/2020	Pharmaceutical Process Validation: A cGMP	Prof. Sanjay K Jain Head of Department, Department of Pharmaceutical Sciences Dr. H. S. Gour University, Sagar
15	2019-20	13/06/2020	Quality concerns of Medicinal Products and Botanical Food Supplements	Prof. U. K. Patil Professor, Department of Pharmaceutical Sciences Dr. H. S. Gour University, Sagar

Industrial Visits

S. No	Academic Year	Date	Industry
1	2022-23	07/12/2022	National Doping Test Laboratory, New Delhi
2	2022-23	10/09/2022	Lifespan biotech, Mandideep
3	2022-23	12/07/2022	PBRI, Bhopal
4	2022-23	12/07/2022	Hind Pharma, Bhopal
5	2021-22	19/04/2022	Modern laboratories, Indore
6	2021-22	08/05/2022	Industrial Expo, Bhopal
7	2021-22	09/12/2021	Van vihar and tribal museum Bhopal
8	2021-22	07/12/2021	RB Science, Bhopal
9	2021-22	07/12/2021	Scan Laboratories, Bhopal
10	2021-22	16/12/2021	Phyto Drugs, Peelukhedi
11	2021-22	24/12/2021	Vindhya Herbs

Initiatives: College Training and Placement Cell facilitates arrangements for four weeks in-plant training to be undergone by the III Year Pharmacy students. At the beginning of IVth Year Semester-VII, the Cell gives orientation to the students regarding the purpose of In-plant training and procedure to approach industries for the same. The Cell facilitates issue of official appeal letters to the students which need to be submitted to industries. The Cell further coordinates with industries for the confirmation of training. On completion of the training, the students are asked to submit a report of the same and appear for a short individual interactive session with the Training Cell regarding their observations and experiences during the training. Students are evaluated based on the above criteria and top three reports are issued a Certificate of Merit which is handed over to them during the annual gathering function. Students are benefitted from the practical In-Plant training activity since they have related topics such as Pilot-Plant scale up techniques in their subsequent final year syllabus. The issue of Certificate of Merit additionally motivates the students to strive for active participation in this co-curricular activity.

Implementation: A list of students, their summer industrial training for the last three years is listed below. The industries covered are: formulations, and biological products. A list of students undergone skill development program in drug manufacturing companies, drug research labs, animal testing labs in Indore, Bhopal, Dewas, Mandideep, Baddi, etc are also included.

Industrial Training:

AcademicYear2020-2021:Industryinternshipandsummertraining

S.No	Enroll.NO	NameoftheStudent	NameoftheIndustry
1.	0554PY171002	ABHISHEK PATEL	Lupin Ltd. Mandideep
2.	0554PY171005	AMAN KUMAR	Lupin Ltd. Mandideep
3.	0554PY171006	AMAN PRAJAPATI	Lupin Ltd. Mandideep
4.	0554PY171011	ASHISH KUMAR SAH	Drug Testing Laboratories, Bhopal
5.	0554PY171014	ASIF ULLAH KHAN	Hind Pharma, Govindpura, Bhopal
6.	0554PY171015	BHAG CHANDRA	Lupin Ltd. Mandideep
7.	0554PY171019	DASHARATH	Hind Pharma, Govindpura, Bhopal
8.	0554PY171023	GAURAV BUDHOLIAYA	Drug Testing Laboratories, Bhopal
9.	0554PY171024	GAUTUM KUMAR SAHU	Drug Testing Laboratories, Bhopal
10.	0554PY171030	HARSHAL KAKDE	Drug Testing Laboratories, Bhopal
11.	0554PY171031	HEERA KUMAR PASWAN	Drug Testing Laboratories, Bhopal
12.	0554PY171036	KAPIL RAGHUWANSHI	Drug Testing Laboratories, Bhopal
13.	0554PY171037	KATRE SUMITKUMAR MAHESH	Drug Testing Laboratories, Bhopal
14.	0554PY171038	KOLTHARKAR MANISH MADUKAR	Drug Testing Laboratories, Bhopal
15.	0554PY171041	LUCKY KUMAR	Hind Pharma, Govindpura, Bhopal
16.	0554PY171048	MD DANISH QUAMAR	Lupin Ltd. Mandideep
17.	0554PY171049	MD IMRAN	Lupin Ltd. Mandideep
18.	0554PY171051	MD MAHBOOB	Life Span Biotech, Mandideep
19.	0554PY171053	MD SALMAN REZA	Life Span Biotech, Mandideep
20.	0554PY171054	MD SAZID AZIM	Life Span Biotech, Mandideep
21.	0554PY171056	MOHAMMAD USMAN ALI	Lupin Ltd. Mandideep
22.	0554PY171057	MOHD UMAIR KHAN	Lupin Ltd. Mandideep
23.	0554PY171063	PRASHANT CHOUHAN	Lupin Ltd. Mandideep
24.	0554PY171064	PRATIKSHA DUBEY	Lupin Ltd. Mandideep
25.	0554PY171066	PUSHPENDRA	Hind Pharma, Govindpura, Bhopal
26.	0554PY171069	RAJNISH KUMAR TIWARI	Life Span Biotech, Mandideep
27.	0554PY171070	RAKESH KUMAR GAUTAM	Life Span Biotech, Mandideep

28.	0554PY171072	RAVINDRA KUMAR	Hind Pharma, Govindpura, Bhopal
29.	0554PY171077	SAGAR DEWANGAN	Life Span Biotech, Mandideep
30.	0554PY171078	SAGAR GURJAR	Life Span Biotech, Mandideep
31.	0554PY171081	SALAMUL HAQUE	Life Span Biotech, Mandideep
32.	0554PY171082	SANGEETA GOUR	Life Span Biotech, Mandideep
33.	0554PY171085	SHAKIR ALI	Hind Pharma, Govindpura, Bhopal
34.	0554PY171086	SHAKSHI KUMARI	Hind Pharma, Govindpura, Bhopal
35.	0554PY171087	SHASHI SUPRIYA	Hind Pharma, Govindpura, Bhopal
36.	0554PY171091	SHUBHAM RAO	Hind Pharma, Govindpura, Bhopal
37.	0554PY171093	TRIBHUWAN KUMAR	Hind Pharma, Govindpura, Bhopal
38.	0554PY171097	VIVEK KUMAR SINGH	Hind Pharma, Govindpura, Bhopal
39.	0554PY171098	YOGENDRA KUMAR SAHU	Hind Pharma, Govindpura, Bhopal

AcademicYear2021-2022: Industry internship and summer training

S.No	Enroll.NO	Name of the Student	Name of the Industry
1.	0554PY181001	Aakash Choudhary	Hind Pharma, Govindpura, Bhopal
2.	0554PY181002	Abdul Haseeb	Hind Pharma, Govindpura, Bhopal
3.	0554PY181003	Abdul Mabud	Drug Testing Laboratory
4.	0554PY181004	Abdur Rahman	Hind Pharma
5.	0554PY181005	Abhishek Giri	Hind Pharma, Govindpura, Bhopal
6.	0554PY181006	Abhishek Kumar	Hind Pharma, Govindpura, Bhopal
7.	0554PY181007	Abrar Ansari	Hind Pharma, Govindpura, Bhopal
8.	0554PY181008	Adarsh Pratap Rao	Hind Pharma, Govindpura, Bhopal
9.	0554PY181009	Aditya Kumar Gupta	Hind Pharma, Govindpura, Bhopal
10.	0554PY181010	Afsar Hussain	Hind Pharma, Govindpura, Bhopal
11.	0554PY181011	Ajay Gupta	Citi Pharma, Bhopal
12.	0554PY181012	Ajay Kumar Verma	Drug Testing Laboratory, Bhopal
13.	0554PY181013	Ajay Kushwah	Drug Testing Laboratory, Bhopal
14.	0554PY181014	Akash	Drug Testing Laboratory, Bhopal
15.	0554PY181015	Aman Raj	Drug Testing Laboratory, Bhopal
16.	0554PY181016	Amit Kumar	Drug Testing Laboratory, Bhopal
17.	0554PY181017	Animesh Singh	Drug Testing Laboratory, Bhopal
18.	0554PY181019	Ankit Agrahari	Drug Testing Laboratory, Bhopal
19.	0554PY181020	Ankit Kumar Gupta	Drug Testing Laboratory, Bhopal
20.	0554PY181021	Anuruddh Pratap Sahu	Drug Testing Laboratory, Bhopal
21.	0554PY181022	Aquib Malik	Drug Testing Laboratory, Bhopal
22.	0554PY181023	Ashwini Lilhare	Drug Testing Laboratory, Bhopal
23.	0554PY181024	Ayush Sahu	Hind Pharma, Bhopal
24.	0554PY181025	Ayush Sharma	Hind Pharma, Bhopal
25.	0554PY181026	Bhagchaandra Kushwaha	Drug Testing Laboratory, Bhopal
26.	0554PY181027	Chandan Kumar Yadav	Drug Testing Laboratory, Bhopal
27.	0554PY181028	Deepak	Hind Pharma, Govindpura, Bhopal
28.	0554PY181029	Dheeraj Kumar	Hind Pharma, Govindpura, Bhopal
29.	0554PY181030	Divyanshu Kumar Saket	Drug Testing Laboratory, Bhopal
30.	0554PY181031	Garima Katiyar	Hind Pharma, Govindpura, Bhopal

31.	0554PY181032	Govind Rajput	Drug Testing Laboratory, Bhopal
32.	0554PY181033	Gyan Singh Bharti	Aristo Pharmaceuticals Pvt Ltd, Mandideep
33.	0554PY181034	Harpreet Singh	Aristo Pharmaceuticals Pvt Ltd, Mandideep
34.	0554PY181035	Hasrat Ali	Aristo Pharmaceuticals Pvt Ltd, Mandideep
35.	0554PY181036	Himanshu Kumar	Aristo Pharmaceuticals Pvt Ltd, Mandideep
36.	0554PY181037	Iftexhar Ahmad	Aristo Pharmaceuticals Pvt Ltd, Mandideep
37.	0554PY181038	Imran Khan	Aristo Pharmaceuticals Pvt Ltd, Mandideep
38.	0554PY181039	Jai Kishan Pal	Lupin Ltd, Mandideep
39.	0554PY181040	Jannat Hussain	Drug Testing Laboratory, Bhopal
40.	0554PY181041	Jeetendra Yadav	Aristo Pharmaceuticals Pvt Ltd, Mandideep
41.	0554PY181042	Jyotish Kumar	Hind Pharma, Govindpura, Bhopal
42.	0554PY181043	Karan Kumar	Lupin Ltd, Mandideep
43.	0554PY181044	Karan Singh	Lupin Ltd, Mandideep
44.	0554PY181045	Krishna Agrahari	Lupin Ltd, Mandideep
45.	0554PY181047	Kumar Saurav	Lupin Ltd, Mandideep
46.	0554PY181048	Md Ahtesham	Aristo Pharmaceuticals Pvt Ltd, Mandideep
47.	0554PY181049	Md Kamal Mustafa	Lupin Ltd, Mandideep
48.	0554PY181050	Md Reyaz	Lupin Ltd, Mandideep
49.	0554PY181051	Md Tabish Atahar	Aristo Pharmaceuticals Pvt Ltd, Mandideep
50.	0554PY181052	Mohammad Faizan Khan	Drug Testing Laboratory, Bhopal
51.	0554PY181053	Mohammad Hassan	Hind Pharma, Govindpura, Bhopal
52.	0554PY181054	Mohammad Usama	Drug Testing Laboratory, Bhopal
53.	0554PY181055	Mohammad Zeeshan	Hind Pharma, Govindpura, Bhopal
54.	0554PY181056	Mohd Adnan	Hind Pharma, Govindpura, Bhopal
55.	0554PY181057	Mohd Afroz	Hind Pharma, Govindpura, Bhopal
56.	0554PY181058	Mohd Arif	Hind Pharma, Govindpura, Bhopal
57.	0554PY181059	Mohd Rehan	Drug Testing Laboratory & Hind Pharma, Govindpura, Bhopal
58.	0554PY181060	Mohd Taufeeq	Lupin Ltd, Mandideep
59.	0554PY181062	Mohamad Adnan	Aristo Pharmaceuticals Pvt Ltd, Mandideep
60.	0554PY181063	Mohit Ranglani	Lupin Ltd, Mandideep
61.	0554PY181064	Naqeeb Ul Islam	Lupin Ltd, Mandideep
62.	0554PY181065	Nasem Hasan Khan	Aristo Pharmaceuticals Pvt Ltd, Mandideep
63.	0554PY181066	Naveen Pandey	Lupin Ltd, Mandideep
64.	0554PY181067	Neeraj Rathore	Lupin Ltd, Mandideep
65.	0554PY181068	Neha Yadav	Hind Pharma, Govindpura, Bhopal
66.	0554PY181069	Nehal Ahmed	Aristo Pharmaceuticals Pvt Ltd, Mandideep
67.	0554PY181070	ObaidurRahman	Aristo Pharmaceuticals Pvt Ltd, Mandideep
68.	0554PY181071	Pankaj Kumar	Aristo Pharmaceuticals Pvt Ltd, Mandideep
69.	0554PY181072	Pankaj Kumar Singh	Drug Testing Laboratory, Bhopal
70.	0554PY181073	Pawan Nambardar	Aristo Pharmaceuticals Pvt Ltd, Mandideep
71.	0554PY181074	Prajval Malviya	Aristo Pharmaceuticals Pvt Ltd, Mandideep
72.	0554PY181075	Priyanshu Meshram	Hind Pharma, Govindpura, Bhopal
73.	0554PY181076	Rahul Maurya	Aristo Pharmaceuticals Pvt Ltd, Mandideep
74.	0554PY181077	Rahul Patel	Aristo Pharmaceuticals Pvt Ltd, Mandideep
75.	0554PY181078	Rajkishor Prajapati	Drug Testing Laboratory, Bhopal
76.	0554PY181079	Rajneesh Kumar Patel	Aristo Pharmaceuticals Pvt Ltd, Mandideep
77.	0554PY181080	Ram Chandra	Lupin Ltd, Mandideep
78.	0554PY181081	Ranjeet Puri	Lupin Ltd, Mandideep
79.	0554PY181082	Razaullah Ansari	Lupin Ltd, Mandideep
80.	0554PY181083	Saif Khan	Lupin Ltd, Mandideep
81.	0554PY181084	Saket Kumar	Lupin Ltd, Mandideep
82.	0554PY181085	Sanjeev Kumar	Aristo Pharmaceuticals Pvt Ltd, Mandideep
83.	0554PY181086	Satyam Singh	Hind Pharma, Govindpura, Bhopal
84.	0554PY181087	Saurav Singh	Hind Pharma, Govindpura, Bhopal

85.	0554PY181088	Shashank Bhardwaj	Lupin Ltd, Mandideep
86.	0554PY181089	Shifa Agha	Aristo Pharmaceuticals Pvt Ltd, Mandideep
87.	0554PY181090	Shivam Kumar	Aristo Pharmaceuticals Pvt Ltd, Mandideep
88.	0554PY181091	Shivanshu Mishra	Lupin Ltd, Mandideep
89.	0554PY181092	Shubham	Lupin Ltd, Mandideep
90.	0554PY181093	Shubham Kumar Tripathy	Aristo Pharmaceuticals Pvt Ltd, Mandideep
91.	0554PY181094	Sourabh Mahajan	Aristo Pharmaceuticals Pvt Ltd, Mandideep
92.	0554PY181095	Sudhakar Singh	Aristo Pharmaceuticals Pvt Ltd, Mandideep
93.	0554PY181096	Sushmita Pandey	Hind Pharma, Govindpura, Bhopal
94.	0554PY181097	Vikas Yadav	Lupin Ltd, Mandideep
95.	0554PY181098	Vikesh Kumar	Aristo Pharmaceuticals Pvt Ltd, Mandideep
96.	0554PY181099	Vineet Kushwaha	Lupin Ltd, Mandideep
97.	0554PY181100	Yogesh vardhan Vishwakarma	Aristo Pharmaceuticals Pvt Ltd, Mandideep

AcademicYear2022-2023: Industry internship and summer training

S.No	Enroll. NO	Name of the Student	Name of the Industry
1.	0554PY191031	KRISHNA MURARI	Nootan pharmaceuticals , barotiwala
2.	0554PY191030	KRISHNA KUAMR SINGH	Nootan pharmaceuticals , barotiwala
3.	0554PY191029	KARISHMA KUMARI	Nootan pharmaceuticals , barotiwala
4.	0554PY191002	ABHIJEET KUMAR THAKUR	Nootan pharmaceuticals , barotiwala
5.	0554PY191062	RANDHIR KUMAR VERMA	Nootan pharmaceuticals , barotiwala
6.	0554PY191016	DEEPAK KUMAR	Nootan pharmaceuticals , barotiwala
7.	0554PY191078	SATYAM KUMAR SHARMA	KMS , New delhi
8.	0554PY191078	SATYAM KUMAR SHARMA	Modern Laboratories
9.	0554PY191053	NITESH KUSHWAHA	Nootan pharmaceuticals , barotiwala
10.	0554PY191079	SATYENDRA YADAV	Modern Laboratories
11.	0554PY191065	RAVI KUMAR	Modern Laboratories
12.	0554PY191050	NANDKISHORE DEHARIYA	Modern Laboratories
13.	0554PY191025	GUDDU KUMAR	Nootan pharmaceuticals , barotiwala
14.	0554PY191010	ANKIT KUMAR	AlkemHealth science
15.	0554PY191018	DHANANJAY KUMAR	Nootan pharmaceuticals , barotiwala
16.	0554PY191058	RAJEEV KUMAR RANJAN	R.S. Memorial Hospital
17.	0554PY191011	ANSHRAJ KUMAR	Sunny clinic
18.	0554PY191013	CHANDAN KUMAR	Nootan pharmaceuticals , barotiwala
19.	0554PY191099	VISHWAJEET RAO	Lupin Limited
20.	0554PY191044	MD SHAHID	Primary health centre , pupri
21.	0554PY191033	MANISH KUMAR	Zydus Healthcare limited
22.	0554PY191045	MERAJ ANWAR	YL Pharma, Baddi
23.	0554PY191023	FAHIM ALAM KHAN	YL Pharma, Baddi
24.	0554PY191038	MD KAMRAN ASHRAF	YL Pharma, Baddi
25.	0554PY191029	KARISHMA KUMARI	YL Pharma, Baddi
26.	0554PY191038	MD KAMRAN ASHRAF	YL Pharma, Baddi
27.	0554PY191008	ANAND RAJ	YL Pharma, Baddi
28.	0554PY191100	WAQAS SHAIKH	YL Pharma, Baddi

Continuous evaluation is a practice in IES Institute of Pharmacy, keeping the spirit of semester system. Too many tests and assessments are counter-productive. The main components of evaluation are described below.

Theory evaluation: In a semester period (90 days of instruction), two examinations are conducted with a gap of 40-45 days. These are conducted as per the almanac of the PCI. In fact, writing both of these examinations are compulsory for computing the average. In IES Institute of Pharmacy, theory examinations are written exam for 30 marks with time duration of 1.5 hours, which gives greater opportunity to express.

The pattern is objective type, short essay type and long essay type. Each student is given feedback on the performance. Within the short period of 45 days, again each unit is tested in the form of slip test (short answer type). Further, assignments are given to students, which are corrected and feedback is given. Further, attendance of regularity, active interaction in the classroom are given due credit in the evaluation. Therefore, the student is continuously engaged in the academic activity throughout the semester.

Practical Evaluation: In the laboratory setup, the experiments are conducted as per the list given by the PCI, New Delhi. A lot of time is spent for acquiring practical skills.

The continuous evaluation provides the opportunity to practice the skill. It normally involves feedback and corrective action, completing the given task in a given time. This is the informal evaluation. The writing of the practical records, submission and evaluation are done regularly. Viva voce is conducted at the end of each experiment (in every day) is another important feature of evaluation.

The above process demonstrated that the evaluation is a continuous process in place at IES Institute of Pharmacy. Special efforts are also taken for the holistic development of the students. Students interested in a particular subject are given certain assignments by the respective teachers. This helps them to learn the process of gaining extra knowledge by in depth literature search. After completion of the topic, students are asked to deliver seminar on some small subtopic from the syllabus. This helps them to overcome stage fright and also understand the topic in detail. Students with good drawing or computer skills are encouraged to prepare certain display charts. This helps them in a better understanding of the subject.

In order to motivate the students to participate in research, students from the third year are given Mini Research Projects. The student presents the findings of the same in the form of a poster at the National level. Last year, this work has also been presented at National Level competitions. They have won prizes for the same.

Especially for the final year students, pre-placement talks are organized. The lectures conducted include talks in which students are guided for facing the interview, performing in the aptitude tests, writing resume etc. They are also counseled for Post Graduate studies in India and abroad along with information of the courses available.

Students are encouraged to participate in various Inter and Intra-Collegiate sports events. Special sports hours are allotted in the time table wherein students spend some time playing sports. This helps in their overall development.

2.2.7 Quality of Experiments (20)

Institute Marks : 20.00

The syllabus of B. Pharmacy in PCI has specified the list of experiments after due consideration of the quality of the experiments. A few experiments are added by the college, in order to further enhance the quality of the experimental skills.

The college has a machine room as well as an instrument room having equipment. Flame Photometry, Dissolution Apparatus, Disintegration Apparatus, Punch Machine and UV Spectrophotometer. College laboratories are well equipped with basic requirements as per the syllabus.

A few highlights are enumerated below.

1. Laboratories are spacious and equipped with the necessary infrastructure that facilitate for the smooth conduct of experiments.
2. The college has the necessary equipment, instruments and apparatus as prescribed by the PCI, New Delhi.
3. The college has procured the necessary equipment in order to conduct the labs as per the specifications of PCI, New Delhi.
4. The teachers are meritorious, well qualified and experienced for handling the practical/labs work and effective learning.
5. The teachers are continuously striving and actively involved in research work, which is translated into the practical's.
6. The simulation experiments for the pharmacology are conducted regularly using established software. The software experiments conducted by UG students are being exposed to B. Pharmacy students for enhanced learning of pharmacology.
7. The language laboratory imparts specific skill. A multimedia aided language lab gives stress on experiments: grammatical exercises, phonetics pronunciation, oral presentations, vocabulary building, writing skills and interview skills.
8. Each student is given opportunity to conduct the experiments independently. For this reason, the practical batch size limited to 25 students.
9. Sufficient number of systems is maintained in the computer lab to enable that each student can get one terminal, so as to work independently in a lab.

The staff has been involved in developing laboratory manuals and a few are published. However, the students are expected to consult them, but they have to write the own laboratory manuals or records.

3 COURSE OUTCOMES (COS) AND PROGRAM OUTCOMES (POS) (100)

Total Marks 100.00

3.1 Establish the correlation between the courses and the Program Outcomes (NBA defined Program Outcomes as mentioned in Annexure I) (20)

Total Marks 20.00

Note : Number of Outcomes for a Course is expected to be around 6.

Course Name :	C1 01	Course Year :	2018-19
---------------	-------	---------------	---------

Course Name	Statements
C1 01.1	Identify the gross morphology, structure and organs of the human body.
C1 01.2	Illustrate anatomy and physiology of organ systems of the body.
C1 01.3	Compare autonomic and peripheral nervous system.
C1 01.4	Make use of hematological tests in blood cell counts and hemoglobin estimation.

Course Name :	C1 02	Course Year :	2018-19
---------------	-------	---------------	---------

Course Name	Statements
C1 02.1	Make use of nomenclature of organic compounds.
C1 02.2	Demonstrate the structure, physical and chemical properties of Organic compounds.
C1 02.3	Analyze reaction mechanisms and orientation of reactions
C1 02.4	Illustrate applications of organic compounds.

Course Name :	C2 01	Course Year :	2018-19
---------------	-------	---------------	---------

Course Name	Statements
C2 01.1	Evaluate the various preparation methods of organic Compounds
C2 01.2	Demonstrate stereo modeling and its application
C2 01.3	Analyze organic compound, their reaction mechanism involved in the synthesis
C2 01.4	Estimate elements in organic samples on preliminary based tests.

Course Name :	C2 02	Course Year :	2018-19
---------------	-------	---------------	---------

Course Name	Statements
C2 02.1	Outline the history and scope of Pharmacognosy.
C2 02.2	Elaborate the cultivation and evaluation of crude drugs.
C2 02.3	Analyze the traditional system of medicines and secondary metabolites.
C2 02.4	Utilize crude drugs in the formulation of medicine.

Course Name :	C3 01	Course Year :	2018-19
---------------	-------	---------------	---------

Course Name	Statements
C3 01.1	Summarize the chemistry of drugs with respect to their pharmacological activity
C3 01.2	Analyze the drug metabolic pathways, adverse effect and therapeutic value of Drugs
C3 01.3	Apply the Structural Activity Relationship of different classes of drugs in determining the activity of drugs.
C3 01.4	Analyze the chemical synthesis of selected drugs

Course Name :	C3 02	Course Year :	2018-19
---------------	-------	---------------	---------

Course Name	Statements
C3 02.1	Classify the approaches used in the drug design
C3 02.2	Classify the structure activity, chemistry and therapeutic value of drugs.
C3 02.3	Utilize medicinal drugs according to their mechanism of action and therapeutic use
C3 02.4	Apply quantitative structure activity relationship (QSAR), Prod rug concept, combinatorial chemistry and Computer aided drug design (CADD) to rational drug design

Course Name :	C4 01	Course Year :	2018-19
---------------	-------	---------------	---------

Course Name	Statements
C4 01.1	Illustrate the Laws and Acts that regulates pharmaceutical industry.
C4 01.2	Implement Pilot plant scale up techniques and pharmaceutical considerations for the preparation of dosage forms
C4 01.3	Assemble facts on responsibilities of regulatory affairs professionals.
C4 01.4	Apply the quality management systems in pharma industry for approval procedures

Course Name :	C4 02	Course Year :	2018-19
---------------	-------	---------------	---------

Course Name	Statements
C4 02.1	Elaborate Applications of Biostastics in Pharmacy
C4 02.2	Understand the drug metabolic pathways, adverse effect and therapeutic value of drugs
C4 02.3	Analyze Phases of Clinical trials, Observational and Experimental studies.
C4 02.4	Examine the statistical data using Excel.

3.1.2 CO-PO matrices of courses selected in 3.1.1 (four matrices to be mentioned; one per semester from 1st to 8th semester; atleast one per year) (5)

Institute Marks : 5.00

1 . course name : C101

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C101.1	2	2	3	2	-	1	1	3	1	-	2
C101.2	3	2	3	2	-	1	-	3	2	-	1
C101.3	3	2	3	2	-	1	-	3	1	-	2
C101.4	3	2	3	3	-	1	1	3	2	-	2
Average	2.75	2.00	3.00	2.25	0.00	1.00	1.00	3.00	1.50	0.00	1.75

2 . course name : C102

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C102.1	3	2	3	2	-	1	1	3	2	-	2
C102.2	3	2	3	2	-	1	1	3	1	-	2
C102.3	3	2	3	2	-	1	1	3	1	-	1
C102.4	3	2	3	3	-	1	1	3	2	-	2
Average	3.00	2.00	3.00	2.25	0.00	1.00	1.00	3.00	1.50	0.00	1.75

3 . course name : C201

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C201.1	3	3	3	3	-	-	2	-	1	1	2
C201.2	3	-	3	2	-	-	1	-	2	1	1
C201.3	3	3	2	1	-	-	1	-	1	1	1
C201.4	3	-	2	2	-	-	2	-	2	1	2
Average	3.00	3.00	2.50	1.70	0.00	0.00	1.50	0.00	1.50	0.00	1.50

4 . course name : C202

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C202.1	2	2	1	2	2	-	1	-	1	2	1
C202.2	3	2	1	2	-	-	1	-	1	2	2
C202.3	3	2	1	2	2	-	2	-	1	1	2
C202.4	3	3	1	-	2	-	2	-	2	2	1
Average	2.75	2.25	1.00	2.00	0.00	0.00	1.50	0.00	1.25	0.00	1.50

5 . course name : C301

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C301.1	2	2	-	3	-	1	-	-	2	-	2
C301.2	2	2	1	3	-	-	-	-	1	-	2
C301.3	2	2	3	2	-	1	-	-	1	-	1
C301.4	3	2	3	2	-	-	-	-	2	-	2
Average	2.00	2.00	2.30	2.50	0.00	1.00	0.00	0.00	1.50	0.00	1.75

6 . course name : C302

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C302.1	3	2	1	3	3	2	1	-	1	-	2
C302.2	3	2	1	2	-	2	1	1	1	-	2
C302.3	3	2	1	2	1	1	1	1	2	-	2
C302.4	3	2	1	2	1	1	1	-	1	-	2
Average	3.00	2.00	1.00	2.25	0.00	1.50	1.00	1.00	1.25	0.00	2.00

7 . course name : C401

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
--------	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
COBP208	3	3	3	2	2	3	2	2	2	2	2.5
COBP209	3	3	2.75	3	2.2	3	2	2.25	3	3	3
COBP210	2	2.5	3	3	2.5	3	2	3	2.5	3	3
COBP301	3	2	2	1.5	1.5	2.25	3	1.5	2.5	2	3
COBP302	3	3	2	2.5	2	2	2	1.5	2.5	1.75	2.75
COBP303	2.5	2.5	2	2	1.5	2.5	3	2	3	3	2.5
COBP304	3	3	2.5	2	1.5	2.5	2.5	2.25	2.5	2.75	3
COBP305	3	3	2.5	1.67	0	0	1.5	0	1.5	0	1.5
COBP306	3	3	2	2.5	2	2	2	1.5	2.5	1.75	2.75
COBP307	3	2	2.5	3	2.5	3	2.5	2.5	2.75	2.75	2
COBP308	3	3	2.5	2	1.5	2.5	2.5	2.25	2.5	2.75	3
COBP401	3	3	3	2	2	3	2	2	2	2	2.5
COBP402	2.75	2.25	2.5	2	2	2.75	2.5	2	2	2.5	3
COBP403	3	3	2.25	3	2	2	3	2	2	2	3
COBP404	2	2	3	3	2.5	3	2.5	2	2.5	2.75	2.5
COBP405	2.75	2.25	1	2	0	0	1.5	0	1.25	0	1.5
COBP406	3	3	3	2	2	3	2	2	2	2	2.5
COBP407	3	3	2.25	3	2	2	3	2	2	2	3
COBP408	2	2	3	3	2.5	3	2.5	2	2.25	2.75	2.5
COBP409	3	3	2	2	2.25	2.25	2.75	2	3	2.75	3
COBP501	2	2	2.33	2.5	0	1	0	0	1.5	0	1.75
COBP502	3	3	2.5	3	2	2.75	2.5	2	2	2.5	3
COBP503	2.5	2.25	3	3	2.25	3	2.5	2	2.5	2.5	2.5
COBP504	3	3	2	2	2.25	2.25	2.75	2	3	2.75	3
COBP505	2.25	2	1.25	0	2	2.75	2.5	2.5	3	0	2
COBP506	3	3	2	3	2	2.75	2.5	2	2	2.5	3
COBP507	3	2	3	3	2.25	3	2.5	2	2.5	2.5	2.5
COBP508	3	3	2	2	2.25	2.25	2.75	2	3	2.75	3
COBP601	3	2	1	2.25	0	1.5	1	1	1.25	0	2
COBP602	2	2	3	3	2.5	3	2.5	2	2.25	2.75	2.5
COBP603	3	3	2	2.5	2.25	2.25	2.75	2	3	2.75	3
COBP604	2.5	2.5	3	3	1.75	1.75	1.5	2.5	2.5	2.5	1.75
COBP605	3	2	2	3	2	2.5	2.5	2.75	2.75	2	2.5
COBP606	3	2	2.5	3	2.75	3	2.5	2.75	2.75	3	2
COBP607	2.5	2	2.5	2	2	2.75	2.5	2	2	2.5	3
COBP608	2.25	2.25	3	3	2.5	2.75	2.25	2.5	2.5	2.75	2.75
COBP609	3	3	2.5	2.5	2.25	2.5	2.75	2	3	2.75	3
COBP110	3	2.75	3	3	0	2	0	2	0	2	0
COBP 111	0	2.75	2	2	2.5	2.75	2	3	2.5	2	2.5
COBP112	3	3	3	3	1.5	2.5	2.5	3	2.5	3	3
COBP201	3	2	3	2.25	2.75	2	2.5	3	3	2.5	3
COBP202	3	2	3	2.25	0	1	1	3	1.5	0	1.75
COBP203	3	3	2.75	3	2.5	3	2	2.25	3	3	2.75
COBP204	3	3	3	2.75	2	3	2.5	3	3	2.5	2
COBP205	2	2.5	3	3	2.5	3	2	3	2.5	3	3
COBP206	2	3	2.75	2.5	2	3	2	2.25	2	3	3
COBP207	3	2	3	2.25	2.75	2	2.5	3	3	2.5	3
COBP701	3	2.75	3	3	2.5	2.5	2	2.5	1.5	2	1.75
COBP702	3	2	3	1	0	1	1.5	0	1.5	0	1.75
COBP703	2.5	2	3	2.25	1.75	1.75	2.5	2.5	2.75	2.5	2.5

COBP704	3	2	2	2	2.5	2.5	2	2.5	2.75	2	2
COBP701	3	2	2.75	1	1.25	2	1	0	2	2	2
COBP705	3	2	2.75	3	2.5	2.5	2	2.5	1.5	2	1.5
COBP801	1.5	1	2.25	2	0	1.25	1.75	3	1	0	1.5
COBP802	3	2.75	2.5	2	2.5	2.75	2.75	2.5	3	3	3
COBP803	3	3	2	2.5	2.25	2.25	2.75	2	3	2.75	3
COBP804	3	3	2.5	2.25	2.25	2.5	2.75	2	3	2.75	3
COBP805	2.5	2	3	2.25	2.5	2.75	2.5	2.5	2.75	2.5	2.5
COBP 10	2.75	2	3	2.25	0	1	1	3	1.5	0	1.75
COBP 10	3	2	3	3	2	2	2.5	2	2	2	2
COBP 10	3	3	2.25	3	2	2	3	2	2	2	3
COBP 10	3	2	2.75	2.50	2	2.75	2	1.5	2	2.25	3
COBP 10	0	2.75	2	2	2.5	2.75	2	3	2.5	2	2.5
COBP 10	2.75	3	2	2	2	2	2	1.5	2	2	2.75
COBPT 1	3	3	3	3	1.5	2.5	1.5	3	2.5	3	3
COBP 10	3	2	3	2.25	3	3	2.5	3	2	3	2.5
COBP108	2.5	2.75	3	3	2.5	2	3	2	2.5	2	3
COBP109	3	2.5	1.5	3	2.5	2.5	2.5	2	2	3	2.5

3.2 Attainment of Course Outcomes (40)

Total Marks 40.00

3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based (10)

Institute Marks : 10.00

In the Outcome Based Education (OBE) assessment is done through one or more processes (carried out by the institution) that identify, collect, and prepare data to evaluate the achievement of course outcomes (CO's).

Course Outcomes (CO's) Assessment Processes:-

- **Evaluation Tool as per University Examination**

S. No	COMPONENT	MARKS	
I	INTERNAL ASSESSMENTS	25	
1	Mid Semester Tests		15
2	Quiz/ Assignment		10
II	END SEMESTER EXAMINATION	75	
TOTAL		100	

- **Assessment tools are categorized into two methods to assess the course outcomes as:**

- **Direct methods and indirect methods.**

Formative and Summative assessment are used for evaluation of the internal and external marks in a theory and practical subjects, based on Mid Semester examination, unit tests, assignments, seminar, group discussion, self study, tutorials, internal viva and end semester exam. Students are awarded internal and external marks on the basis of the performance in the above-noted criteria. Projects, internal reviews are conducted and evaluated for judging the level of students' standards.

To know the learning status of the students, assignments are given. At the end of the semester examinations are conducted by the affiliated University- RGPV Bhopal and IES University, Bhopal whichever is applicable.

- **Direct Assessment Methods**

Direct Assessment Methods		
S.No	Assessment Processes	Method Description
1.	Internal Assessment Test, Assignments, Quizzes, Internal Viva	Formative and summative assessment are used for evaluation of the Internal and external marks in theory and practical subjects, based on Mid semester examination, unit tests, assignments, seminar, group discussion, self study and tutorials generally conducted in between and on completion of course. An improvement test is conducted for those students who score very less marks in internal assessment before the end of the semester to give an opportunity to such students to improve their internal Assessment Marks. It is a metric to continuously assess the attainment of course outcomes. Average of the two Mid Semester marks, assignment marks and tutorials are taken as Internal Assessment Marks for the relevant subject.
2.	Theory / Practical Semester Examination.	Semester examinations are conducted by the affiliating University RGPV Bhopal and the metric to assess whether all the course outcomes are attained or not are framed by the course owner. Semester Examination is more focused on attainment of course outcomes and uses descriptive exam pattern
3.	Seminar, Presentations, Project assessment	The Internal Assessment marks of projects and seminars in the final year are based on the evaluation at the end of 8th semester by a committee consisting of Head of the concerned Department and two senior faculty members of the Department, one of whom is the project / seminar guide.
4.	Project Work Viva-voce	Viva-voce examination of project work is conducted batch-wise.

- **Indirect Assessment Methods**

The indirect assessment methods ask the stake holders to reflect own learning. They assess the opinions or thoughts about the graduate's knowledge or skills and are valued by different stakeholders.

Indirect Assessment Methods		
S. No	Indirect Assessment Method	Method Description
1	Alumni: Survey Questionnaire	Collect Variety of Information About Program Satisfaction And College From the Alumni Students

2	Exit Feedback: Survey Questionnaire	Collect Variety of Information about course and program satisfaction, facilities of College etc. From the Final Year Students.
3	Parent: Survey Questionnaire	Collect Variety Of Information About Program Satisfaction And College From Parents.
4	Employer's Feedback Form	Collect Variety Of Information About The Graduates' Skills, Capabilities And Opportunities.
5	Student Feedback (About OBE)	Collect Variety Of Information About Outcome Based Education In Teaching And Learning Process.

Internal Assessment Tools:

Method of Assessment	Source For Data Collection	Setting of Target	Data Assessment
Internal/External Evaluation	Evaluation Data	Target Set with respect to previous results analysis and internal assessment	End of the Semester
Course Exit Survey	Survey Report	Target Set with reference to previous survey report and internal assessment	End of the Year

POs	Skill to be Demonstrated	Assessment Tools
PO1	Pharmacy Knowledge:	<ul style="list-style-type: none"> Internal/External Evaluation as per University exam. Lab Experiments Technical Events/Workshop/conferences/Seminar/ Group discussion/Social Activities Course Exit Survey/Program Exit Survey Industrial Visit/Industrial Training Alumni Feedback/Student Feedback/Employer Feedback Content Beyond syllabus Project work/ Practice school
PO2	Planning Abilities	<ul style="list-style-type: none"> Technical Events/Workshop/conferences/Seminar/ Group discussion/Social Activities Project work/ Practice school Industrial Visit/Industrial Training Lab Experiments
PO3	Problem analysis	<ul style="list-style-type: none"> Internal/External Evaluation as per University exam. Lab Experiments Technical Events/Workshop/conferences/Seminar/Group discussion/Social Activities Course Exit Survey/Program Exit Survey Industrial Visit/Industrial Training Alumni Feedback/Student Feedback/Employer Feedback Content Beyond syllabus Project work/ Practice school
PO4	Modern tool usage	<ul style="list-style-type: none"> Lab Experiments Mentoring, Core software skills Technical Events /Workshop/conferences/Seminar/ Group discussion/Social Activities Course Exit Survey/Program Exit Survey Industrial Visit/Industrial Training Alumni Feedback/Student Feedback/Employer Feedback Course Beyond syllabus Project work/ Practice school
PO5	Leadership skills	<ul style="list-style-type: none"> Lab Experiments Technical Events /Workshop/conferences/Seminar/Group discussion/Social Activities Course Exit Survey/Program Exit Survey Industrial Visit/Industrial Training Alumni Feedback/Student Feedback/Employer Feedback Course Beyond syllabus Project work/ Practice school
PO6	Professional Identity	<ul style="list-style-type: none"> Internal/External Evaluation as per University exam. Lab Experiments Technical Events/Workshop/conferences/Seminar/ Group discussion/Social Activities Course Exit Survey/Program Exit Survey Industrial Visit/Industrial Training Alumni Feedback/Student Feedback/Employer Feedback Course Beyond syllabus Project work/ Practice school

PO7	Pharmaceutical Ethics	<ul style="list-style-type: none"> • Lab Experiments • Events/Workshop/conferences/Seminar/ Group discussion/Social Activities • Course Exit Survey/Program Exit Survey • Industrial Visit/Industrial Training • Course Beyond syllabus • Alumni Feedback/Student Feedback/Employer Feedback • Project work/ Practice school
PO8	Communication	<ul style="list-style-type: none"> • Internal Evaluation as per University exam. • Lab Experiments • Events/Workshop/conferences/Seminar/Group discussion/Social Activities • Course Exit Survey/Program Exit Survey • Industrial Visit/Industrial Training • Alumni Feedback/Student Feedback/Employer Feedback • Course Beyond syllabus • Project work/ Practice school
PO9	The Pharmacist and society	<ul style="list-style-type: none"> • Internal/External Evaluation as per University exam. • Project work/Lab Experiments • Technical Events/Workshop/conferences/Seminar/Social Activities • Course Exit Survey/Program Exit Survey • Industrial Visit/Industrial Training • Alumni Feedback/Student Feedback/Employer Feedback • Course Beyond syllabus • Practice school
PO10	Environment and sustainability	<ul style="list-style-type: none"> • Internal Evaluation as per University exam. • Workshop/conferences/Seminar/Social Activities • Course Exit Survey/Program Exit Survey • Alumni Feedback/Student Feedback/Employer Feedback • Course Beyond syllabus
PO11	Life-long learning	<ul style="list-style-type: none"> • Internal/External Evaluation as per University exam. • Lab Experiments • Technical Events/Workshop/conferences/Seminar/Group discussion/Social Activities • Course Exit Survey/Program Exit Survey • Industrial Visit/Industrial Training • Alumni Feedback/Student Feedback/Employer Feedback • Course Beyond syllabus • Project base and Problem base learning

- The assessment process used to evaluate course outcome is mainly assessment with weightage of 80% (direct assessment) and 20% to course exit survey (indirect assessment).
- Assignments are given to improve the internal examination results.
- The IQAC committee verify all evaluation process at the starting of semester.

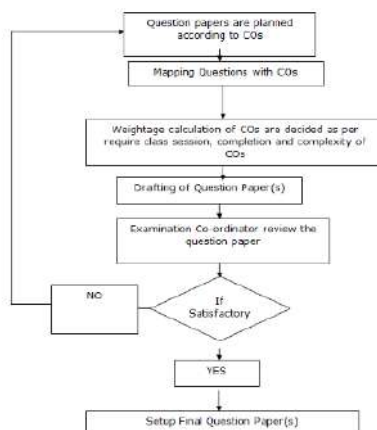


Figure 3.1: Process of Question Paper Setting

3.2.2 Record the attainment of Course Outcomes of all courses with respect to set attainment levels (30)

Institute Marks : 30.00

A. Setting of Target

Target of the course outcome has decided as per

- Average university examination result
- Subject internal Assessment Average Marks
- Class interactions during completion of course outcome

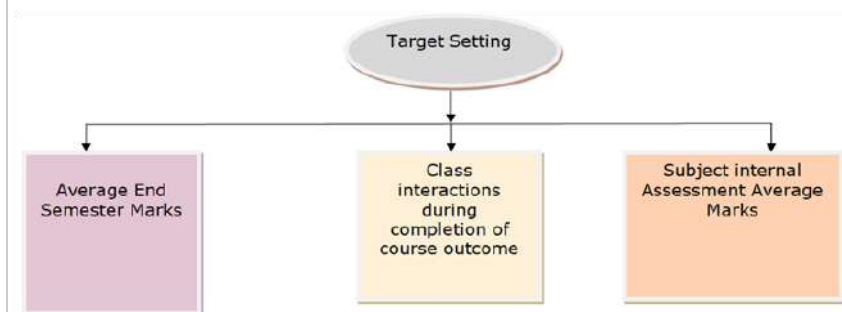


Figure 3.2 Process of Target Setting

Internal & External attained level for Evaluation (Theory Subject)

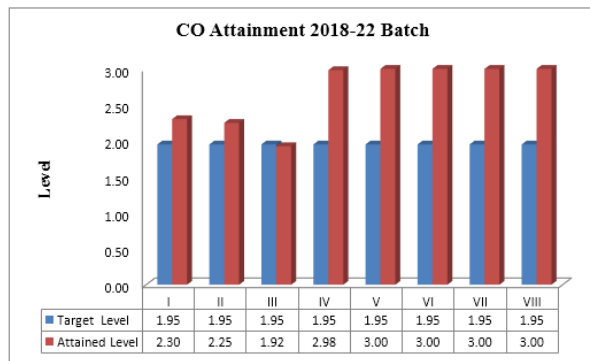
Rubrics (2017-21 Batch)	
External Evaluation	If 80% students achieve marks above 50% marks then attained level is 3
	If 70% students achieve marks above 50% marks then attained level is 2
	If 60% students achieve marks above 50% marks then attained level is 1
Internal Evaluation	If 80% students achieve marks above 60% marks then attained level is 3
	If 70% students achieve marks above 60% marks then attained level is 2
	If 60% students achieve marks above 60% marks then attained level is 1

Internal & External attained level for Evaluation (Practical Subject)

Rubrics (2017-21 Batch)	
External Evaluation	If 80% students achieve marks above 60% marks then attained level is 3
	If 70% students achieve marks above 60% marks then attained level is 2
	If 60% students achieve marks above 60% marks then attained level is 1
Internal Evaluation	If 80% students achieve marks above 60% marks then attained level is 3
	If 70% students achieve marks above 60% marks then attained level is 2
	If 60% students achieve marks above 60% marks then attained level is 1

B. CO-ATTAINMENT (2018-2022 Batch)**IES Institute of Pharmacy, Bhopal****2018-2022 CO Attainment**

Semester	Target Level	Attained Level	Target%	Attained %
I	1.95	2.30	65.00	76.73
II	1.95	2.25	65.00	75.00
III	1.95	1.92	65.00	64.15
IV	1.95	2.98	65.00	99.44
V	1.95	3.00	65.00	100.00
VI	1.95	3.00	65.00	100.00
VII	1.95	3.00	65.00	100.00
VIII	1.95	3.00	65.00	100.00
Average	1.95	2.68	65.00	89.42



Measuring Course Outcomes attained through University Examinations

3.3 Attainment of Program Outcomes (40)

T

3.3.1 Describe assessment tools and processes used for assessing the attainment of each PO (10)

Program Outcomes (PO's) Assessment Tools:

Assessment tools are categorized into direct and indirect methods to assess the Program Specific outcomes, Program outcomes and course outcomes.

- Direct attainment of COs is determined from the performances of students in 25% of Internal Evaluation and 75% of Semester End Examination.
- 25% of Internal Evaluation is calculated from 60% of Mid Semester Examination and 40% of Assignment/theory quizzes/Attendance.
- For assessment of Mid Semester Examination marks, two mid semester are conducted and final marks is consider as an average of two mid marks.
- First Mid Semester Examinations included eight questions with respect to 50% Coverage of CO's.
- Second Mid semester Examination is included eight questions with respect to remaining 50% Coverage of CO's.
- For assessment of assignment four assignments are given and each assignment includes three to five questions with respect to concern CO's.
- For practical COs attainment is determined from the performances of students in 30% of Internal Evaluation and 70% of End Semester Examination.
- Direct method enables faculty to judge student's knowledge and skills from their performance in the continuous assessment tests, end-semester examinations, presentations, and classroom assignments provide a sample of what students know and/or can do and provide strong evidence of extent of student- learning.
- Under Indirect methods, feedbacks of the stakeholders are considered on students learning. They express their opinions or thoughts about the graduates' knowledge, skills and similar information is co different stakeholders.
 - Course/ Program Exit Survey (30%)
 - Alumni Feedback (20%)
 - Employer Feedback (10%)
 - Parents Feedback (10%)
 - 30% Student Feedback (About OBE)

The process of attainment has described in flow chart

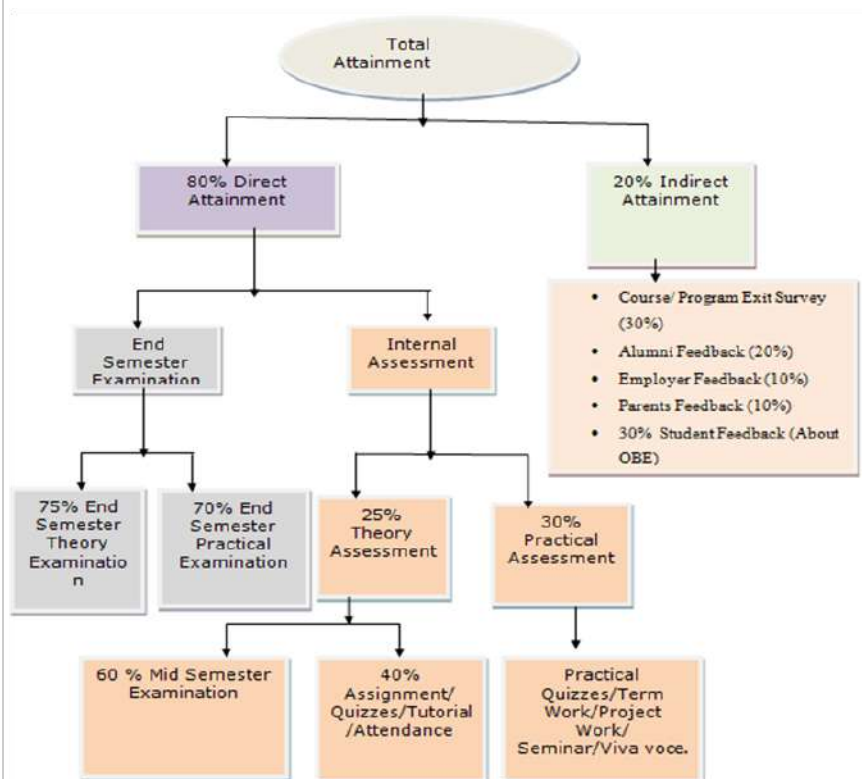


Figure 3.3 Flow Chart of Attainment Calculations

Use of Rubrics for Evaluation and Assessment of PO's

- The Course/ Program outcomes are difficult to measure e.g. assessment of critical thinking, creativity, analytical skills, and problem solving etc. Hence the department has adopted criterion referenced assess the POs and Cos, wherever appropriate. The Rubric criteria are either developed by department faculty or sometimes even with consultation with students and distributed among concerned before assignment, project or test.
- Rubrics are used for both formative and summative assessment of students. Same rubric is used for assessing an outcome so that the faculty is able to assess student progress and maintain the record for each student.
- The rubrics are shared with students before being evaluated so that they are aware of the performance criteria and their weightage.

Lab Performance Evaluation Rubric

Student Name: -----
Evaluation Date: -----

Enrolment Number: -----

S.NO.	Method of Evaluation	Rubrics	Exceeds expectation(3)	Meets expectation(2)	Doesn't meet expectation(0-1)	Marks
-------	----------------------	---------	------------------------	----------------------	-------------------------------	-------

1	Conduction of Experiments	Lab Participation	Student demonstrates an accurate understanding of the lab objectives and concepts. The student can correctly answer questions and if appropriate, can explain concepts to fellow classmates. Student is eager to participate and assists when needed.	Student arrives on time to lab, but may be unprepared. Answers to questions are basic and superficial suggesting that concepts are not fully grasped.	Student tardiness or unpreparedness makes it impossible to fully participate. If able to participate, Student has difficulty explaining key lab concepts. OR Student was absent from lab
2		Instruments setup and calibration	Student has made correct setup and calibration of instruments	Student needed guidance to make setup and calibration instruments.	Student was unable setup and calibration instruments
3		Data Recording/ Collection	Student has correctly measured the relevant parameters	Student has performed incorrect measurement of relevant parameters	Student was unable to identify /measure relevant parameters
4		Results	Accurate results have been achieved	The achieved results are not accurate but are within tolerance range	No results are achieved OR The achieved results are meaningless
5		Checking	Student has ability to detect and correct the errors	Student can detect the error but unable to correct it	Student was unable to detect the error
6	Ethics	Safety	Student carefully observes the safety rules and procedures during practical work	Student observes safety rules and procedures with minor deviation during practical work	Student does not care about safety rules during practical work.
7	Ethics	Punctuality	Student was on time and stayed till the completion of task	Student was on time but wasted time outside the work place during the experiment.	Student was not on time and left class before time.
8	Ethics	Workplace Clearance and cleanliness	The student uses the equipment responsibly and clears the leftovers at the work place on completion of lab work	The student has shown responsibility towards using the equipment while he didn't care about the cleanliness of work place	The student has shown irresponsibility using the equipment and didn't clear the leftovers at the workplace on completion of lab work
9	Team Work	Research & gather information	Student has collected a great deal of information which goes beyond the basics.	Student has collected basic information related the topic.	Student has not collected any information that relates to the topic
10		Fulfil team role's duties	Student has performed the duties assigned and actively assisted others.	Student has shown limited performance in the duties that are assigned	Student has not performed any duties of assigned team role.
11		Listen to other teammates	Consistently listens and responds to other appropriately	Usually doing most of the talking rarely allowed others to speak.	Student shows an assertive behaviour and was unable to show respect towards other teammates.
Total Marks					

Seminar

- For the seminar, the student shall collect the information on a specialized topic and prepare a technical report, showing his understanding of the topic, and submit it to the department. It will be evaluate departmental committee consisting of head of the department.
- The seminar report shall be evaluated for 50 marks. There will be no external examination for the seminar. The committee evaluates seminar based on following parameters.

Assessment Tool	
Internal Assessment	Presentation
	Viva-voce

- **Presentation:** The content, quality of the presentation and communication skill is assessed by the evaluation committee.
- **Viva-voce:** At the end of the presentation, the assessment panel and the peer group ask questions and seek clarifications on specific issues related to the seminar. The effectiveness of the student's responses to these queries is assessed.

SEMINAR EVALUATION RUBRIC

- **Student Presenter:** _____
- **Evaluator Date:** _____

Evaluate the student's presentation				
Evaluation Parameters	Outstanding(4)	Admirable(3)	Average(2)	Inadequate(1)
Knowledge and Content	Outstanding	Admirable	Average	Inadequate
Organization of presentation	Information presented as interesting story in logical, easy to follow sequence	Information presented in logical sequence; easy to follow	Most of information presented in sequence	Hard to follow; sequence of information jumpy
Background content	Material sufficient for clear understanding AND exceptionally presented	Material sufficient for clear understanding AND effectively presented	Material sufficient for clear understanding but not clearly presented	Material not clearly related to topic OR background dominated seminar
Methods	Sufficient for understanding and exceptionally presented	Sufficient for understanding and effectively presented	Sufficient for understanding but not clearly presented	Methods too brief or insufficient for adequate understanding
Knowledge of subject	Demonstrated full knowledge; answered all questions with elaboration	At ease; answered all questions but failed to elaborate	At ease with information; answered most questions	Does not have grasp of information; answered only rudimentary questions
Presentation Skills	All appropriately formatted	Most appropriately formatted	Majority appropriately formatted	Some explanations lacking
Graphics (use of PowerPoint)	Uses graphics that explain and reinforce text and presentation	Uses graphics that explain text and presentation	Uses graphics that relate to text and presentation	Uses graphics that rarely support text and presentation

• **Setting Levels for evaluation of Indirect Assessment**

Internal Evaluation	If 60% Parents are giving above 60% attained level is 3
	If 50% Parents are giving above 60% then attained level 2
	If 40% Parents achieve marks above 60% marks then attained level is 1

Internal Evaluation	If 60% Alumni are giving above 60% attained level is 3
	If 50% Alumni are giving above 60% then attained level 2
	If 40% Alumni achieve marks above 60% marks then attained level is 1

Internal Evaluation	If 60% Students are giving above 60% attained level is 3
	If 50% Students are giving above 60% then attained level 2
	If 40% Students achieve marks above 60% marks then attained level is 1

Internal Evaluation	If 60% Employer are giving above 60% attained level is 3
	If 50% Employer are giving above 60% then attained level 2
	If 40% Employer achieve marks above 60% marks then attained level is 1

PO Attainment

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
COBP304T	0.9	0.9	0.9	0.9	0	0	0	0	0	0
COBP305P	3	3	3	3	3	3	3	3	3	3
COBP306P	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37
COBP307P	2.98	2.98	2.98	2.98	2.97	2.98	2.97	2.98	2.97	2.98
COBP308P	2.98	2.95	2.97	2.96	2.97	2.97	2.98	2.98	2.97	2.97
COBP401T	2.85	2.85	2.85	2.85	2.89	2.85	2.85	2.81	2.89	2.85
COBP402T	3	3	3	3	3	3	3	3	3	3
COBP403T	3	3	3	3	3	3	3	3	3	3
COBP404T	3	3	3	3	3	3	3	3	3	3
COBP405T	3	3	3	3	3	3	3	3	3	3
COBP406P	3	3	3	3	3	0	0	0	0	0
COBP407P	3	3	3	3	3	3	3	3	3	3
COBP408P	3	3	3	3	3	3	3	3	3	3
COBP409P	3	3	3	3	3	3	3	3	3	3
COBP501T	3	3	3	3	3	3	3	3	3	3
COBP502T	3	3	3	3	3	3	3	3	3	3
COBP503T	3	3	3	3	3	3	3	3	3	3
COBP504T	3	3	3	3	3	3	3	3	3	3
COBP505T	3	3	3	0	3	3	3	3	3	0
COBP506P	3	3	3	3	3	3	3	3	3	3
COBP507P	3	3	3	3	3	3	3	3	3	3
COBP508P	3	3	3	3	3	3	3	3	3	3
COBP601T	3	3	3	3	3	3	3	3	3	3
COBP602T	3	3	3	3	3	3	3	3	3	3
COBP603T	3	3	3	3	3	3	3	3	3	3
COBP604T	3	3	3	3	3	3	3	3	3	3
COBP605T	3	3	3	3	3	3	3	3	3	3
COBP606T	3	3	3	3	3	3	3	3	3	3
COBP607P	3	3	3	3	3	3	3	3	3	3
COBP608P	3	3	3	3	3	3	3	3	3	3
COBP609P	3	3	3	3	3	3	3	3	3	3
COBP110P	3	3	3	3	3	3	3	3	3	3
COBP 111P	0	3	3	3	3	3	3	3	3	3
COBP112R	3	3	3	3	3	3	3	3	3	3
COBP201T	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
COBP202T	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
COBP203T	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
COBP204T	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
COBP205T	3	3	3	3	3	3	3	3	3	3
COBP206T	3	3	3	3	3	3	3	3	3	3
COBP207P	3	3	3	3	3	3	3	3	3	3
COBP701T	3	3	3	3	3	3	3	3	3	3
COBP702T	3	3	3	3	3	3	3	3	3	3
COBP703T	3	3	3	3	3	3	3	3	3	3
COBP704T	3	3	3	3	3	3	3	3	3	3
COBP701P	3	3	3	3	3	3	3	3	3	3
COBP705P	3	3	3	3	3	3	3	3	3	3
COBP801T	3	3	3	3	3	3	3	3	3	3
COBP802T	3	3	3	3	3	3	3	3	3	3

COBP803T	3	3	3	3	3	3	3	3	3	3
COBP804T	3	3	3	3	3	3	3	3	3	3
COBP805P	3	3	3	3	3	3	3	3	3	3
COBP 101	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
COBP 102	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
COBP 103	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
COBP 104	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
COBP 105	0	3	3	3	3	3	3	3	3	3
COBP 106F	2.97	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.96
COBPT 10€	3	3	3	3	3	3	3	3	3	3
COBP 107	3	3	3	3	3	3	3	3	3	3
COBP108P	3	3	3	3	3	3	3	3	3	3
COBP109P	3	3	3	3	3	3	3	3	3	3
COBP301T	0.67	0.67	0.67	0.67	0.73	0.65	0.67	0.68	0.67	0.67
COBP302T	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
COBP303T	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
COBP208P	3	3	3	3	3	3	3	3	3	3
COBP209P	3	3	3	3	3	3	3	3	3	3
COBP210P	3	3	3	3	3	3	3	3	3	3

PO Attainment Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
Direct Attainment	2.62	2.63	2.63	2.62	2.66	2.65	2.65	2.65	2.65	2.64
InDirect Attainment	2.5	3	2.3	2.5	2.8	1.7	2.2	2.6	2.3	2.2
PO Attainment	2.60	2.70	2.56	2.60	2.69	2.46	2.56	2.64	2.58	2.55

4 STUDENTS' PERFORMANCE (180)

Total Marks 136.12

Total Marks 20.00

Table 4.1

Item	2022-23 (CAY)	2021-22 (CAYm1)	2020-21 (CAYm2)	2019-20 (CAYm3)	2018-19 (CAYm4)	2017-18 (CAYm5)	2016-17 (CAYm6)
Sanctioned intake of the program(N)	100	100	100	100	100	100	0
Total number of students admitted in first year (N1)	107	103	100	98	97	91	0
Number of students admitted in 2nd year in the same batch via lateral entry (N2)	0	5	3	0	0	1	0
Total number of students admitted in the programme(N1 + N2)	107	108	103	98	97	92	0

4.1 Enrolment Ratio (20)

Institute Marks : 20.00

	N (From Table 4.1)	N1 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2022-23	100	107	107.00
2021-22	100	103	103.00
2020-21	100	100	100.00

Average [(ER1 + ER2 + ER3) / 3] : 103.33

Assessment : 20.00

4.2 Success Rate in the stipulated period of the program (50)

Total Marks 30.70

Table 4.2

Year of entry	Number of students admitted in 1st year + admitted via lateral entry in 2nd year (N1 + N2)	Number of students who have successfully graduated without backlogs in any year of study (Without backlog means no compartment/failure in any semester/year of study)			
		I year	II year	III year	IV year
2022-23 (CAY)	107				
2021-22 (CAYm1)	108	101			
2020-21 (CAYm2)	103	97	87		
2019-20 (CAYm3)	98	63	63	41	
2018-19 (LYG)	97	61	57	56	55
2017-18 (LYGm1)	92	50	45	35	34
2016-17 (LYGm2)	0	0	0	0	0

Table 4.3

Year of entry	Number of students admitted in 1st year + admitted via lateral entry in 2nd year (N1 + N2)	Number of students who have successfully graduated in stipulated period of study [Total of with Backlog + without Backlog]			
		I year	II year	III year	IV year
2022-23 (CAY)	107				
2021-22 (CAYm1)	108	102			
2020-21 (CAYm2)	103	100	89		
2019-20 (CAYm3)	98	89	88	86	
2018-19 (LYG)	97	85	83	81	78
2017-18 (LYGm1)	92	87	84	83	79
2016-17 (LYGm2)	0	0	0	0	0

4.2.1 Success rate without backlogs in any year of study (30)

Institute Marks : 14.10

Item	Latest Year of Graduation, LYG (2018-19)	Latest Year of Graduation minus 1, LYGm1 (2017-18)	Latest Year of Graduation minus 2, LYGm2 (2016-17)
X Number of students admitted in the corresponding First Year + admitted in 2nd year via lateral entry	97.00	92.00	0.00
Y Number of students who have graduated without backlogs in the stipulated period	55.00	34.00	0.00
Success Index [SI = Y / X]	0.57	0.37	0.00

Average SI [(SI1 + SI2 + SI3) / 3] : 0.47

Assessment = 30 * Average SI : 14.10

4.2.2 Success rate in stipulated period (20)

Institute Marks : 16.60

Item	Latest Year of Graduation, LYG (2018-19)	Latest Year of Graduation minus 1, LYGm1 (2017-18)	Latest Year of Graduation minus 2, LYGm2 (2016-17)
X Number of students admitted in the corresponding First Year + admitted in 2nd year via lateral entry	97.00	92.00	0.00
Y Number of students who have graduated in the stipulated period	78.00	79.00	0.00
Success Index [SI = Y / X]	0.80	0.86	0.00

Average SI [(SI1 + SI2 + SI3) / 3] : 0.83

Assessment = 20 * Average SI : 16.60

Note : If 100% students clear without any backlog then also total marks scored will be 40 as both 4.2.1 & 4.2.2 will be applicable simultaneously.

4.3 Academic Performance in Final Year (10)

Total Marks 7.25

Academic Performance	2018-19 (LYG)	2017-18 (LYGm1)	2016-17 (LYGm2)
Mean of CGPA or mean percentage of all successful students(X)	7.98	7.17	0.00
Total number of successful students(Y)	78.00	79.00	0.00
Total number of students appeared in the examination(Z)	81.00	83.00	0.00
API [X*(Y/Z)]:	7.68	6.82	0.00

Average API [(AP1 + AP2 + AP3)/3] : 7.25

Academic Performance = Average API = [(AP1 + AP2 + AP3)/3] : 7.25

4.4 Academic Performance in Third Year (10)

Total Marks 7.51

Institute Marks : 7.51

Academic Performance	CAYm3 (2019-20)	LYG (2018-19)	LYGm1 (2017-18)
Mean of CGPA or mean percentage of all successful students(X)	7.98	7.94	7.05
Total number of successful students (Y)	86.00	81.00	83.00
Total number of students appeared in the examination (Z)	88.00	83.00	84.00
API [X * (Y/Z)]	7.80	7.75	6.97

Average API [(AP1 + AP2 + AP3)/3] : 7.51

Academic Performance = Average API [(AP1 + AP2 + AP3)/3] : 7.51

4.5 Academic Performance in Second Year (10)

Total Marks 7.39

Institute Marks : 7.39

Academic Performance	2020-21 (CAYm2)	2019-20 (CAYm3)	2018-19 (LYG)
Mean of CGPA or mean percentage of all successful students(X)	7.52	8.26	7.68
Total number of successful students(Y)	89.00	88.00	83.00
Total number of students appeared in the examination(Z)	103.00	89.00	85.00
API [X*(Y/Z)]:	6.50	8.17	7.50

Average API [(AP1 + AP2 + AP3)/3] : 7.39

Academic Performance = Average API = [(AP1 + AP2 + AP3)/3] : 7.39

4.6 Academic Performance in First Year (20)

Total Marks 15.07

Institute Marks : 15.07

Academic Performance	2021-22 (CAYm1)	2020-21 (CAYm2)	2019-20 (CAYm3)
Mean of CGPA or mean percentage of all successful students(X)	7.96	7.57	7.87
Total number of successful students(Y)	102.00	100.00	89.00
Total number of students appeared in the examination(Z)	103.00	100.00	98.00
API [X*(Y/Z)]:	7.88	7.57	7.15

Average API [(AP1 + AP2 + AP3)/3] : 7.53

Academic Performance = Average API = [(AP1 + AP2 + AP3)/3] : 7.53

4.7 Placement and Higher Studies (40)

Total Marks 28.20

Institute Marks : 28.20

Item	2018-19 (LYG)	2017-18 (LYGm1)	2016-17 (LYGm2)
Total No of Final Year Students(N)	81.00	83.00	0.00
Number of students placed in Industries/ Hospitals/ Government sector through on/off campus recruitment or opted for Entrepreneurship(x)	54.00	52.00	0.00
No. of students admitted to higher studies with valid scores in various qualifying exams(y)	8.00	1.00	0.00
Placement Index [(X + Y)/N] :	0.77	0.64	0.00

Average Placement [(X + Y)/N] : 0.70

Assessment [40 * Average Placement] : 28.20

4.8 Professional Activities (20)

Total Marks 20.00

4.8.1 Professional societies / chapters and organizing pharmacy events (5)

Institute Marks : 5.00

PROFESSIONAL SOCIETY ACTIVITIES			
Sr No.	Professional Society Name/Chapter	Events Organized	Date
1	Society of Ethnopharmacology, Integro pharma Bangladesh, ICM Maldives	Virtual Global Symposium on Skill Development of Pharmacist for Better community Services	30/7/2021 to 2/8/2021
2	Society of Pharmacovigilance India	National Webinar On "Pharmacovigilance: Opportunities and Future Career Prospects for Fresh Graduates"	10/7/2021
3	IIC and IEEE Sight	HR conclave: latest trends in hiring trend of pharmacy/ Biotechnology post covid	26/4/2021
4	IPGA, IPA, IIC	Generic Drug Development: Current Scenario and future challenges	5 to 9 April 2021
5	IPGA, Women forum, MP	Live International Webinar on "Gender Inequality Challenges in Science & Education".	25/11/2021 to 26/11/2021
6	APTI, IIC	Five days Faculty Development Program (FDP), in association with Association of Pharmaceutical Teachers of India (APTI).	16/08/2021 to 20/08/2021
7	Healthcopeia foundation, IPGA Student Chapter	International Webinar, Pharmacy: Always trusted for your health	25/9/2021
8	CII	Orientation Program for fresher's	17/11/2021
9	SPER Student Chapter	World Pharmacist Day Celebration, Pharmacy: Always trusted for your health	21/09/2021 to 25/09/2021
10		Virtual international conference, Advances and future prospective of healthcare technologies post covid	26/02/2022 to 28/02/2022
11	Healthcopeia foundation, Scan laboratories, IIC	Vice Chancellor's Conclave on Better Public Health through Pharmacovigilance	18/12/2021
12		Vice Chancellor's Conclave on Role of NEP in Growth of Research and Development in India	14/1/2022
13	Society of Pharmaceutical Sciences and Research (SPSR)	One week faculty development program (FDP) on Scientific Writing and Research Ethics	25/01/2022 to 31/01/2022

4.8.2 Publication of technical magazines, newsletters, etc. (5)

Institute Marks : 5.00

QUEST is published on annual basis and is being circulated among faculty, students and parents.

Editorial Board for news letter:

S. No.	Academic Year	Name of The Newsletter	Month and Year of Publication	Name of editors	Name of Publishers
1	2021-2022	QUEST	June, 2022	Chief Editor: 1. Dr. Vinod Kumar Gauttam, Principal, Institute of Pharmacy, Bhopal Student Editors: 1. Mr. Satyendra Yadav 2. Mr. Harpreet Singh 3. Ms. Sushmita Pandey	IES Institute of Pharmacy, Bhopal
2	2020-21	QUEST	June, 2021	Chief Editor: 1. Dr. Vinod Kumar Gauttam, Principal, Institute of Pharmacy, Bhopal Student Editors: 1. Ms. Kritiksha Arya 2. Mr. Pawan Khatri 3. Md. Imran	IES Institute of Pharmacy, Bhopal
3	2019-20	QUEST	June, 2020	Chief Editor: 1. Dr. Vinod Kumar Gauttam, Principal, Institute of Pharmacy, Bhopal Student Editors: 1. Ms. Shashi Supriya 2. Md. Danish 3. Mr. Abhishek Patel	IES Institute of Pharmacy, Bhopal

4.8.3 Participation in inter-institute events by students of the program of study (10)

Institute Marks : 10.00

Batch 2018

Sr No.	Name of Student	Date	Organiser
1	Mr. Sahil Kurmi	DCS	05-04-18 Sachin computer technical institute
2	Mr. Mohit Ranglani	Microbial outbreaks	31/05/2021 Akhil Bharti college of pharmacy
3	Mr. Mohit Ranglani	Industrial pharmacy	25/09/2021 Pharmastate Academy
4	Mr. Mohit Ranglani	Pharmacovigilance programme of india	17/09/2021 Akhil Bharti college of pharmacy
5	Mr. Shahzad Ahmad	Covid 19 impact on herbal medicine and nutraceutical sector	26/10/2021 MAHARISHI UNIVERSITY

Batch 2019

1	Mr. Tathagat	Covid-19 -precaution&prevention	18/05/2020 Khajuraho Institute of Pharmaceutical sciences
2	Mr. Satyam ku sharma	Covid-19 -precaution&prevention	18/05/2020 Khajuraho Institute of Pharmaceutical sciences
3	Mr. Sohaib Akhtar	Covid-19 -precaution&prevention	18/05/2020 Khajuraho Institute of Pharmaceutical sciences
4	Mr. Tathagat	Covid-19 -precaution&prevention	21/05/2020 GIHM
5	Mr. Sohaib Akhtar	onlinen quiz	29/05/2020 Jis university
6	Mr. Tathagat	online Quiz	29/05/2020 Jis university
7	Ms. karishma kumari	Mind control:Managing your mental health during covid19	08-06-20 University of TORONTO
8	Mr. Sohaib Akhtar	Mind control:Managing your mental health during covid19	18/06/2020 University of TORONTO
9	Ms. karishma kumari	Placement Awareness Talk	29/06/2020 RGPV,Bhopal
10	Mr. Satyam ku sharma	Convention on current trends	01-09-21 RGPV BHOPAL
11	Mr. Satyendra yadav	Transforming Global health:Role of pharmacist	25/09/2020 Swami vivekanad College of pharmacy,bhopal
12	Mr. Tathagat	Communication Skill	07-11-20 RGPV BHOPAL
13	Mr. Satyendra yadav	Drug metabolism Through ADME	03-12-22 Modern Institute of Pharmaceutical Sciences
14	Mr. Sohaib Akhtar	Nanotechnology and nanoparticles	06-12-20 RGPV,Bhopal
15	Mr. Tathagat	Modern talk	07-12-20 Modern Institute of Pharmaceutical Sciences
16	Mr. Satyam ku sharma	Modern talk	07-12-20 Modern Institute of Pharmaceutical Sciences
17	Mr. Sohaib Akhtar	Modern talk	07-12-20 Modern Institute of Pharmaceutical Sciences

Batch 2020

1	Mr. Aniruddh ku Dubey	Sport relay	04-12-21 The aditya birla public school
2	Mr. Kundan ku das	The fundamentals of digital marketing	17/05/2022 The Open University
3	Mr. Aashutosh Kumar	The fundamentals of digital marketing	16/05/2022 The Open University
4	Ms. Shradha Chouhan	The fundamentals of digital marketing	16/05/2022 The Open University

5 FACULTY INFORMATION AND CONTRIBUTIONS (175)

Total Marks 145.48

Name	PAN No.	University Degree	Date of Receiving Degree	Area of Specialization	Research Paper Publications	Ph.D Guidance	Faculty receiving Ph.D during the assessment year	Current Designation	Date (Designated as Prof/Assoc. Prof.)	Initial Date of Joining	Association Type	At present working with the Institution(Yes/No)	In case NO, Date of Leave
Dr Jyotiram Sawale	BHDPS8396E	M.Pharm and Ph.D	29/01/2018	Pharmacognosy	8	0	0	Professor	01/07/2020	01/07/2020	Regular	Yes	
Dr. Vinod Kumar Gauttam	ALBPG6621R	M.Pharm and Ph.D	10/08/2013	Pharmacognosy	8	0	0	Professor	01/03/2017	01/03/2017	Regular	Yes	
Dr. Sameer Sapra	BLKPS1866E	M.Pharm and Ph.D	29/12/2011	Pharmaceutical Chemistry	0	0	0	Professor	01/02/2020	01/02/2020	Regular	Yes	
Dr. Gaurav Jain	AHMPJ3088J	M.Pharm and Ph.D	27/12/2014	Pharmacognosy	3	0	0	Professor	02/08/2021	02/08/2021	Regular	Yes	
Dr. Sima Singh	DAKPS9054M	M.Pharm and Ph.D	30/01/2020	Pharmaceutics	12	0	0	Assistant Professor		09/08/2021	Regular	Yes	
Dr. Vivek Chourasia	BBOPC0214Q	M.Pharm and Ph.D	17/03/2021	Pharmacology	5	0	0	Associate Professor	01/02/2022	01/02/2022	Regular	Yes	
Mr. Phoolsingh Yaduwanshi	AHMPY9558L	M.Pharm	17/09/2009	Pharmaceutical Chemistry	3	0	0	Assistant Professor		01/02/2017	Regular	Yes	
Ms. Damini Singh	GWPCS7930H	M.Pharm	25/05/2017	Pharmaceutics	0	0	0	Assistant Professor		01/07/2017	Regular	Yes	
Ms. Kiran Bhopate	ERLPD3950C	M.Pharm	11/04/2018	Pharmaceutics	0	0	0	Assistant Professor		21/11/2018	Regular	Yes	
Ms. Jyoti Uikey	ACVPU6366L	M.Pharm	11/04/2018	Pharmaceutics	0	0	0	Assistant Professor		20/07/2018	Regular	Yes	
Mr. Braj Gopal Kushwah	CSRPK3286K	M.Pharm	11/04/2018	Pharmaceutics	0	0	0	Assistant Professor		09/08/2018	Regular	Yes	
Mr. Vaibhav Jaiswal	BPDPJ7660P	M.Pharm	18/09/2017	Pharmaceutics	0	0	0	Assistant Professor		16/08/2018	Regular	Yes	
Ms. Divya Mittal	CMDPM1570J	M.Pharm	15/03/2013	Pharmaceutical Chemistry	0	0	0	Assistant Professor		01/09/2018	Regular	Yes	
Mr. Santosh Kumar Singh	CMJPS0255A	M.Pharm	08/06/2012	Pharmacy Practice	0	0	0	Assistant Professor		28/01/2019	Regular	No	01/07/20
Mr. Raghvendra Patel	BBSPP8360E	M.Pharm	25/05/2017	Pharmaceutics	0	0	0	Assistant Professor		25/01/2019	Regular	Yes	
Ms. Aakanksha Verma	ARDPV8126G	M.Pharm	03/01/2015	Pharmaceutics	0	0	0	Assistant Professor		02/07/2019	Regular	Yes	
Mr. Rajkishore Kushwaha	CQPPK9881C	M.Pharm	25/05/2017	Pharmaceutics	0	0	0	Assistant Professor		02/07/2019	Regular	Yes	
Ms. Teena Vishwakarma	BQTPV1408B	M.Pharm	06/03/2019	Pharmacology	0	0	0	Assistant Professor		01/02/2020	Regular	Yes	
Ms. Sumati Jangid	DEVPS9299D	M.Pharm	04/05/2011	Pharmacognosy	0	0	0	Assistant Professor		01/02/2020	Regular	No	30/06/20
Ms. Jyoti Patidar	BRKPP2865A	M.Pharm	04/03/2015	Pharmaceutics	0	0	0	Assistant Professor		01/02/2020	Regular	No	06/08/20
Ms. Rukhsar Syed	LMKPS6635N	M.Pharm	06/03/2019	Pharmacology	0	0	0	Assistant Professor		07/02/2020	Regular	Yes	
Mr. Pradeep Tiwari	AOHPT5248Q	M.Pharm	01/03/2014	Pharmaceutics	0	0	0	Assistant Professor		28/08/2020	Regular	No	04/08/20
Ms. Monam Kushwaha	EXWPK9299C	M.Pharm	06/10/2020	Pharmacology	0	0	0	Assistant Professor		08/10/2020	Regular	Yes	
Ms. Sonam Kushwaha	EXWPK9327R	M.Pharm	06/10/2020	Pharmacology	0	0	0	Assistant Professor		08/10/2020	Regular	Yes	
Ms. Shipra Lal	ILYPS3148Q	M.Pharm	25/05/2016	Pharmaceutics	0	0	0	Assistant Professor		28/08/2020	Regular	Yes	
Ms. Prinsi Sahpuriya	MPIPS3488B	M.Pharm	13/01/2021	Pharmacology	2	0	0	Assistant Professor		12/03/2021	Regular	Yes	
Mr. Deepesh Gupta	ANIPG0970C	M.Pharm	05/12/2007	Biotechnology	0	0	0	Assistant Professor		01/08/2020	Regular	Yes	
Mr. Himanshu Joshi	APCPJ2519L	M.Pharm	14/03/2015	Pharmacology	0	0	0	Assistant Professor		01/08/2020	Regular	Yes	

Mr. Suresh Kumar Tiwari	BMWPT8980R	M.Pharm	02/07/2022	Pharmaceutics	0	0	0	Assistant Professor		05/07/2022	Regular	Yes	
Mr. Mahant Abhishek Puri	DTKPP8972C	M.Pharm	09/03/2022	Pharmaceutics	0	0	0	Assistant Professor		04/07/2022	Regular	Yes	
Ms. Samisha Sharma	DGZPS5062N	M.Pharm	21/05/2014	Pharmaceutics	1	0	0	Assistant Professor		04/07/2022	Regular	Yes	
Dr. Reenu Yadav	ADGPY5915G	M.Pharm and Ph.D	13/04/2015	Pharmacognosy	3	0	0	Professor	01/08/2022	01/08/2022	Regular	Yes	
Mr Shubham Tiwari	AUCPT0218P	M.Pharm	22/07/2019	Pharmaceutics	2	0	0	Assistant Professor		10/08/2020	Regular	No	17/07/20
Ms. Pooja Prajapati	FENPP3639J	M.Pharm	22/09/2020	Pharmaceutical Chemistry	0	0	0	Assistant Professor		01/08/2022	Regular	Yes	
Mr Mohit Soni	GOQPS0486Q	M.Pharm	22/11/2019	Pharmacology	1	0	0	Assistant Professor		27/06/2022	Regular	Yes	
Dr. Yashika Bhalla	ADMOY7089A	M.Pharm and Ph.D	29/11/2019	Medicinal Chemistry	0	0	0	Associate Professor	01/08/2020	01/08/2020	Regular	Yes	
Mr. Chandra Ketu Kaushik	AUKPK5791Q	M.Pharm	27/02/2015	Pharmacognosy	0	0	0	Assistant Professor		01/08/2020	Regular	No	31/07/20
Ms. Sabera Baig	BAMTB9705Q	M.Pharm	11/02/2020	Pharmaceutics	0	0	0	Assistant Professor		14/02/2020	Regular	No	20/12/20
Mr Mayank Goyal	BLFPG0278R	M.Pharm	15/03/2018	Pharmaceutics	0	0	0	Assistant Professor		18/08/2018	Regular	Yes	

5.1 Student-Faculty Ratio (SFR) (20)

Total Marks 20.00

UG

No. of UG Programs in the Department

Pharmacy						
Year of Study	CAY		CAYm1		CAYm2	
	(2022-23)		(2021-22)		(2020-21)	
	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students
1st Year	100	0	100	0	100	0
2nd Year	100	5	100	3	100	0
3rd Year	100	0	100	0	100	0
4th Year	100	0	100	0	100	0
Sub-Total	400	5	400	3	400	0
Total	405		403		400	
Grand Total	<input type="text" value="405"/>		<input type="text" value="403"/>		<input type="text" value="400"/>	

PG

No. of PG Programs in the Department

Grand Total	<input type="text"/>	<input type="text"/>	<input type="text"/>
-------------	----------------------	----------------------	----------------------

SFR

No. of UG Programs in the Department

No. of PG Programs in the Department

Description	CAY(2022-23)	CAYm1 (2021-22)	CAYm2 (2020-21)
Total No. of Students in the Department(S)	<input type="text" value="405"/> Sum total of all (UG+PG) students	<input type="text" value="403"/> Sum total of all (UG+PG) students	<input type="text" value="400"/> Sum total of all (UG+PG) students
No. of Faculty in the Department(F)	<input type="text" value="32"/> F1	<input type="text" value="29"/> F2	<input type="text" value="29"/> F3
Student Faculty Ratio(SFR)	<input type="text" value="12.66"/> SFR1=S1/F1	<input type="text" value="13.79"/> SFR2=S2/F2	<input type="text" value="13.90"/> SFR3=S3/F3
Average SFR	<input type="text" value="13.45"/> SFR=(SFR1+SFR2+SFR3)/3		
F=Total Number of Faculty Members in the Department (excluding first year faculty)			

Note: 75% should be Regular/full time faculty and the remaining shall be Contractual Faculty/Adjust Faculty/Resource persons from industry as per AICTE norms and standards. The contractual faculty will be considered for assessment only if a faculty is drawing a salary as prescribed by the concerned State Government for the contractual faculty in the respective cadre.

5.1.1. Provide the information about the regular and contractual faculty as per the format mentioned below:

	Total number of regular faculty in the department	Total number of contractual faculty in the department
CAY(2022-23)	32	0
CAYm1(2021-22)	29	0
CAYm2(2020-21)	29	0

Average SFR for three assessment years : 13.45

Assessment SFR : 0

5.2 Faculty Cadre Proportion (20)

Total Marks 20.00

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY(2022-23)	3.00	5.00	6.00	2.00	18.00	25.00
CAYm1(2021-22)	2.00	4.00	5.00	1.00	17.00	24.00
CAYm2(2020-21)	2.00	3.00	5.00	1.00	17.00	25.00
Average Numbers	2.33	4.00	5.33	1.33	17.33	24.67

Cadre Ratio Marks [(AF1 / RF1) + [(AF2 / RF2) * 0.6] + [(AF3 / RF3) * 0.4]] * 10 : 20.00

5.3 Faculty Qualification (20)

Total Marks 15.48

Institute Marks : 15.48

	X	Y	F	FQ = 2.0 x [(10X + 6Y) / F]]
2022-23(CAY)	8	24	27.00	16.59
2021-22(CAYm1)	6	23	26.00	15.23
2020-21(CAYm2)	4	25	26.00	14.62

Average Assessment : 15.48

5.4 Faculty Retention (20)

Total Marks 16.00

Institute Marks : 16.00

Description	2021-22	2022-23
No of Faculty Retained	26	22
Total No of Faculty	29	29
% of Faculty Retained	90	76

Average : 83.00

Assessment Marks : 16.00

5.5 Innovations by the Faculty in Teaching and Learning (15)

Total Marks 15.00

Innovation by the faculty in Teaching and Learning

Traditional educational methodology is complemented by innovative, updated techniques for the benefit of the learners. Several activities are included which contribute towards enhancement of learning, at the same time facilitating ease of understanding in students with variegated learning styles. These activities involve innovative use of trending technologies, customized instruction module and techniques, Online/Offline assessment, evaluation and inclusive class rooms that lead to effectiveness of instruction delivery.

1. Various diagrams, flow charts are used for facilitating better understanding.
2. Group assignments are provided in labs and in classes also to ensure healthy competition, team work and new, improved outcomes of the existing problem while promoting peer to peer learning.
3. Faculty members deliver lectures with the help of Videos and Animations in class room. This practical approach for demonstrating complex procedures/topics ensures student can visualize and follow the content with ease.
4. Research papers are used to teach student latest technologies to bridge research gap and help students to gain knowledge of trends and advanced techniques as well to select a viable project for the final terms.
5. Beyond curricula content includes emerging and advances technologies, latest updates, news features, etc which faculty introduce new experiments designed keeping in mind the University syllabus and student existing skill levels.
6. NPTEL, SWAYAM portals with their have Nationally–mapped Curricula are accessed by faculties and students for audio-visual support to textual material.
7. Quizzes Online and offline test, Workshops etc. are adopted to support assessment process.
8. Laboratory Improvement future trends-the designed faculty member constantly update manuals with different activities.
9. Assessments are designed innovatively and also modified as require collecting the attainment levels of course outcomes and program outcomes on frequent basis.
10. Innovations in Evaluations include use presentation skills and such process which can enhance the understanding level and assure fair outcomes.

Innovations by the Faculty in teaching and learning shall be summarized as per the following description.

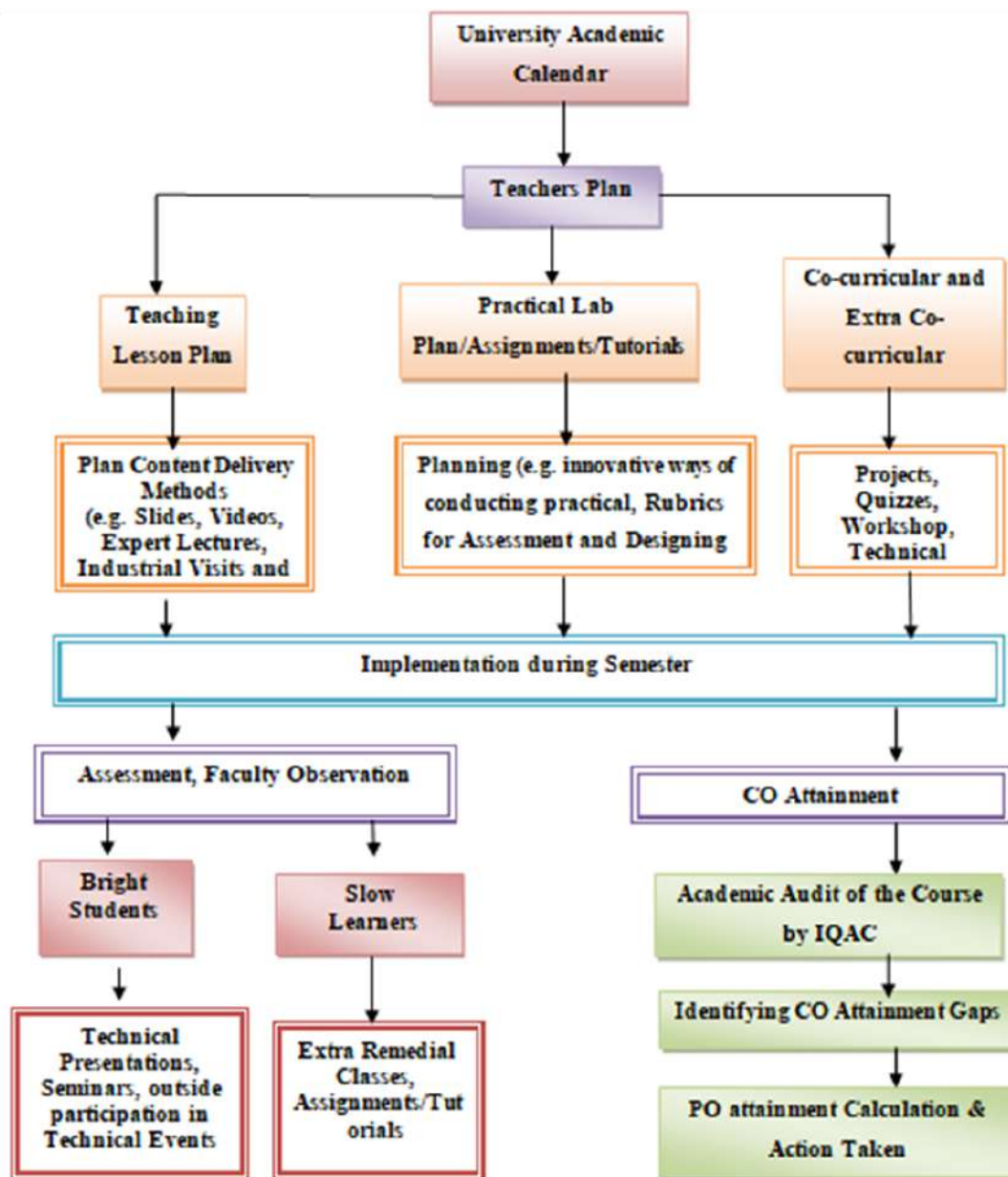


Figure 5.1 Innovations by the Faculty in TL

5.6 Faculty as participants in Faculty Development/Training Activities (15)

Total Marks 15.00

Institute Marks : 15.00

Name of the faculty	Max 5 Per Faculty		
	2022-23	2021-22	2020-21
Dr Vinod Gautam	3.00	5.00	5.00
Dr Jyotiram Sawale	5.00	5.00	5.00
Dr Sameer Sapra	5.00	5.00	3.00
Dr. Gaurav Jain	5.00	5.00	0.00
Dr. Reenu Yadav	5.00	0.00	0.00
Dr. Vivek Chourasia	3.00	0.00	0.00
Dr. Yashika Bhalla	5.00	5.00	5.00
Dr. Sima Singh	0.00	5.00	0.00
Mr Phoolsingh Yaduwanshi	5.00	5.00	5.00
Mrs Damini Singh	5.00	5.00	5.00
Ms Kiran Bhopate	3.00	3.00	3.00
Ms Jyoti Uikey	3.00	3.00	3.00
Mr Braj Gopal Kushwah	3.00	3.00	3.00
Mr Vaibhav Jaiswal	3.00	3.00	0.00
Ms Divya Mittal	3.00	3.00	3.00
Ms Aakansha Verma	3.00	3.00	3.00
Ms Teena Vishwakarma	3.00	3.00	3.00
Mrs Sonam Ramshankar	3.00	3.00	3.00
Mrs Shipra Lal	3.00	3.00	3.00
Ms. Prinsi Sahapuria	3.00	3.00	0.00
Mr Pradeep Tiwari	0.00	3.00	3.00
Ms SumatiJangid	0.00	3.00	3.00
Sum	71.00	76.00	58.00
RF = Number of Faculty required to comply with 15:1 Student Faculty Ratios per 5.1	27.00	26.87	26.67
Assessment [3*(Sum / 0.5RF)]	15.78	16.97	13.05

Average assessment over 3 years: 15.27

5.7 Research and Development (40)

Total Marks 24.00

Academic research includes research paper publications, Ph.D. guidance, and faculty receiving Ph.D. during the assessment period.

Ph.D. Pursuing

S. No.	Research Guide	Name of the scholar	University and year of Registration	Status
1	Dr. Vinod Kumar Gautam	Ms. Prinsi Sahpuriya	IES University, Bhopal	Running

Table 5.8 Details of Ph.D Pursuing Faculties

- **Faculty Publication:** Following table indicates the faculty publications during the three assessment years.

S. No.	Faculty	SCI	Scopus	WOS	Other Journals
1	Dr. Seema Singh	02	03	05	0
2	Dr Gaurav Jain	0	03	0	01
3	Dr. Vinod Gautam	01	04	01	03
4	Dr. Jyotiram Sawale	0	02	01	01
5	Mr. Phoolsingh Yaghuwanshi	01	01	0	01
6	Ms. Prinsi Sahpuriya	0	0	0	1

Table 5.9 Summary of Paper Publication

List of Publications

S.No	Name of Faculty	Title	Journal/Conference	ISSN / DOI	Publication Year
------	-----------------	-------	--------------------	------------	------------------

1		A novel, eco-friendly multi-walled carbon nanotubes functionalized copper metal-organic framework for ultrasensitive potentiometric detection of cadmium ions	Journal of Environmental Chemical Engineering	https://www.sciencedirect.com/science/article/abs/pii/S2213343721015116	Oct, 2021
2		Point-of-Care for Evaluating Antimicrobial Resistance through the Adoption of Functional Materials	Analytical Chemistry	https://pubs.acs.org/doi/full/10.1021/acs.analchem.1c03856	Nov, 2021
3		Gum Acacia Functionalized Colloidal Gold Nanoparticles of Letrozole as Biocompatible Drug Delivery Carrier for Treatment of Breast Cancer	Pharmaceutics	https://www.mdpi.com/1999-4923/13/10/1554	Sept, 2021
4		Nano-enabled strategies to combat methicillin-resistant Staphylococcus aureus	Materials Science and Engineering	https://www.sciencedirect.com/science/article/abs/pii/S0928493121005245	Jan,2022
5	Dr. Seema Singh	Advanced Nanoengineered-Customized Point-of-Care Tools for Prostate-Specific Antigen	MicrochimicaActa	https://link.springer.com/article/10.1007/s00604-021-05127-y	Jan,2022
6		Adenosine Conjugated Docetaxel Nanoparticles - Proof of Concept studies for Non Small Cell Lung Cancer	Pharmaceutics	https://doi.org/10.3390/ph15050544	April,2022
7		Synthesis and antimicrobial activity of vancomycin-conjugated zinc metal-organic framework nanoparticles against methicillin-resistant staphylococcus aureus	Journal of Drug Delivery Science and Technology	https://www.sciencedirect.com/science/article/pii/S1773224722001654?via%3DIhub	March,2022
8		Advances in Noble-Metal Nanoparticle-Based Fluorescence 2 Detection of Organophosphorus Chemical Warfare Agents	ACS Omega	https://doi.org/10.1021/acsomega.2c03645	July,2022
9		Analgesic Action of Catechin on Chronic Constriction Injury-Induced Neuropathic Pain in Sprague-Dawley Rats	Frontiers of Pharmacology	10.3389/fphar.2022.895079	August,2022

10		Evaluation of the Antigenotoxic Potential of Methanolic Leaves Extract of Triticumaestivum in Mice	Journal of Pharmaceutical Research International	http://www.libraryaplos.com/handle/123456789/6455	Oct, 2021
11	Dr. Gaurav Jain	Protective Effect of Blumeralacera in Rifampicin Induced Hepatotoxicity in Rats	Journal of Pharmaceutical Research International	http://www.libraryaplos.com/handle/123456789/6168	Oct, 2021
		Stability Indicating Rp-HPLC Method for the Estimation of Drug in Marketed Formulation	A multifaceted peer reviewed journal in the field of Pharmacy	https://www.tojqi.net/index.php/journal/article/view/4329	July,2021
12		Medicinal plants: Potent effect on memory deficits and Alzheimers disease	Zeichen Journal	http://www.ezeichen.com/gallery/2146.pdf	Oct, 2021
13		Medicinal plants: Potent effect on memory deficits and Alzheimers disease	Zeichen Journal	http://www.ezeichen.com/gallery/2146.pdf	Oct, 2021
14	Ms. PrinsiSahpuriya	Review on Management of Peptic Ulcer By Herbal-Based Medications	International Journal of Botany Studies	ISSN:2455-541X	Feb,2022
15		Stability Indicating Rp-HPLC Method for the Estimation of Drug in Marketed Formulation	A multifaceted peer reviewed journal in the field of Pharmacy	https://www.tojqi.net/index.php/journal/article/view/4329	July,2021
16	Mr. Phool Singh	Anti -microbial Evaluation of twigs of Butea monosperma Lam	Nat. Volatile & Essential oils	https://www.dcth.org/index.php/journal/issue/view/11	2021
17		Development and Charaterization of Niosomal gel of acefenac for the treatment of Arthritis	Drugs and cell therapies in hematology	https://www.dcth.org/index.php/journal/issue/view/1	2021

18		Bioactivity guided fractionation of potent antiacne plant extract against Propionibacterium acnes	African Journal of Biotechnology	https://doi.org/10.5897/AJB2015.14495	17(13), 2018
19		Development and characterization of spheroidal antidiabetic polyherbal formulation from fresh vegetable juice: A novel approach	Journal of Food Biochemistry	https://doi.org/10.1111/jfbc.13290	45(3), 2020
20		Effect of Geographical and Seasonal Variations on Phenolic Contents and Antioxidant Activity of Aerial Parts of <i>Urticadiocia</i> L.	Current Traditional Medicine	https://doi.org/10.2174/2215083804666181012123333	5(2), 2019
21		Natural Polymers In The Development Of Gastroretentive Systems: A Review	Natural Volatiles & Essential Oils	2148-9637	8(5), 2021
22	Dr. Vinod Kumar Gauttam	Scope and limitations of digital learning's in developing countries: A real time survey	Annals of Phytomedicine	10.54085/ap.covid19.2022.11.3.9	Special issue 3, 2022
23		Comparative Study of Developed Formulation and Market Formulation for Antidiabetic Potential in Alloxan-Induced Diabetic Wistar Rats	Journal of Young Pharmacists	10.5530/jyp.2022.14.78	14(4), 2022
24		Development of Validated HPTLC Method for Quantification of Luteolin in <i>Ecliptaalba</i> and its Formulation	World Journal of Pharmacy and Pharmaceutical Sciences	10.20959/wjpps202011-17766	9(11), 2020
25		Synthesis and Characterization of Azetidene Analogous and related compounds for their antimicrobial activity	World Journal of Pharmacy and Pharmaceutical Sciences	10.20959/wjpr201813-12811	7(13), 2018
26		<i>Ficusracemosa</i> Linn- Gooler A Review	World Journal of Pharmacy and Pharmaceutical Sciences	10.20959/wjpr201812-12653	7(12), 2018

27		Herbal Fennel Essential Oil Nanogel: Formulation, Characterization and Antibacterial Activity against Staphylococcus aureus	MDPI	Gels 2022, 8, 736	Nov,2022
28	Dr. Jyotiram Sawale	"Formulation and development of gastro retentive tablet of captopril using maize stem pith powder as a novel polymer"	Neuro Quantology	ISSN13035150	Set, 2022
29		Anti -microbial Evaluation of twigs of Butea monosperma Lam	NVEO	2021,8(5)2883-2894	2021
30		Stability indicating Rp-Hplc method for the estimation of drug in Marketed Formulation	Turkish Online Journal of Qualitative Inquiry	3890-3904	2021

Table 5.10 Paper Publication

Patent:

S. No (http://s.no/)	Academic Year	Name of the Faculty	Application Number	Topic
1	2021-22	Ms Sheelu Singh	202221034658	Hydrogel Of Tribulus Terrestris In Aloxane Monohydrate Induced Diabetic Wound In Rats
2	2022-23	1. Dr. Vivek Chourasia 2. Prinsi Sahpuriya 3. Vinita Singh	202211054814	An Antidepressant Activity Evaluation And Extraction Process Of Cascabela Thevetia

Table 5.11 Patent Publication

2022-23

Project Title	Duration	Funding Agency	Amount (in Rupees)

2021-22

Project Title	Duration	Funding Agency	Amount (in Rupees)

2020-21

Project Title	Duration	Funding Agency	Amount (in Rupees)

Cumulative Amount(X + Y + Z) =

5.7.3 Consultancy (from Industry) (10)

Institute Marks : 9

2022-23

Project Title	Duration	Funding Agency	Amount (in Rupees)
Development of Hair & Nail	July,2022-Jan,2023	Chem masters Laboratories	400000.00
SOP Development	August,2022- Oct,2022	Univictor healthcare Pvt. Ltd.	100000.00
			Total Amount(X): 500000.00

2021-22

Project Title	Duration	Funding Agency	Amount (in Rupees)
Development of Antiacne Herbal based formulation	Dec,2021- August,2022	CHEM MASTER LABORATORIES	100000.00
Training on Drug Store Management	Jan, 2022- March,2022	SADANA MEDICAL HALL	100000.00
Product Development on Sexual Health, Immunity booster and diabetes management	Dec,2021- Feb,2022	DR. NATURE WELLNESS PVT. LTD.	150000.00
SOP Development for Processing of Food and Nutraceutical Formulation (Liquid)	Jan,2022	VITALYSE FOODS PVT. LTD.	50000.00
Establishment of Food Processing Facility at Jind Haryana	July, 2021- May,2022	BHAIRAV TRADING CO.	200000.00
SOP Development	Feb,2022- April,2022	BIO SCI HEALTHCARE	109322.00
Establishment of Food Processing Facility, Punjab	Nov,2022- May,2022	THE HERB HOUSE	169492.00
Product Development on sport category (As per FSSAI Norms)	Oct,2022- June,2022	UNIVICTOR HEALTHCARE PRIVATE LIMITED	300000.00
			Total Amount(Y): 1178814.00

2020-21

Project Title	Duration	Funding Agency	Amount (in Rupees)
Product Development for Women wellness category (As per FSSAI Norms)	Jan,2021-Feb,2022	MAKSON HEALTH CARE PVT. LTD.	615000.00
			Total Amount(Z): 615000.00

Cumulative Amount(X + Y + Z) = 2293814.00

5.7.4 Honorary Consultancy from Central/State/Local Government Organizations (5)

Institute Marks : 0.00

5.7.5 Development activities (5)

Institute Marks : 5.00

5.7.3.1. Product Development**Table 5.15 Academic Year 2022-23**

S. No.	Faculty Name	Title of Product Development
1	Ms. Prinsi Sahpuriya	Rose Perfume
2	Mr. Indrakumar	Gilloe Tablet
3	Dr. Gaurav Jain	Turmeric Capsule
4	Mr. Mohit Soni	Herbal Shampoo
5	Ms. Pooja Prajapati	Herbal Oil
6	Dr. Vivek Chourasia	Herbal Face Pack
7	Mr. Tejram	Herbal Cold Cream

Table 5.16 Academic Year 2021-22

Sr. No.	Faculty Name	Title of Product Development
1	Ms. Sheelu Singh	Aloe Vera Lotion
2	Ms. Prinsi Sahpuriya	Aloe Vera Suspension
3	Ms. Sonam	Ibuprofen Syrup
4	Dr. Gaurav Jain	Herbal Vanishing Cream

Table 5.17 Academic Year 2020-21

S. No.	Faculty Name	Title of Product Development
1	Mr. Phool Singh	Paracetamol Elixir
2	Ms. Damini Singh	Suppository
3	Ms. Monam Kushwaha	Camphor Powder

5.7.3.2. Research Laboratories

Central Instrumentation Laboratory has been developed for

1. Extraction and Isolation of active constituents from several plant extracts
2. Formulation and Development of various herbal products

5.7.3.3. Instructional materials

- Instructional Manual
- Laboratory Manuals
- Power Point Presentation
- Handouts
- Subject notes

Video Lecturers

5.7.3.4. Working models /charts/monograms:**Charts:**

- Anatomical structures of different systems of body like circulatory system, excretory system, respiratory system, digestive system, human brain, human eye, human ear, human skin, lymphatic System, Female Reproductive system etc
- Transverse section of various crude drugs

Models:

Models for various organ of the human body - Urinary system, Human Skin, Heart, Kidney etc.

5.8**Faculty Performance Appraisal and Development System (FPADS)**

Total Marks 20.00

(20)

Faculty Performance Appraisal format is collected from each faculty in which they need to show their innovations and research for their self-renewal to cope up with changes in technology and develop expertise for effective implementation of the curricular. The format of Faculty Performance Appraisal format is provided in annexure.

Institute organizes a meeting every month for faculty for feedback in which they discuss about the class conduct, performance, assignment, unit test, class test and activity of students. For the same faculty feedback is also considered on results, behaviour and own performance for active participation and achievements, discipline and quality basis, compiled annually for two semesters (even and odd). Institute acknowledge faculty on the basis of self-appraisal report. Increments are assigned given according to appraisal report.

Process for the appraisal –

- Format given by the Head of the department
- Filled by the concerned faculty
- Submitted to Head of the department for remarks
- Final submitted to director office for verification of marks and appropriate action (Increments/Reward).

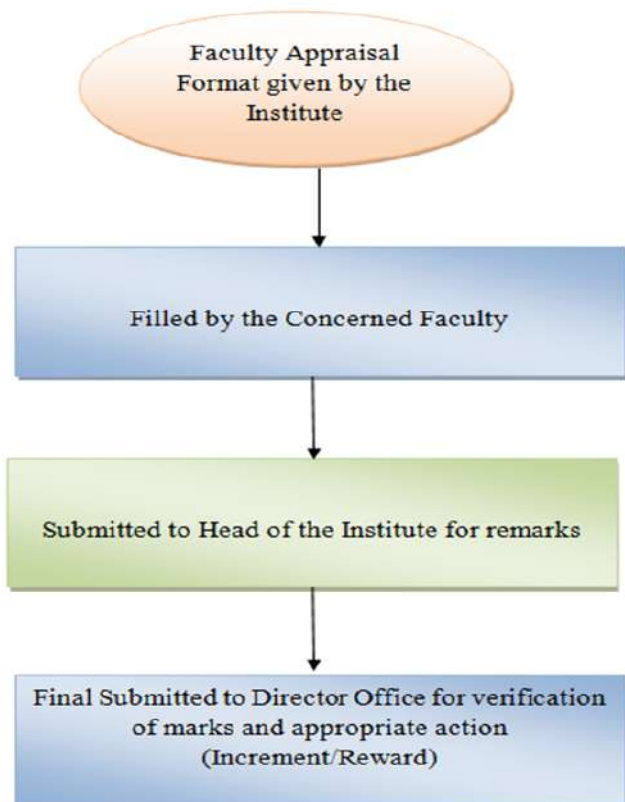


Fig: 5.2 Flow chart of Faculty Appraisal Process

Faculty Appraisal Evaluation Rubrics:

Table 5.18 Faculty Appraisal Evaluation Rubrics

S.No	Title	Verification Authority	Marking Scheme	Obtained Marks	Signature of Verified Aut
1	Students Aggregate Attendance (20Marks)	HOD & Principal	< 40% = 0 < 40 to 50% = 5 < 50 to 65% = 10 < 65 to 75% = 15 > 75 = 20 <u>No. of students with respect to grade</u> <u>A+/A/B+/B</u>		
2	Results of Previous Sem Subjects Taught (15Marks)	HOD & Principal	If total A+/A/B+/B > 30% then 15 if A+/A/B+/B> 20% then 8 A+/A/B+/B > 10% then 5 If 1 book published award =5, ICT Tool uses =5		
3	Research Papers/ Book Published/ICT Tool uses (10Marks)	Principal	1 SCI Paper Published = 5 3 Papers with ISSN/UGC = 5 if Published up to 2 papers = 2 NIL = 0		

4	Grant received from AICTE/UGC/MAPCOST/Other Government bodies/Consultancy (5Marks)	Principal	YES = 5 NO = 0
5	Students Projects/Product made by faculty(10Marks)	HOD & Principal	If among best project = 10 Otherwise if guided =5 Product made by faculty=5 Not Guided = 0 Excellent = 20 Very Good = 18 Good = 15 Average = 10 Satisfactory = 5
6	Students Feedback(20Marks)	HOD & Principal	Yes (Actively involved) = 05 Participated = 02 Organized=03 NO = 0
7	Extra Curricular involvement/FDP /Conferences /Seminar(Attended / Organized) 5 Marks	HOD/ Principal	If YES = 5 NO = 0
8	New Lab Establishment / Lab Maintenance/ Uses of virtual labs (5Marks)	HOD/ Principal	1 Mark/Thesis if completed within time Maximum mark = 05
9	Ph.D. /M. Tech Thesis Guided (5Marks)	HOD/ Principal	If doing with full cooperation then 05 doing without co operation then 3 Refusing = 0
10	Responsibility	HOD/ Principal	
11	(Exam Control Room/TG/Anti Ragging/ Monitoring 5Marks)	Principal	

Forwarded by HOD

Signature of Faculty

Principal

Table 5.16: Faculty Appraisal Evaluation Rubrics

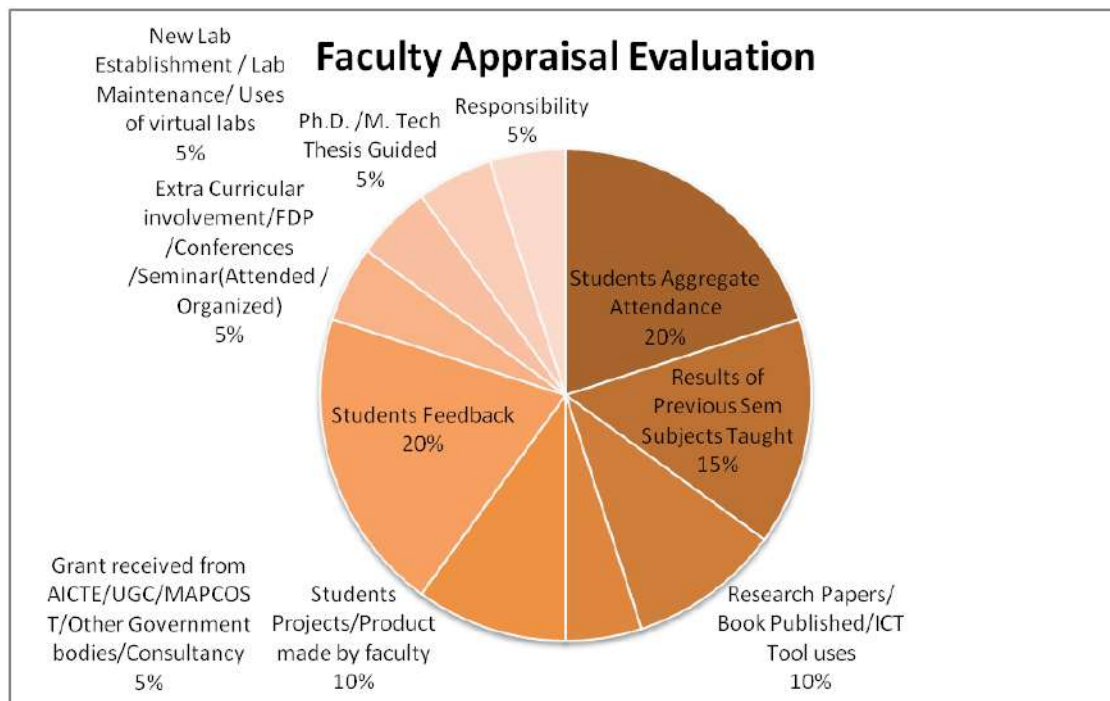


Figure 5.3 Faculty Appraisal Evaluation

Key points for faculty appraisal are:

- Students Aggregate Attendance
- Results of Previous Semester Subjects Taught
- Research Papers/ Book Published/ICT Tool uses
- Grant received from AICTE/UGC/MAPCST/Other Government bodies/Consultancy
- Students Projects/Product made by faculty
- Students Feedback
- Extra-Curricular involvement/FDP /Conferences /Seminar(Attended / Organized)
- Ph.D. /M. Pharma Thesis Guided

Additional Responsibility ((Exam Control Room/TG/Anti Ragging/ Monitoring)

5.9 Visiting/Adjunct Faculty (5)

Total Marks 0.00

Institute Marks : 0.00

Our Institute does not have the provision of Visiting/Adjunct Faculty for this Assessment Year

6 FACILITIES (120)

Total Marks 120.00

6.1 Availability of adequate, well-equipped classrooms to meet the curriculum requirements (20)

Total Marks 20.00

Institute Marks : 20.00

The institute has:

- Facilities as per requirements for conducting lectures and tutorials from first to final year students are adequate.
- Class rooms have capacity to accommodate upto 60 students; they are well ventilated and equipped.
- Tutorial rooms are available with all the necessary facilities to conduct remedial classes for students having backlogs as well.
- A seminar hall and a Board room are available to conduct seminars, guest lectures and workshops and staff meeting.
- Teaching aids – Green boards, Projectors equipped with LAN facility, and adequate number of tube lights, fans are available.

The details of the classrooms along with the facilities available are provided in the table below.

The details of the classrooms along with the facilities available are provided in table below:

S. No	Floor	Room No	Room Type (Classroom/Lab/ Seminar Hall)	Carpet Area (In Sq M.)
	Ground Floor	Room No 6	Class Room-1 (M. Pharm.)	75
2	Ground Floor	Room No 12	Class Room-2 (B. Pharm.)	75
3	Ground Floor	Room No 14	Class Room-3 (B. Pharm.)	75
4	First Floor	Room No 15	Class Room-4 (B. Pharm.)	75
5	First floor	Room No 16	Class Room-5 (B. Pharm.)	75
6	Second Floor	Room No 19	Class Room-6 (D. Pharm.)	75
7	Second Floor	Room No 20	Class Room-7 (B. Pharm)	75
8	Second Floor	Room No 23	Seminar Hall	150
9	Second Floor	Room No 25	Girls Common Room	75
10	First floor	Room No 17	Boys Common Room	75
11	First floor	Room No 18	Museum	50

6.2 Faculty rooms (10)

Total Marks 10.00

Institute Marks : 10.00

The faculty rooms allotted accordingly to norms of regulatory bodies, with sufficient infrastructure includes computers, printers and internet facilities. The details of the faculty rooms along with the facilities available are given in the table below.

- Adequate rooms and cabins are available to accommodate all faculty members.
- Faculty members have been provided with computer and internet facility.
- The staff rooms and staff cabins are well furnished.

S. No.	Rooms	Location	Carpet area (Sqm)
1	Principal Office	Ground Floor	40
2	Vice Principal Room	First Floor	30
3	HOD Room-I	First Floor	10
4	HOD Room-II	Second Floor	10
5	HOD Room-III	Second Floor	10
6	Faculty Room-I	Ground Floor	12
7	Faculty Room-II	First Floor	12
8	Faculty Room-III	Second Floor	12

6.3 Laboratories including preparation room (wherever applicable), instrument/machine room and computer labs along with equipment and relevant facilities (60)

Total Marks 60.00



Lab Description	Batch size	Availability of Manuals	Quality of instruments	Safety measures
Pharmacology Lab-I (Human Anatomy and Physiology) (B. Pharm)	25	Available	Excellent	First Aid & Fire Extinguisher Safety Measure (Chart)
Pharmacology Lab-II (B. Pharm)	25	Available	Excellent	First Aid & Fire Extinguisher
Pharmacognosy Lab-I (B. Pharm & D. Pharm)	25	Available	Excellent	Safety Measure (Chart)
Pharmacology Laboratory-III (B. Pharm & D. Pharm)	25	Available	Excellent	First Aid & Fire Extinguisher
Pharmaceutics Lab-I (B. Pharm)	25	Available	Excellent	Safety Measure (Chart)
Pharmaceutics Lab-II (B. Pharm)	25	Available	Excellent	First Aid & Fire Extinguisher
Microbiology/Biotech Lab (B. Pharm)	25	Available	Excellent	Safety Measure (Chart)
Pharmaceutics Lab. (PG-I)	15	Available	Excellent	First Aid & Fire Extinguisher
Pharmaceutics Lab (PG-II)	15	Available	Excellent	Safety Measure (Chart)
Pharmaceutical chemistry Lab-I	25	Available	Excellent	First Aid & Fire Extinguisher
Pharmaceutical chemistry Lab-II	25	Available	Excellent	Safety Measure (Chart)
Pharmaceutical Analysis Lab	25	Available	Excellent	First Aid & Fire Extinguisher
Pharmaceutical chemistry Lab-III	25	Available	Excellent	Safety Measure (Chart)
Machine Room	25	Available	Excellent	First Aid & Fire Extinguisher
Central Instrument Room	25	Available	Excellent	Safety Measure (Chart)
Computer Lab.	25	Available	Excellent	First Aid & Fire Extinguisher
Pharmacology Lab-I (Human Anatomy and Physiology) (B. Pharm)	25	Available	Excellent	Safety Measure (Chart)

The list of equipment available in each laboratory specialization-wise is given below

B. Pharmacy – Pharmaceutics

S. No	Name of the equipment	Code	SOP
1.	Friability apparatus	IESPH/FA/	Available
2.	Disintegration apparatus	IESPH/DA/	Available
3.	Microscopes	IESPH/MICROSCOPE	Available
4.	Desiccator	IESPH/DC/	Available
5.	Vacuum pump	IESPH/VP	Available
8.	Homogenizer	IESPH/HOMO	Available
9.	Mechanical stirrer	IESPH/MS/	Available
10.	Multi heating mantle	IESPH/MHM	Available
12.	Moisture balance	IESPH/MB	Available
13.	Magnetic stirrer	IESPH/MS	Available
14.	Dissolution apparatus	IESPH/DA/	Available
15.	Anderson pipettes	IESPH/AP	Available
16.	Distillation set	IESPH/DIST	Available
18.	Analytical balance	IESPH/AB/	Available
19.	Hot air oven	IESPH/HO	Available
20.	Digital balance	IESPH/DB/	Available
23.	UV spectrophotometer	IESPH/UVSM	Available
25.	TLC chamber	IESPH/TLC	Available
26.	TLC plate chamber	IESPH/TLPCPC	Available
29.	Digital melting point	IESPH/DMP	Available
30.	Water bath	IESPH/WB	Available
31.	Digital PH meter	IESPH/DPH	Available
32.	Potentiometer	IESPH/PM	Available
33.	Bottle washing machine	IESPH/BWM	Available
34.	Weighing balance	IESPH/WB	Available
35.	Single punching machine	IESPH/SPM	Available
36.	Centrifuge	IESPH/CENTRI	Available
39.	Capsule filling machine	IESPH/CFM	Available
40.	Tray dryer	IESPH/TD	Available
41.	Digital ultra-sonic cleaner	IESPH/DUS	Available
42.	Sieve shaker	IESPH/SS	Available
43.	Black and white background	IESPH/B&W BACK	Available

44.	Bulk density apparatus	IESPH/BDA	Available
45.	Ointment filling machine	IESPH/OFM	Available
46.	Ball mill	IESPH/BM	Available
47.	Percolator	IESPH/PER	Available
48.	Abbes refractor meter	IESPH/AR	Available
49.	Digital tablet disintegration test machine	IESPH/DTDTM	Available
50.	Dissolution apparatus	IESPH/DTA	Available
51.	Autoclave	IESPH/AC	Available
52.	Ampoule sealing and filling machine	IESPH/ASF	Available

B. Pharmacy – Pharmaceutical Biotechnology

S. No	Name of the equipment	Code	SOP
1.	Digital colony counter	IESPH/DCC	Available
2.	Antibiotic zone reader	IESPH/AZR	Available
3.	Centrifuge with head	IESPH/CENTR	Available
4.	Orbital water bath shaker	IESPH/OWBS	Available
5.	Hot air oven	IESPH/HO	Available
6.	BOD incubator	IESPH/BOD	Available
7.	Autoclave	IESPH/AC	Available
8.	Centrifuge	IESPH/CENTRI	Available
9.	Analytical balance	IESPH/AB	Available
10.	Heating mantle	IESPH/HM	Available
11.	Laminar air flow	IESPH/LAF	Available
12.	Microscope	IESPH/MICROSCOPE	Available
13.	Centrifuge	IESPH/CENTRI	Available
14.	Desiccator	IESPH/DC	Available
15.	Sonicator	IESPH/SONI	Available
16.	Filtration assembly	IESPH/FIL	Available
17.	Micro pipette	IESPH/MP	Available
18.	Digital balance	IESPH/DB	Available

B. Pharmacy – Pharmaceutical Chemistry and Pharmaceutical Analysis

S. No	Name of the equipment	Code	SOP
1.	Hot plate	IESPH/HP	Available
2.	Heating mantle	IESPH/HM	Available
3.	Analytical balance	IESPH/AB	Available
4.	Hot air oven	IESPH/HO	Available
5.	Water bath	IESPH/WB	Available
6.	Electric water bath	IESPH/EWB	Available
7.	Vaccum pump	IESPH/VP	Available
8.	Digital Colorimeter	IESPH/DCM	Available
9.	Fume hood	IESPH/FH	Available
10.	Digital balance	IESPH/DB	Available
11.	Magnetic stirrer	IESPH/MS	Available
12.	Digital melting point Apparatus	IESPH/DMPA	Available
13.	Muffle furnace	IESPH/MF	Available
14.	Oven	IESPH/OVEN	Available
15.	Six hole heating mantle	IESPH/SHHM	Available
16.	Digital PH meter	IESPH/DPHM	Available
17.	Balance	IESPH/BALANCE	Available

18.	Suction pump	IESPH/SP	Available
-----	--------------	----------	-----------

B. Pharmacy – Pharmacognosy and Phytochemistry

S. No	Name of the equipment	Code	SOP
1.	Projection microscope	IESPH/PROMICRO	Available
2.	Electrical water bath	IESPH/EWB	Available
3.	Autoclave	IESPH/AC	Available
4.	Digital colony counter	IESPH/DCC	Available
5.	Analytical balance	IESPH/AB	Available
6.	Heating mantle (small)	IESPH/HMS	Available
7.	Heating mantle (six hole)	IESPH/HMSIX	Available
8.	Digital balance	IESPH/DB	Available
9.	BOD incubator	IESPH/BOD	Available
10.	Tissue culture station	IESPH/TCS	Available
11.	Camera lucida	IESPH/CL	Available
12.	Microscopes Projection	IESPH/MP	Available
13.	Vacuum pump	IESPH/VP	Available
14.	Stop clock	IESPH/SC	Available
15.	Moisture Balance	IESPH/MB	
16.	Compound Microscopes	IESPH/CM	Available
17.	Homogenizer	IESPH/HOMO	Available
18.	Grinder	IESPH/GRINDER	Available

B. Pharmacy – Pharmacology

B. Pharmacy components are simulation experiments and are also conducted in the computer laboratory (systems). Simulation software experiments are demonstrated. It is aimed at helping the students to understand and remember the principles of bioassays.

S. No	Name of the equipment	Code	SOP
1.	Spirometer	IESPH/SM	Available
2.	Water bath	IESPH/WB	Available
3.	Heating mantle	IESPH/HM	Available
4.	Electronic balance	IESPH/EB	Available
5.	Microscope	IESPH/MICROSCOPE	Available
6.	Stethoscope	IESPH/SS	Available
7.	Haemocytometer	IESPH/HC	Available
8.	Haemometer	IESPH/HM	Available
9.	Stop clock	IESPH/SC	Available
10.	Sphygmanometer	IESPH/SM	Available
11.	Weighing balance	IESPH/WB	Available
12.	Plethysmometer	IESPH/PM	Available
13.	Electroconvulsimeter	IESPH/ECM	Available
14.	Analgesimeter	IESPH/ANALG	Available
15.	Student organ bath	IESPH/SOB	Available
16.	Actophotometer	IESPH/APM	Available
17.	Heating mantle	IESPH/HM	Available
18.	Kymography drum	IESPH/KD	Available
19.	Aerators	IESPH/AERA	Available
20.	Rota rod	IESPH/RR	Available
21.	Temperature controller	IESPH/TC	Available

Lab Description	BatchSize	Availability of manuals	Quality of Instrument	Safety Measures	Remarks
Machine Room	25	Yes	Excellent	Fire Extinguisher, First Aid Kit ar	Regular maintenance is in place
Central Instrumentation Lab	25	Yes	Excellent	ire Extinguisher, First Aid Kit anc	Regular maintenance is in place

The institute is established a well equipped and separated area for the museum and display of the modern and traditional drugs in the corridor at ground floor. It contains specimens of important species of medicinal plants collected from different places. The main purpose is to promote education on the herbal drugs by providing the information of authentication and standardization of the traditional natural medicines in light of scientific methods. To fulfill this purpose, the crude drug samples have been collected directly from ethnic people and local markets. The museums aim is to enhance the experience of students and staff at the institute. It is promoted as a resource for teaching and research. The museum is designed to provide separate sections for various categories of products. The museum keeps and displays crude drug samples, herbal specimens, various pharmaceutical preparations and dosage forms including tablets, injections, blister packs, cosmetics, strips, bandages and so on. Regular cleaning schedule is followed for the museum. The products are updated from time to time with latest developments in the market. Most of the items including crude drugs have significant educational, scientific and historical value.

S. No.	Name of the Product		
	Natural Drugs: Natural drugs are the treasure for pharmaceutical formulation And they are used to evaluate the Pharmacognostical, Phytochemical and pharmacological activities.		
I	Drugs Specimen	S. No.	Drugs Specimen
1.	Cinnamon	17	Aswagandha
2.	Jalap	18	Senna
3.	Nirgundi	19	Rauwolfia
4.	Acacia	20	Cumin
5.	Turmeric	21	Ginger
6.	Ajowan	22	Psoralea
7.	Lemon	23	Solanum khasianum
8.	Balsam of tolu	24	Coriander
9.	Nux-vamoica	25	Benzoin
10.	Cardmom	26	Asafoetida
11.	Amla	27	Terminalia chebula
12.	Fennel	28	Arjuna bark
13.	Vasaka	29	Asparagus
14.	Isabgol	30	Gambir
15.	Kurchi bark		
16.	Rhubarb		
II	Anatomical Specimen: They are useful to understand the shape, structure and orientation of different body organs, especially useful as a study design in Anatomy and Physiology lab.		
1.	Brain		
2.	Kidney		
3.	Heart		
4.	Human reproductive system male and female		
5.	Human tongue		
6.	Ear		
7.	Teeth with lower jaw		
8.	Eye		
III	DOSAGE FORM: Useful for study about the marketed available formulation in different dosage form, different routs of administration and different packing materials used for packing of different dosage form.		
	Solid Dosage Form	S. No	Liquid Dosage forms
1.	Gut-xt	1	Altherocin drops
2.	Limcee	2	Kontum mouthwash
3.	Sporlac powder	3	NCH-cold suspension
4.	Maxpure	4	Wikoryl suspension
5.	Fourts-b-z-plus	5	Xpect-b suspension
6.	Etilaam-MD-0.5	6	Brozeet syrup
7.	Glyciphage-G1	7	Oricitral syrup
8.	Panex-CR 12.5	8	Cofaid-D
9.	Moxikind-CV-625	9	Voxy-P
10.	Metsmallvx-500	10	Wikorylaf
11.	Rosuvagold-20	11	Nazomac
12.	Rabepoz-I	12	Kona-vit -12
13.	Acenac-MR	13	Levolin
14.	Rabiex-DSR	Semisolid Dosage Form	
15.	face-sp	1	Clenorush
16.	ORS (electrical)	2	Cipladine
17.	3x cold and flu	3	Laliconazole cream

18.	Histafree	4	Cutimax
19.	Oxidox	5	Lalifresh
20.	Mefta-forte	6	Skinbrite
		7	Cindane lotion
		8	Zincoderm
		9	Lupiderm
		10	Gem

6.5 Medicinal Plant Garden (5)

Total Marks 5.00

(Area, demarcation, temporary/permanent arrangement, planting of plants under the shade in demarcated areas, adequacy of the plants)

(5)

A well maintained medicinal garden is located at IES Institute of Pharmacy, IES University campus with more than 90 varieties and around 300 plants having medicinal properties. The garden is located near the main building of IES Institute of Pharmacy, IES University campus. The institute is maintaining the medicinal plant garden which includes several types of herbs, shrubs and trees. Total area of the garden 1200 square meter with boundary of the garden properly demarcated. Two gardeners are taking care for water pouring, cleaning and providing the pesticides from time to time. Two faculty members are made in-charges of the medicinal plant garden and overall maintenance is under the supervision of these faculty members. The plantation has made appropriately under the shade of demarcated areas (shadows of tree). All the plants are provided with name plates. The plant density of the medicinal plants is maintained properly.

The purpose of the Medicinal Plant Garden is to demonstrate some of the plants that have been the source of medicines in the past and present and to share interesting historical information to students. Majority of plants are having traditional uses and it is important for students to get knowledge about these. The plants available in medicinal garden are from Family named *Liliaceae*, *Meliaceae*, *Solanaceae*, *Rutaceae*, *Combretaceae* and many others. The details of Botanical Name with, Vernacular name and uses thereof are mentioned in following table.

Table: List of Medicinal Plants available at Medicinal Garden of IES Institute of Pharmacy.

S. No.	Common Name	Botanical Name	Family	Uses
1	Shankhpuspi	<i>Covolvulus pluricaulis</i>	Convolvulaceae	Arthritis, rheumatic pain
2	Dambel	<i>Tylophora indica</i>	Asclepiadaceae	Asthma, sinusitis
3	Kapoor kachri	<i>Hedychium spicatum</i>	Zingiberaceae	Asthma, cough
4	Coleus	<i>Plectranthus scutellariodes</i>	Lamiaceae	Angina, epilepsy
5	Pathar chata	<i>Bryophyllum pinnatum</i>	Crassulaceae	Burns, bloating
6	Bach	<i>Acorus calamus</i>	Acoraceae	Ulcer, gas
7	Sudarshan	<i>Crinum asiaticum</i>	Amaryllidaceae	Ear pain, scabies
8	akarkara	<i>Anacyclus pyrethrum</i>	Asteraceae	Arthritis, inflammation
9	Ulat kambal	<i>Abroma augusta</i>	Malvaceae	Arthritis, sinus
10	Neel brahmi	<i>Bacopa monnieri</i>	Plantaginaceae	Anticancer, anxiety
11	Harjod	<i>Cissus quadrangularis</i>	Vitaceae	Asthma, piles
12	Rasna	<i>Alpinia calcarata</i>	Zingiberaceae	Inflammation, asthma
13	Plash	<i>Butea monosperma</i>	Fabaceae	Antifertility, aphrodisiac
14	Nagarmotha	<i>Cyperus scariosus</i>	Cyperaceae	Diarrhea, sore throat,
15	Gulab khawali	<i>Hedychium coronarium</i>	Zingiberaceae	Anti-rheumatic, anthelmintic
16	Ashwagandha	<i>Withania somnifera</i>	Solanaceae	Reduce swelling
17	Kasoud	<i>Cassia occidentalis</i>	Fabaceae	Cough, asthma
18	Somballi	<i>Sarcostemma brevistigma</i>	Asclepiadaceae	Diabetes, soar throat
19	Mithi neem	<i>Murraya koenigii</i> L	Rutaceae	Digestive Disorder, Skin Disorder
20	baheda	<i>Terminalia belerica</i>	Combretaceae	Anthelmintic, Dysentery, Blood Purifier
21	adusa	<i>Adhatoda vasica</i>	Acanthaceae	Treating bronchitis, asthma
22	nirgundi	<i>Vitex negunda</i>	Lamiaceae	Fever, toothache
23	Bhui amla	<i>Phyllanthum niruri</i>	Phyllanthaceae	Leprosy, phlegm
24	Bhatkataiya	<i>Solanum virginianum</i>	Solanaceae	Sputum, gripe
25	Saunf tulsi	<i>Ocimum tenuiflorum</i> Linn	Lamiaceae	Herbal tea cancer, Skin disease
26	Bhrangraj	<i>Eclipta prostrata</i> Linn	Asteraceae	Ulcer, swelling
27	Mogra	<i>Jasminum sambac</i> Alton.	Oleaceae	Asthma, Skin Disease
28	Apamarg	<i>Achyranthes aspera</i> Linn	Amaranthaceae	Asthma, Snake bite, Jaundice
29	Sarpokha	<i>Tephrosia purpurea</i>	Fabaceae	Leprosy, ulcers, asthma, and tumors
30	Makoy	<i>Solanum nigrum</i>	Solanaceae	Pneumonia, aching teeth, stomach ache
31	Gokhru	<i>Tribulus terrestris</i>	Zygophyllaceae	Urinary Disorders,
32	Dhatura kala	<i>Dhatura metel</i>	Solanaceae	Improves Kidney Functions
33	Van tulsi	<i>Ocimum tenuiflorum</i>	Lamiaceae	Bronchitis, malaria, diarrhea, dysentery
34	Mehndi	<i>Lawsonia innermis</i> Linn	Lythraceae	Hair Die, analgesic, anti-inflammatory, hepatoprotective
35	Raatrani	<i>Cestrum nocturnum</i>	Solanaceae	Antioxidant, anti-hyperlipidemic, hepatoprotective
36	Dhatura kala	<i>Datura stramonium</i> Linn	Solanaceae	Anti-spasmodic, analgesic, sleep-inducing
37	Kharenti	<i>Sida cordifolia</i> Linn	Malvaceae	Asthma, tuberculosis
38	Putrajiwa	<i>Putranjiva roxburghii</i> Wall	Putranjivaceae	Fever, arthritis,
39	Khirmi	<i>Mimusops hexandra</i>	Sapotaceae	Ulcer
40	Vidhara	<i>Argyreia nervosa</i>	Convolvulaceae	Treat cuts, wounds, internal bleeding, rheumatism
41	Mandook parni	<i>Centellia asiatica</i> Linn	Apiaceae	Blood Disorder,
42	Champa	<i>Magnolia champaca</i>	Magnoliaceae	Diarrhea, cough, bronchitis, hypertension
43	Sadabahar	<i>Catharanthus roseus</i>	Apocynaceae	Anti Cancer, Diabetes
44	Pan	<i>Piper bettle</i>	Piperaceae	Vit C, anticancer, anti-allergic, anti-malarial
45	Bhimavasi	<i>Artemisia vulgaris</i> Linn	Asteraceae	diarrhea, constipation, cramps
46	Bharangi	<i>Clerodendrum serratum</i>	Lamiaceae	Common cold, chronic sinusitis, allergic rhinitis

47	Marhua dona	<i>Origanum majorana</i> Linn.	Lamiaceae	Running nose, cough, common cold
48	Guggal	<i>Commiphora mukul</i> Hook	Burseraceae	Acne, eczema, psoriasis, and arthritis
49	Ashok bhed	<i>Polyalthia longifolia</i> Thiu	Annonaceae	Heart Disease, Blood Pressure, Respiratory D
50	Rajni gandha	<i>Agave amica</i>	Asparagaceae	Manage anxiety, stress, anger, confusio
51	Chitrak	<i>Plumbago zeylenica</i> Linn	Plumbaginaceae	Fever, Leprosy
52	Achar	<i>Buchanania Inzan Speng</i>	Anacardiaceae	General Weakness, Stomach Disease
53	Stevia	<i>Stevia rebaudiana</i> Bertoni	Asteraceae	Diabetes, Headache, Weight loss
54	Insulin	<i>Costus igneus</i>	Asteraceae	Diabetes, Headache, Weight loss
55	Pipli	<i>Piper longum</i> Linn	Piperaceae	Soar throat, Respiratory Disease
56	Lahsun	<i>Allium sativum</i>	Amaryllidaceae	High blood pressure, high levels of cholest
57	Gudmar	<i>Hibiscus rosa sinensis</i> Linn.	Malvaceae	Heart disease, Diabetes, Hair tonic
58	Punamava	<i>Boerhavia diffusa</i> Linn	Nyctaginaceae	Asthma, Heart Disease, Jaundice
59	Anjir	<i>Ficus carica</i> Linn	Moraceae	Heart disease, Diabetes, Respiratory disea
60	Harsringar	<i>Nyctanthes arbor-tristis</i> Linn.	Oleaceae	Fever, Bone disorder, Anthelmintic
61	Amla	<i>Embelica officinalis</i> Gaertn.	Euphorbeaceae	Heart Disease Respiratory Sisease
62	Aprajita	<i>Clitoria ternatea</i> Linn	Fabaceae	Eye Disorder, headache, Stomachic
63	Aam	<i>Magnifera indica</i>	Anacardiaceae	Dentifrice, antiseptic, astringent
64	Lemon grass	<i>Cymbopogan citratus</i> Stapi	Poaceae	White discharge, urine Infection
65	Kalmegh	<i>Andrographis peniculate</i>	Acanthaceae	Blood disorder, Fever, Skin disease
66	Gular	<i>Ficus glomerata</i> Roxb.	Moraceae	Blood disorder, Diabetes
67	Ajwain	<i>Coleus amboinicus</i> Linn	Lamiaceae	Pain, Urine disorder, Paralysis
68	Satawar	<i>Asparagus racemosus</i> Willd	Asparagaceae	Diarrhea, Energy tonic
69	Lajwanti	<i>Momosa pudica</i> Linn.	Mimosoideae	Asthma, Constipation
70	Gorakh mnudi	<i>Sphaeranthus indicus</i> Linn	Asteraceae	Indigestion, piles, Intestinal worms
71	Arandi	<i>Ricinus communis</i> Linn.	Euphorbiaceae	Headache, Body pain, Nausea
72	Mahua	<i>Madhuca indica</i>	Sapotaceae	Arthritis, Headache, Piles, Ulcer
73	Harad	<i>Terminalia chebula</i>	Combretaceae	Asthma, Soar throat , piles
74	Sita ashok	<i>Saraca indica</i> Roxb	Fabaceae	Headache, Skin Disease, Urine Infectio
75	Shivnak	<i>Oroxylum indicum</i> Benth	Bigoniaceae	Diarrhea, Stomach pain
76	Sindoor	<i>Bixa orellana</i>	Bixaceae	Poisoning, Nasal bleeding, Anthelmintic
77	Gandh pratam	<i>Paderia foetida</i>	Rubiaceae	Aphrodisiac, Strength and Immunity
78	Arjun	<i>Terminalia arjuna</i>	Combretaceae	Cardiotonic, atherosclerosis, blood disord
79	Bakayan neem	<i>Melia azedarach</i>	Meliaceae	acne, burns
80	Jamun	<i>Syzygium cumini</i>	Myrtaceae	Diarrhea, Diabetes
81	Saptarni	<i>Alstonia scholaris</i>	Apocynaceae	Diarrhea, Fever, Soar throat
82	Tiyubia	<i>Monstera dubia</i>	Meliaceae	Arthritis, insect or snake bites
83	Imli	<i>Tamarandus Indica</i> Linn	Leguminosae	Soar throat, Col Cough, Fever
84	Shisham	<i>Dalbergia sissoo</i> Roxb.	Fabaceae	Non healing wounds, ulcers, intestinal paras
85	Karanj	<i>Pongamia pinnata</i> Linn.	Fabaceae	Skin Disease, Pils, Joint pain
86	August	<i>Sesbania glandiflora</i>	Fabaceae	Stomachache, Liver and spleen disorder
87	Dudhi	<i>Euphorbia hirta</i> Linn.	Euphorbiaceae	Digestive disorder, Diabetes, Acne and Pim
88	Kewda	<i>Bryophyllum pinnatum</i>	Crassulaceae	Ear pain, gout
89	Lata karanj	<i>Caesalpinia crista</i> Linn.	Caesalpinaceae	Antimalarial, Antispasmodic, Fever
90	Badam	<i>Terminalia catappa</i>	Combretaceae	Skin disease, Digestive Disorder
91	Nibo	<i>Citrus medica</i> Linn.	Rutaceae	Vit C Source, Digestive
92	Dhain phool	<i>Woodfordia fruticosa</i>	Lythraceae	Piles, Leukoria, Blood Disease
93	Din ka raja	<i>Cestrum dirurnum</i> Linn	Solanaceae	Skin disease, Joint pain
94	Kapok	<i>Ceiba pentandra</i>	Malvaceae	Absorbent cotton in surgery, fever, spasms, and
95	Agni mantha	<i>Premna integrifolia</i>	Lamiaceae	Anemia, Swelling, slow digestion, Constipa
96	Sarpghandha	<i>Rauwolfia serpentina</i> Benth	Apocynaceae	Fever, Poison, anthelmintic
97	Bajyanti	<i>Sesbania sesbani</i> Linn.	Fabaceae	Ulcer, diarrhea
98	Chameli	<i>Jasminum multiflorum</i>	Oleaceae	Urine disorders, indigestion



Name of the Technical Staff	Designation	Date Of Joining	Qualification		Other Technical Skill Gained	Responsibility
			AT joining	Now		
Mrs Gayatri Kushwaha	Librarian	02/01/2017	M.Lib.	M.Lib.	Expert in classification systems	Maintaining of all records (purchase of invoices and issue of books). Requesting the Quotations from Suppliers and forwarding to the purchase department. Follow up of purchase order, receiving the items and arranging them in a specified manner. Proper maintenance of books and journals including binding process. Issue of book sets and books to the students and maintaining their records.
Mr. Pramod Porwal	Assistant Librarian	07/01/2017	M.Lib.	M.Lib.	Computer knowledge	Proper maintenance of books and journals including binding process. Issue of book sets and books to the students and maintaining their records.
Mr. Chandan Singh	Accountant	04/01/2017	M.Com.	M.Com.	Well versed with computer	Preparing and entry of day-to-day expenses. Collecting the college fees, exam fees, caution deposits etc. Dispatch and depositing the cheques. Collecting account statements for verification from time to time. Involved in preparation of records for fees fixation.
Mr. Suresh Maran	Office Asst. Cum Computer Operator	04/01/2017	M. Sc in Computer Science	M. Sc in Computer Science	Well versed with computer	Maintaining all the systems computers, laptops, scanners, printers) and updating periodically. Maintaining records (purchase orders, delivery of items and Processing of invoices)
Mr. Shivam Kesari	Lab Tech.	13/04/2017	B. Pharm	B. Pharm	Computer Knowledge	Assist the faculties during practical classes and involve in the experiment designing Arranging the Chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store incharge. Receiving the items from the central stores as per the approve indent and storing them.
Mr. Rahul Sahu	Lab Tech.	22/12/2018	B.Pharm	B.Pharm	Computer Knowledge	Assist the faculties during practical classes and involve in the experiment designing Arranging the Chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store incharge. Receiving the items from the central stores as per the approve indent and storing them.
Ms. Archana Shrivatava	Lab Tech.	19/08/2019	B.Pharm	M.Pharm	Computer Knowledge	Assist the faculties during practical classes and involve in the experiment designing Arranging the Chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store incharge. Receiving the items from the central stores as per the approve indent and storing them.
Ms. Neetu Rajak	Lab Tech.	27/12/2018	B.Pharm	B.Pharm	Computer Knowledge	Assist the faculties during practical classes and involve in the experiment designing Arranging the Chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store incharge. Receiving the items from the central stores as per the approve indent and storing them.
Mr. Prahalad Kurmi	Lab Tech.	01/09/2017	B.Pharm	M.Pharm	Computer Knowledge	Assist the faculties during practical classes and involve in the experiment designing Arranging the Chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store incharge. Receiving the items from the central stores as per the approve indent and storing them.
Ms. Kavita	Lab Tech.	22/12/2018	B.Pharm	B.Pharm	Computer Knowledge	Assist the faculties during practical classes and involve in the experiment designing Arranging the Chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store incharge. Receiving the items from the central stores as per the approve indent and storing them.
Ms. Geetanjali Singh	Lab Tech.	17/12/2018	B.Pharm	B.Pharm	Computer Knowledge	Assist the faculties during practical classes and involve in the experiment designing Arranging the Chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store incharge. Receiving the items from the central stores as per the approve indent and storing them.
Mr. Mudit pal	Store Keeper	01/01/2018	B.Pharm	B.Pharm	Computer Knowledge	Assist the faculties during practical classes and involve in the experiment designing Arranging the Chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store incharge. Receiving the items from the central stores as per the approve indent and storing them.
Mr. Roshan Lal Verma	Lab Attendant	05/01/2017	SSLC	SSLC	Computer Knowledge	Arranging the Chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store incharge. Receiving the items from the central stores as per the approve indent and storing them.
Mr. Rajesh	Lab Attendant	20/07/2017	SSLC	SSLC	Computer Knowledge	Arranging the Chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store incharge. Receiving the items from the central stores as per the approve indent and storing them.
Mr. Kamlesh Malviya	Lab Attendant	20/06/2017	SSLC	SSLC	Computer Knowledge	Arranging the Chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store incharge. Receiving the items from the central stores as per the approve indent and storing them.
Mr. Ravi	Lab Attendant	20/04/2017	SSLC	SSLC	Computer Knowledge	Arranging the Chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store incharge. Receiving the items from the central stores as per the approve indent and storing them.

6.6.1 Availability of adequate and qualified technical supporting staff for program specific laboratories (10)

Institute Marks : 10.00

Assessment based on the information provided in the preceding table)

Name of the technical staff	Designation	Date of joining	Qualification		Other technical skills gained
			At Joining	Now	
Mr. Shivam Kesari	Lab Tech.	13/4/2017	B. Pharm	B. Pharm	Computer Knowledge and communication
Mr. Altamash Khan	Lab Tech.	15/01/2020	B. Pharm	B. Pharm	Computer Knowledge
Mr. Rahul Sahu	Lab Tech.	22/12/2018	B. Pharm	B. Pharm	Computer Knowledge
Ms. Archana Shrivatava	Lab Tech..	19/8/2019	B. Pharm	M. Pharm	Computer Knowledge and subject knowledge and communication
Ms. Neetu Rajak	Lab Tech.	27/12/2018	B. Pharm	B. Pharm	Computer Knowledge
Mr. Prahalad Kurmi	Lab Tech.	01/9/2017	B. Pharm	M. Pharm	Computer Knowledge and subject knowledge and communication
Ms. Kavita	Lab Tech.	22/12/2018	B. Pharm	B. Pharm	Computer Knowledge
Ms. Geetanjali Singh	Lab Tech.	17/12/2018	B. Pharm	B. Pharm	Computer Knowledge
Mr. Mudit pal	Store Keeper	01/01/2018	B. Pharm	B. Pharm	Computer Knowledge
Mr. Roshan Lal Verma	Lab Attendant	05/01/2017	SSLC	SSLC	Computer Knowledge
Mr. Rajesh	Lab Attendant	20/07/2017	SSLC	SSLC	Computer Knowledge
Mr. Kamlesh Malviya	Lab Attendant	20/06/2017	SSLC	SSLC	Computer Knowledge and communication
Mr. Ravi	Lab Attendant	20/04/2017	SSLC	SSLC	Computer Knowledge

- In addition adequate menial staffs are working for general maintenance and up keeping of the college premises clean.
 - Security of the premises is taken care by Security staff.
 - Vehicles maintenance, drivers and cleaners are available.
 - The building is taken care by centralized fire safety personnel, in addition to fire extinguishers in individual labs and stores.
 - The electrical and plumbing works are taken care by general maintenance department people.

6.6.2 Incentives, skill upgrade, and professional advancement (10)

Institute Marks : 10.00

- The Institute provides incentives and cash prizes to the staff along with increments to motivate and encourage the staff.
- Technical staff members are encouraged and supported to upgrade their skills by sponsoring the faculty to attend workshops.
- Sponsored to attend training outside the institution for professional advancement.
- Training program is organized by the college for imparting the necessary skills to non- teaching staff.

Academic Year: 2022-23

Date	Title
08-10-22	Workshop On Laboratory Safety
28-10-2022 to 29-10-2022	Demonstration and training for Laboratory reagent preparation
02-07-22	Effective communication and Soft skills for better carrier.

Academic Year: 2021-22

04-12-21	Workshop on handling of analytical instruments
03-07-21	Workshop On Laboratory Safety
14-08-21	Fire Safety Demonstration and Basic Fire Fighting Training

Academic Year: 2020-21

07-11-20	Session on Safe Drug Disposal Awareness
31.10.2020	Awareness of NAAC/NBA accreditation in Improving Quality Education
03.03.2021	Entrepreneurship Awareness camp

7 CONTINUOUS IMPROVEMENT (75)

Total Marks 72.25

7.1 Improvement in Success Index of Students without the backlog (15)

Total Marks 15.00

Institute Marks : 15.00

Items	2018-19 (LYG)	2017-18 (LYGm1)	2016-17 (LYGm2)
Success Index (from 4.2.1)	0.57	0.37	0.00

7.2 Improvement in Placement and Higher Studies (15)

Total Marks 15.00
Institute Marks : 15.00

Items	2018-19 (LYG)	2017-18 (LYGm1)	2016-17 (LYGm2)
Placement Index (from 4.7)	0.77	0.64	0.00

7.3 Improvement in the API of the Final Year Students (10)

Total Marks 7.25
Institute Marks : 7.25

Academic Performance	2018-19 (LYG)	2017-18 (LYGm1)	2016-17 (LYGm2)
Mean of CGPA or mean percentage of all successful students(X)	7.98	7.17	0.00
Total number of successful students(Y)	78.00	79.00	0.00
Total number of students appeared in the examination(Z)	81.00	83.00	0.00
API [X*(Y/Z)]:	7.68	6.82	0.00

Average API [(AP1 + AP2 + AP3)/3] : 7.25

Academic Performance = Average API = [(AP1 + AP2 + AP3)/3] : 7.25

7.4 Improvement in the quality of students admitted to the program (15)

Total Marks 15.00
Institute Marks : 15.00

Item		2021-22(CAYm1)	2020-21(CAYm2)	2019-20 (CAYm3)
National Level Entrance Examination	No of students admitted	0	0	0
	Opening Score/Rank	0	0	0
	Closing Score/Rank	0	0	0
State/ University/ Level Entrance Examination/ Others	No of students admitted	0	0	0
	Opening Score/Rank	0	0	0
	Closing Score/Rank	0	0	0
Name of the Entrance Examination for Lateral Entry or lateral entry details	No of students admitted	0	0	0
	Opening Score/Rank	0	0	0
	Closing Score/Rank	0	0	0
Average CBSE/Any other board result of admitted students(Physics, Chemistry&Maths)		102	100	98

7.5 Actions taken based on the results of evaluation of each of the POs (20)

Total Marks 20.00

POs Attainment Levels and Actions for Improvement- (2021-22)

POs	Target Level	Attainment Level	Observations
PO 1 : Pharmacy Knowledge			
PO 1	1.95	2.59	Observations Target Attained 1.Problem in understanding of Human Anatomy and Physiology, Bio Chemistry and
Action 1: Remedial classes are conducted in Human Anatomy and Physiology, Bio Chemistry and Pharmaceutical Engineering. Action 2: NPTEL video lecture and assignments are provided to solve the problems of Bio Chemistry and Pharmaceutical Engineering.			
PO 2 : Planning abilities			
PO 2	1.95	2.68	Observations Target Attained The students and faculties should be interacting with Managers, Entrepreneurs and
Action 1: The management and administration encourage to organize various events on core subjects and entrepreneurship and skill developments based events those are organized by students and faculties that further helps them to develop their planning and management abilities.			
PO 3 : Problem Analysis			
PO 3	1.95	2.54	Observations Target Attained 1.Lacking in solving Analytical Problems of Pharmaceutical Inorganic Chemistry.
Action 1: Technical events were organized to improve the analytical skills. Action 2: More numerical problems were practice in class room. Action 3: More problems were assigned as part of assignment. Action 4: Remedial classes and NPTEL video session were conducted.			
PO 4 : Modern tool usage			
PO 4	1.95	2.53	Observations Target Attained 1:Should be more emphasis on latest tool and technology.
Action 1: Virtual labs session were conducted Action 2: More lab sessions were conducted in database in Action 3: Webinar and seminar were conducted related to industry issues. Action 4: Emphasis on online certification courses.			
PO 5 : Leadership skills			
PO 5	1.95	2.80	Observations : Target Attained 1.It has been observed that some students did not work in team
Action 1: Motivate students to participate more in National/State/inter and intra college tech fest sports meet, technical and cultural activities to generate the feeling of leadership and working in teams. Action 2: Final year projects give in group so that to enhance team sprit to work in team collaborations.			
PO 6 : Professional identity			
PO 6	1.95	2.38	Observation Target Attained Improve frequency of conducting events related to safety, legal and cultural issues
Action 1: Students were motive to participate in various technical events, technical project making, social events such as Clean India Campaign, NSS/NCC and outside workshop for awareness of legal and cultural issues of society. Action 2: Morning assembly scheduled every Monday to develop awareness about global awareness and social responsibilities. Action 3: Entrepreneurship & innovation session was organized to develop Entrepreneurship and professional.			
PO 7 : Pharmaceutical Ethics			
PO 7	1.95	2.07	Observation Target Attained Organizing frequency of Professional ethics session should be improved.
Action 1: Identified and planned short term industry internship programs. Organized visits to manufacturing and testing laboratories with the aim of exposure in QC/QA and production sections to understand different ethics and norms related to manufacturing and marketing of the pharmaceutical products. Action 2: Organized webinars on regulatory aspects and research ethics in pharmaceutical sciences.			
PO 8 : Communication			
PO 8	1.95	2.48	Observations : Target Attained Should be Improve activities related to Pharmacy community.
Action 1: The students are motivated to undergo hospital and poly clinics to understand the role of pharmacist in community health and also encourage to participate and organize awareness programs on self medication, nutrition and health communicable diseases.			

PO 9 : The pharmacist and society

PO 9	1.95	2.30	Observations : Target Attained Improve frequency of conducting events related to safety, legal and cultural issues
<p>Action 1: Awareness about safety towards waste medicines/post expiry is targeted for which MOU is signed with some NGOs working in this area.</p> <p>Action 2: Stop Self Medication campaigning and communicable diseases awareness program is organized.</p> <p>Action 3: Health Check up and blood donation camp are organized and students were encouraging to participate as Volunteer.</p>			

PO 10 : Environment and Sustainability

PO 10	1.95	2.39	Observation Target Attained The issues of global and environmental awareness among the student should be
<p>Action 1: Students are making aware about identification and role of medicinal plants as a source of medicine and economical development beside environmental aspects.</p> <p>Action 2: Plantation drive was organized with NGOs and medicinal garden maintenance is assigned as a task to the students.</p>			

PO 11 : Life-long Learning

PO 11	1.95	2.20	Observation Target Attained Bioinformatics is a modern tool which is used in many fields of science but the topic is
<p>Action 1: Lecture content included new technological developmental tools and knowledge of new Products.</p> <p>Action 2: Assign projects of to improved lifelong learning</p> <p>Action 3: We made the students to even go through various website like Pub med, NCTR (national centre for toxicological research) and Net bio through which students could understand topic easily</p> <p>Action 4: Webinar and guest lecturers were organized.</p>			

POs Attainment Levels and Actions for Improvement- (2020-21)

POs	Target Level	Attainment Level	Observations
PO 1 : Pharmacy Knowledge			
PO 1	1.8	2.46	Observations Target Attained 1.Problem in understanding of subject Pharmaceutical analysis-I and Pharmaceutical
Action 1: Faculties are encouraged to attend faculty development program, seminars, webinars and technical sessions from educationists and professionals of related field. Action 2: Remedial classes and NPTEL video session were conducted to solve problems of Pharmaceutical analysis-I and Pharmaceutical inorganic chemistry. Action 3: Pedagogy approach was adopted. Action 4: More problems were given for practice in Pharmacognosy and Phytochemistry-I. Subjects.			
PO 2 : Planning abilities			
PO 2	1.8	2.48	Observations Target Attained Different types of filters and centrifuge used is important topic practiced in
Action 1: Industrial visit was arranged so students could understand working of filters and centrifuge.			
PO 3 : Problem Analysis			
PO 3	1.8	2.41	Observations Target Attained Needs analytical skill in Medicinal Chemistry-II and Pharmacognosy and
Action 1: Technical events were organized to improve the analytical skills Medicinal Chemistry-II and Pharmacognosy and Phytochemistry-I Subjects. Action 2: More numerical problems were practice in class room. Action 3: More problems were assigned as part of assignment. Action 4: Extra lectures were conducted to solve analytical problems of Medicinal Chemistry-II.			
PO 4 : Modern tool usage			
PO 4	1.8	2.41	Observations Target Attained Should be improving the frequency of organizing training program.
Action 1: For practical hands on experience, training on computer application in pharmacy was organized. Action 2: Emphasis prior presentation on design tools and solutions. Action 3: 4 Training sessions with hand's on practice of modern tools were conducted.			
PO 5 : Leadership skills			
PO 5	1.8	2.35	Observations Target Attained The Students are not seems confident and found to present with lots of hesitation and
Action 1: We encouraged the students to organize various programs like Ganesh festival, World Health days, etc every year so that they can improve their leadership abilities, planning abilities and communication skills. Action 2: Students are encouraged to organize and participate in morning assembly, where skits and knowledge about current affairs with respect to Pharmacy, sports and economy is discussed.			
PO 6 : Professional identity			
PO 6	1.8	2.41	Observations Target Attained The students and faculties are involved in awareness campaigning related to the
Action: Organized different awareness campaigning to create awareness among society about pharmacists. In this, rally, blood donation, competition, and workshops.			
PO 7 : Pharmaceutical Ethics			
PO 7	1.8	2.07	Observations Target Attained The students were not able to understand the working style and current scenario
Action 1: Organized Visits to testing laboratories, manufacturing units and training in QC/QA sections to understand different ethics and norms related to manufacturing and marketing of the pharmaceutical products. Action 2: Organized webinars on regulatory aspects and research ethics in pharmaceutical sciences.			
PO 8 : Communication			
PO 8	1.8	2.41	Observations Target Attained The students and faculties are encouraged and felt self motivated to organize different
Action 1: Organized awareness programs on self medication, blood donation, nutrition and health, communicable diseases.			

PO 9 : The pharmacist and society			
PO 9	1.8	2.09	Observations Target Attained The students are not exposed towards application of their learning with context to
Action 1: Awareness about safety towards waste medicines/post expiry is targeted. Webinar on Drug safety and disposal is organized. Action 2: Stop Self Medication campaigning and COVID awareness program is organized. Action 3: Health Check up and Blood group testing and blood donation camp are organized and students were encourage to participate as Volunteer.			
PO 10 : Environment and Sustainability			
PO 10	1.8	2.22	Observations Target Attained The Students are found less aware about medicinal plant identification, modern
Action 1: Students are making aware about identification and role of medicinal plants as a source of medicine and economical development beside environmental aspects. Action 2: Plantation drive was organized with NGOs and medicinal garden maintenance is assigned as a task to the students.			
PO 11 : Life-long Learning			
PO 11	1.8	1.89	Observations Target Attained The students are found less aware and ready towards changes and modernization in
Action 1: Subject experts from both Academic and Industries are identified and series of webinars was organized to give exposure to students towards development in the field. Action 2: Industrial visit and short term workshops are organized for the students.			

POs Attainment Levels and Actions for Improvement- (2019-20)

POs	Target Level	Attainment Level	Observations
PO 1 : Pharmacy Knowledge			
PO 1			
Action 1 Action 2 Action N			
PO 2 : Planning abilities			
PO 2			
Action 1 Action 2 Action N			
PO 3 : Problem Analysis			
PO 3			
Action 1 Action 2 Action N			
PO 4 : Modern tool usage			
PO 4			
Action 1 Action 2 Action N			
PO 5 : Leadership skills			
PO 5			
Action 1 Action 2 Action N			
PO 6 : Professional identity			
PO 6			
Action 1 Action 2 Action N			
PO 7 : Pharmaceutical Ethics			
PO 7			
Action 1 Action 2 Action N			
PO 8 : Communication			
PO 8			
Action 1 Action 2 Action N			

PO 9 : The pharmacist and society			
PO 9			
Action 1 Action 2 Action N			
PO 10 : Environment and Sustainability			
PO 10			
Action 1 Action 2 Action N			
PO 11 : Life-long Learning			
PO 11			
Action 1 Action 2 Action N			

8 STUDENT SUPPORT SYSTEMS (50)

Total Marks 50.00

8.1 Mentoring system to help at individual levels (5)

Total Marks 5.00

8.1.1 Details of the mentoring system that has been developed for the students for various purposes and also state the efficacy of such system

The role of the mentoring system is to nurture and provide support for the students during the transition period in academic, professional as well as personal growth thus enabling them to deal with the challenges in their life more effectively.

- To bring forth hidden potential of students, thereby improving their overall performance and skills.
- To overcome weaknesses of students.
- To solve various personal and professional issues and problems related to students.
- To provide a platform for students to express their issues freely.
- To form strong relationships/ bonding with student of diverse cultures and backgrounds.

Our institute has adopted a mentoring system which takes care of the various issues related to students and enhances their academic performance, develops their personality and helps them to tackle problems in professional and personal life to become a good human being and capable professional. In our mentoring system, Principal keeps a close watch on individual student along with mentors. Institute adopts Mentor Teaching Learning system to support weak/slow learner and bright students equally. Mentoring by faculty supports and encourages students to manage their own learning in order that they may maximize their potential, develop skills, improve performance and become the person they want to be. Each mentor is allotted with 20-30 students. To start identifying Slow and Bright learner in this process, the following inputs is needed

- Overall result in preceding examination
- Internal Assessment (Class test/Assignment/Tutorials/Internal Viva/Presentation)
- Class observation by subject teacher

Weak/slow learner students are given counselling for their career guidance, bright students are encouraged to take up new challenges time to time. The parents are also informed about the progress report like result, attendance and performance of the students. The students needing improvement are groomed not only for improving academic performance, but also given opportunity to showcase their skills through events, competitions etc and this helps to improve academic performance also. Mentors meet with the mentees in the weekly meeting and prepare report.

IES INSTITUTE OF PHARMACY, BHOPAL

Academic Year : Semester:

STUDENT COUNSELLING RECORD

Class: Batch: Name of Mentor:

S.No	Roll No.	Name of the Mentee	Date	Time	Issue	Suggestion	Remark
------	----------	--------------------	------	------	-------	------------	--------

IES INSTITUTE OF PHARMACY, BHOPAL

Academic Year : Semester :

IMPROVEMENT STATUS OF MENTEES

Class:		Batch:		Name of Mentor:	
Roll No.	Name of the Student	Active Participation in Mentor Program (Yes/No)	Areas of Improvements Seen in Student		Remark

Figure 8.1: Mentor Format

Mentor's Role and Responsibilities:

- Mentors serve as positive role model, encourage and motivate students to achieve their target/goal.
- Motivate and guide students in all academic, co-curricular and in extra-curricular activities.
- Mentors maintain a mentees record.
- Collect information regarding weak students from the subject teachers on the basis of their previous results, various other skills, having less attentiveness, etc.
- The record of counseling and mentoring is maintained in file, which is updated on regular basis.
- Mentors submit a report to Principal and after approval by the Principal seek/ remedial actions taken for improvement
- Monitoring student's readiness for personal interview, group discussion, technical and non-technical support (including resume making, dressing sense, skills etc.)
- Encouraging and motivating the students for attending all the classes, expert lectures and other technical sessions for better performance in examination, contests and placement.

Assistance for Weak/Slow Learner Students:

- Mentors follow their progress and counsel them from time to time to attend the classes sincerely.
- Subject handling Faculty members conduct extra or revision classes.
- Faculty members inculcate theoretical concepts through model specimen/charts/ video lectures/ online lectures.
- Remedial classes are also conducted for tough subjects/ tough contents.
- Students are encouraged to participate in other activities like essay writing, English role play, model making, anchoring in seminars, functions and in special assembly which is scheduled on every Monday, quiz, poster presentation, inter college competitions, cultural events etc.
- Confidence is boosted by motivating them to participate in sports, NCC, NSS and other activities.
- Slow learners are supported in difficult areas of learning: like encouraging students to sharpen their listening, writing skills and improving communication skills.

Encouraging bright students

- Students are identified and appreciated with certificates.
- Students securing First and Second rank in end semester examination are awarded with certificate of merit.
- Student securing 100% attendances are also awarded by certificate.
- Students are motivated for attending workshops, seminars, and technical contests like Accenture, Hackathon etc.

·Students are encouraged to undergo National level Internships

·Students are encouraged to take charge and supervise competitions and activities like essay writing, English role play, model making, assembly anchoring, quiz, poster presentation, inter and intra college competitions, fashion shows, special assembly etc.

Table 8.1: List of Mentors including number of students Academic Year: 2020-21

S. No	Name of the Mentor	No. of Student	S. No	Name of the Mentor	No. of Student
1.	Dr Sameer Sapra	15	2.	Ms AakanshaVerma	14
3.	Dr. Jyotiram Sawale	15	4.	Mr. RajkishoreKushwaha	15
5.	Dr.YashikaBhalla	15	6.	Ms TeenaVishwakarma	14
7.	Mr. PhoolsinghYaduwanshi	14	8.	Ms. Rukhsar Syed	14
9.	Ms. Damini Singh	14	10.	Ms. MonamKushwaha	14
11.	Ms. Kiran Bhopate	14	12.	Mrs. SonamRamshankar	14
13.	Ms. JyotiUikey	14	14.	Ms Shipra Lal	14
15.	Mr. Braj Gopal Kushwah	14	16.	Ms. JyotiPatidar	14
17.	Mr. VaibhavJaiswal	14	18.	Mr. Santosh Singh	14
19.	Mr. MayankGoyal	14	20.	Ms. Neelima Chauhan	14
21.	Ms. Divya Mittal	14	22.	Ms. SumatiJangid	14
23.	Mr. Raghvendra Patel	14	24.	Mr. Pradeep Tiwari	14

Table 8.2: List of Mentors including number of students Academic Year: 2021-22

S. No	Name of the Mentor	No. of Student	S. No	Name of the Mentor	No. of Student
1.	Dr Sameer Sapra	15	2.	Mr. Raghvendra Patel	15
3.	Dr. Jyotiram Sawale	15	4.	Ms AakanshaVerma	15
5.	Dr.YashikaBhalla	15	6.	Mr. Raj Kishore Kushwaha	15
7.	Dr. Sima Singh	15	8.	Ms Teena Vishwakarma	15
9.	Mr. Phool singh Yaduwanshi	15	10.	Ms. Rukhsar Syed	15
11.	Ms. Damini Singh	15	12.	Ms. Monam Kushwaha	15
13.	Ms. Kiran Bhopate	15	14.	Mrs. SonamRamshankar	15
15.	Ms. JyotiUikey	15	16.	Ms Shipra Lal	15
17.	Mr. Braj Gopal Kushwah	15	18.	Ms. Prinsi Sahapurja	15
19.	Mr. Vaibhav Jaiswal	15	20.	Mr. Deepesh Gupta	15
21.	Ms. Divya Mittal	15			

Table 8.3: List of Mentors including number of students Academic Year: 2022-23

S. No	Name of the Mentor	No. of Student	S. No	Name of the Mentor	No. of Student
1.	Dr Sameer Sapra	13	2.	Ms Aakansha Verma	13
3.	Dr. Jyotiram Sawale	13	4.	Mr. Raj kishore Kushwaha	13
5.	Dr. Gaurav Jain	13	6.	Ms Teena Vishwakarma	13
7.	Dr.Reenu Yadav	13	8.	Ms. Rukhsar Syed	13
9.	Dr.Vivek Chourasia	13	10.	Mrs Monam Kushwaha	13
11.	Dr.Yashika Bhalla	13	12.	Mrs Sonam Ramshankar	13
13.	Mr Phool Singh Yaduwanshi	13	14.	Mrs Shipra Lal	13
15.	Mrs Damini Singh	13	16.	Ms. Prinsi Sahapurja	13
17.	Ms Kiran Bhopate	13	18.	Mr. Deepesh Gupta	13

19.	Ms JyotiUikey	13	20.	Mr Himanshu Joshi	13
21.	Mr Braj Gopal Kushwah	13	22.	Mr. Mohit Soni	13
23.	Mr Vaibhav Jaiswal	13	24.	Mr. Suresh Kumar Tiwari	13
25.	Mr Mayank Goyal	13	26.	Mr. Abhishek Puri	13
27.	Ms Divya Mittal	13	28.	Mr. Samisha Sharma	11
29.	Mr Raghvendra Patel	13	30.	Ms. Pooja Prajapati	11

8.1.2. Impact of Mentor Teaching-Learning System

- Reduced absenteeism.
- Improvement in overall performance.
- Improvement in personality.
- Increased participation in co-curricular activities.
- Improvement in behaviour and attitudes
- Improved interpersonal relationship with elders and peers.
- Becoming conscious and worthy citizen.
- Improvement in performance of weak students.
- Improvement in campus selection ratio.
- Receiving awards and recognition.

8.2 Feedback analysis and reward /corrective measures taken, if any (10)

Total Marks 10.00



8.2.1 Methodology being followed for analysis of feedback and its effectiveness

The Institute continually seeks to review and improve the quality of its teaching and learning by reviewing the feedback about the courses, programs, teaching-learning processes and facilities from students, parents, alumni, employers and passing out students.

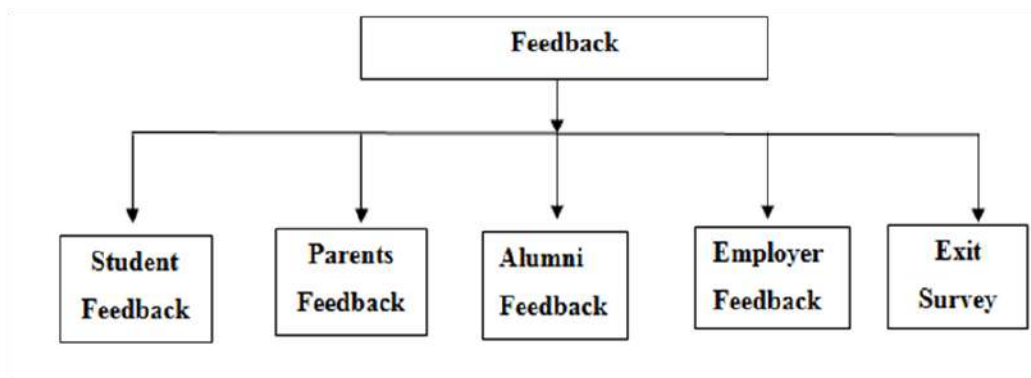


Figure 8.1: Feedback system

Feedback system is well-established in the learning system with a reason to:

- Enhance the students learning skills
- Monitor and review the quality and standards
- Ensure the effectiveness of teaching learning method adopted
- Know good practices and its implementation

The entire process is executed in following three stages

- Feedback collection
- Feedback analysis
- Reward /corrective measures

Feedback Collection Process

Feedback is collected offline from the student's twice in a semester, from the parents, alumni, employers and passing out students once in a year. Feedbacks are taken from the parents in hard copy provided by the Institute. Feedback from Alumni and employers are collected by TNP cell. Exit surveys are collected by the Institutes from final year students. These feedbacks are evaluated and assessed for corrective actions on the basis of certain parameters

Feedback on Teaching-Learning by Students:

Feedback is taken from students on the effectiveness of teaching and subject learning twice during the semester. Initially, feedback is taken from representative students and selected students those having attendance more than 90 % from each class by Principal/senior faculty member (appointed by Principal) after 15 to 20 days of commencement of classes. If students are facing difficulty in any subject, the concerned faculty member is informed of the same. Necessary guidance and support is given by Principal and another senior subject faculty member. This consists of asking the faculty member to give a mock class in presence of Principal and another senior subject faculty, giving guidelines for improvement, reviewing the lecture notes and offering necessary support in the subject. At the end of the semester the feedback is taken again in offline/online mode from students in that subject for necessary action

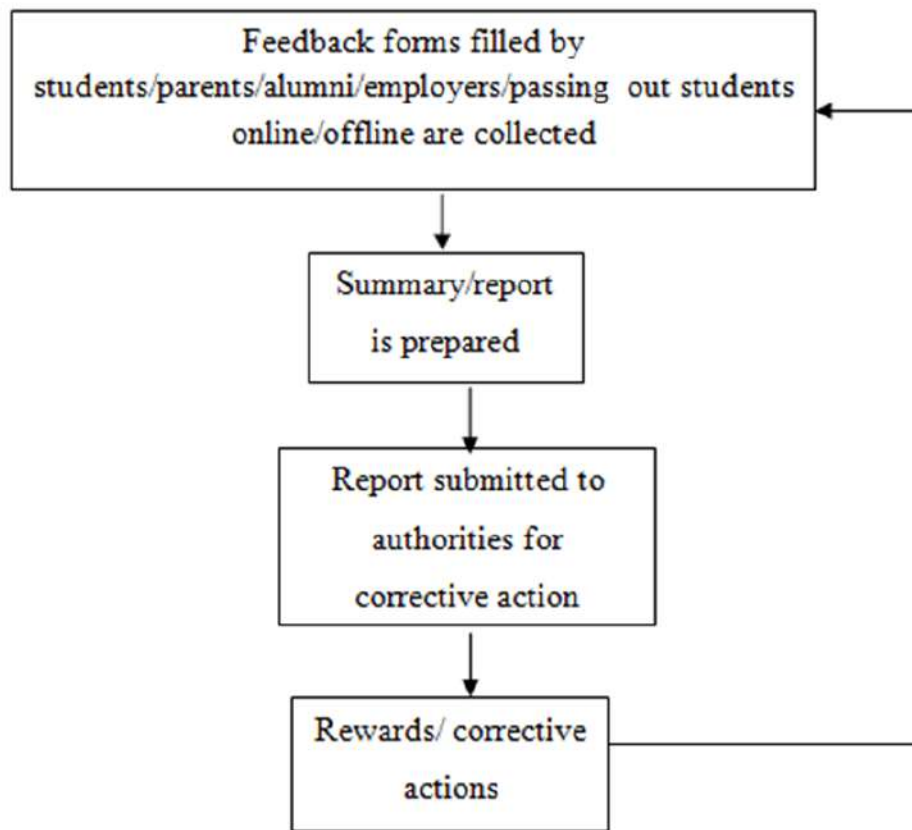


Figure 8.2 Feedback process

Feedback from Alumni:

- Alumni fill feedback forms whenever they visit the Institute or the institute.
- Alumni feedback collected during Alumni meet which held annually in the month of December/January of every year.
- Feedback received through e-mail or hard copy.

Feedback from Parents:

Parent feedback form is given before vacation and collected at the time of registration.

Feedback is collected in hard-copy provided by the TGs to the mentees to get it filled by the parents and submit it back to TG.

From Industry/Employers:

During on campus placements drive from the Industry.

From industry where IES alumni is/are working.

From IES alumnus who have turned entrepreneurs.

From industry during academic alliance meets.

From industry and academic expert during seminar, workshop organized by institute.

Feedback in the form of Exit Survey:

Feedback from the passing out students is filled in the final semester by TGs in the form of Exit Survey. The report is submitted to the Principal for necessary action.

Feedback Analysis Process:

Report of the feedback related to course, program and teaching- learning and facilities is prepared according to different metrics. The feedback is shared with the authorities like student feedback, parents, alumni, employer's and exit survey report is shared by the MENTORSs with the head of institute. Apart from these, informal feedbacks are also taken directly by the mentors and Principal from time to time during the ongoing semester. A special emphasis is paid on transparency and impact of the feedback system.

Various parameters that are used for collecting the feedback data is as given below.

- Coverage of syllabus
- Lectures are interesting and informative
- Promptness in Evaluation of Tests, Assignments and Quizzes
- Punctuality of the faculty
- Recap of last lecture, assignments, quizzes, projects, discussion, case studies etc.
- Faculty takes initiative to answer the questions/queries asked by students
- Teacher encourages students to think independently
- Teacher gives real time examples and uses videos, visual labs or other ICT tools
- Teacher is approachable to students for Academic/ personal advice
- Teacher is enthusiastic about teaching
- Teacher provides course and lecture outline at the semester beginning
- Teacher suggests web-links related to the topics taught
- Teacher takes revision classes to ensure learning
- The course materials are helpful in learning the course
- Other facilities
 1. Record of Rewards/Corrective Measures

The concerned faculty or team makes the report of the feedback. The feedback report is shared with the head of institute. Head of institute share report with the individual faculty member, IQAC and Chairperson as per requirement.

Based on the reports the faculty members are informed about their performance. The faculty members who perform well are appreciated and awarded along with the monetary benefit of increment/ certificates of appreciations in recognition of their commendable efforts for:

- Quality lecture notes, instructional material etc.
- Innovations in teaching and learning methods
- Mentoring work done by faculty
- Work done in academics, research and patenting
- Result of the faculty
- Other contribution in the department or other co-curricular activities

Necessary corrective actions are taken for the faculty members who perform not well as per the department/ college standards, as given below:

- As per feedback, Head of the institute advise the faculty about handling and monitoring the class
- Improvement required in teaching and learning method of some faculties, program incharge and principal counsels the concerned faculties.
- Improvement required in facilities as feedback given by students, parents, aluminize and employers. Appropriate corrective actions taken according to feedback.
- Improvement required in academic performance of the weak/slow learner students. Corrective actions were taken for the improvement of academic performance of students.
- Encouraging faculty members to attend more Faculty Development Programs, Conference, Seminars etc.
- In extreme cases, where the faculty member is unable to improve up to the minimum desired standard, action is taken accordingly.
- The feedback is considered part of Annual Performance Appraisal of the faculty member.
- Faculty members will be rewarded by motivating them in weekly meetings or issuing Certificate of Appreciation for each course.

8.3 Feedback on facilities (5)

Total Marks 5.00

Institute takes feedback on facilities from the students, parents, alumni and passing out students in the feedback forms. The facilities include library, training & placement, transportation, hostel, laboratories, medical facility and other general facilities etc. on Excellent, Good, Average basis. The evaluation process on facility feedback shall also be automated, and then the corrective actions are taken by institute for the improvement.

1. Facility feedback taken through feedback form in online/offline mode from all the stake holders such as the employers, alumni, parents and students which the Program Objectives have been achieved.
2. Feedback on facility taken through Complaint registers by the students, faculties, parents and alumni.

S.No	Facility	Remarks
1.	Mentors facility	Mentor has been allotted to a group of students.
2.	Support provided to students from SC/ST, OBC and economically weaker sections	Help to acquire scholarship from central and/ or state government of India.
3.	Students with physical disabilities	Provide facility of the wheel chair, college van, ramp and hand bar in toilet etc.
4.	Students to participate in various competitions at National/International level	Relaxation in the attendance given those students which are participating in the different competitions. · Facility of Medical room, Nurse Facility, doctor visits as per need.
5.	Medical assistance to students	· Availability of Ambulance in the campus and Tie-up with hospital (Sharda Hospital, Kotra, Bhopal) · The additional classes are regularly conducted by Training & Placement Cell for the campus Placement.
6.	Organizing additional classes for professional improvement of students	· Study material providing towards students, whenever is required. · Remedial classes for slow learners.
7.	Support for "slow learners"	· Mentoring facility is providing. · To organised expert lectures.
8.	Support for "Bright learners"	· To provide study material. · To organised trainings, seminars and industrial visits. · Spoken English classes offered to the students for improvement in the communication skill.
9.	Skill development (Spoken English, Computer Literacy, etc..)	· For improvement of technical skill, offering the various online courses such as NPTEL, SWAYAM, IIT Bombay remote centre and value-added courses such as Machine Learning, Python, Artificial Intelligence, MATLAB, R-Language etc. · Industrial training provided to the sixth semester students.
10.	Exposure of students to other institution for higher learning and internship	· Interaction with the corporate world by interaction with guest lecturers from reputed institutions and industries. · Different training programs organised in the various reputed institutions.

		<p>The committee is constituted to handle to ensure a ragging free environment in and outside the campus and address ragging related issues if any. It performs following roles and responsibilities:</p>
		<p>To create the awareness about Anti Ragging act and punishments among the students and the appropriate law in force.</p>
11.	Anti-Ragging Committee	<p>To create the awareness about Ragging constitutes (AICTE/UGC Regulation as per the directive of the Supreme Court Ragging CLAUSE 3).</p> <p>To prohibit, prevent and eliminate the source of ragging including any conduct by any student or students whether by words spoken or written or by an act which has the effect of teasing, treating or handling with rudeness a fresher or any other student.</p> <p>To prohibit undisciplined activities by any student or students this causes or is likely to cause hardship or psychological harm or to raise fear in any fresher.</p>
12.	Library Facility	<p>The library provide on line and offline access to a large number of full text journals, books, databases from various publishers and e-journals.</p>
13.	Transportation Facility	<p>The Institute self-reliance in providing transport facility to the students. IES Provides bus transportation for major locations of town and campus. We have made arrangements for college buses for students as well as staff. This makes them free from mental tension of driving or taking public transport system, to come to the college and go back, so that they can fully concentrate on their studies.</p>
14.	Mess and Canteen Facility	<p>Canteen is a place where everyone i.e. students, teachers and other staff members can relax in a comfortable atmosphere. The college canteen is much more than merely an eating place. There is an attractive well-equipped canteen on the South-eastern corner of the campus. The canteen provides healthy, tasty eatables fruit juices, hot and cold beverages to the students and faculties at subsidised rates.</p>
15.	Hostel Facility	<p>The institute believes that hostels help to develop group dynamics amongst student and widen their socio-cultural horizon as well. Keeping this in mind, we have made provision for excellent hostel facilities for students. The institution provides excellent play fields, gymnasium and cultural hall for extracurricular activities for the development of the student's personality.</p> <ol style="list-style-type: none"> 1. In-House Pantry/Dining Halls. 2. Supervised with residential warden. 3. Recreational and Entertainment facilities. 4. Medical Aid. 5. Round the clock security
16.	Green Campus	<p>To aid institute in terms of sustainability, to give clean and Green Campus, various activities are conducted with an inclusive strategy to contribute towards betterment of society by aligning itself with National initiatives like Swachh Bharat, Solar Plant, and Plantation of trees, Waste management, water conservation, resource efficiency, and green belt development.</p>
17.	Wi-Fi Campus	<p>Apart from computer laboratory with internet facility, the Wi-Fi for providing continuous and uninterrupted internet connectivity to students and faculty members is available in the campus.</p>

18. Open Auditorium and Conference Room
1. Institute provides Auditorium Hall of 400 seating capacity & an open-air theatre for the conduction of various activities.
 2. The conference/Seminar Halls available for organising expert lectures & other programmes.
 3. A well-furnished fully Air-conditioned meeting room with equipped available for conducting of mock test, GD, industrial instruction and other T&P activities for students.
19. NPTEL Local Chapter
- The NPTEL local chapter is available to help the engineering and core science courses. Additional web and video courses are created in all major branches of engineering/physical sciences at the undergraduate and postgraduate levels and management courses at the postgraduate level.
- It helps women to gain control over their own lives and gives the ability to make strategic choices of life. This cell is constituted to create a harmonious environment and enable women to discharge their responsibilities at workplace with dignity. The functioning of following cell is given below:
20. Women's Grievance Cell
1. Create social awareness about gender discrimination.
 2. Motivate and improve confidence level amongst women staff members
 3. Organize workshops and seminars for women development.
 4. To promote personality development, leadership quality and role of women in the society.

Table: 8.4 List of facilities at institute level for support of the students

1. Feedback collection, analysis and corrective actions

S.No.	Detail of Facility	Feedback Parameters	Evaluation Process	Correction Action Taken
1	Hostel	1. Entry in the register	Evaluation by students.	1. Entry/Exit Timing are fixed but on demand as per permission is provided.
		2. Discussion with warden	1-Unsatisfactory	2. Maintenance Entry in register and corrective action will take.
		3. Written application	2- satisfactory 3- Excellent	3. Medical facility is provided.
2	Lab Maintenance	1. Lab records	Evaluation by faculty and students.	1. It is checked before being put back to use.
		2. safety guidelines and instructions	1-Unsatisfactory	2. Proper cleaning of equipment's has been done two times in a week.
		3. sign the manual /rough record	2- satisfactory	
		4. Cleaning and repairing of equipment's	3- Excellent	
3	Transportation	1. Written application	Evaluation by faculty and students.	1. Recorded with bus in charge and appropriate action is Taken.
		2. Meeting with Bus In charge.	1-Unsatisfactory	
		3. Committee for monitoring discipline and ragging in buses	2- satisfactory 3- Excellent	2. Collect the report from committee and corrective actions is taken.

	1. Time Management	Evaluation by faculty and students.	1. Appropriate action taken by Library in-charge.
	2. Manage Entry register	1-Unsatisfactory	
4	Library	2- satisfactory 3- Excellent	2. Schedule of library is incorporated in the time table.
	1. Assigned co-ordinators	Evaluation by students and management.	1. Sports incharge takes appropriation decision
5	Sports	1-Unsatisfactory 2- satisfactory 3- Excellent	2.Repairing and replacements of kits
	1. Maintain files	Evaluation by management.	1. Medical OPD First aid Box
6	Medical assistance	2. Appoint CAO 3. Tie-up with hospital	2. CAO is responsible
	1. Quality of food	Evaluation by students and faculty.	1. Food quality checked by faculty and management
7	Mess and Canteen	2. Discipline 3. Cleaning and maintenance	2. Monitoring of students 3. Feedback on maintenance and cleaning
	1. Meetings	Evaluation by management.	
8	Security Service	2. Monitoring and controlling	Correct identified security deficiencies and action taken.
		1-Unsatisfactory 2- Satisfactory 3- Excellent	

Table 8.5: Feedback collection, analysis and corrective actions



Figure 8.3: Lab Facility

Self-learning is encouraged in the institute by implementing self-learning facilities and environments for students. Students are encouraged for self-learning by personal counselling and mentoring.

8.4.1 Scope for self learning

The following methods are used for self learning:

- Web based learning (Teaching-Learning Course online NPTEL, SWAYAM, Webinars etc.)
- Central Library and Digital Library
- Learning through projects, internships, summer trainings etc.
- Assignments
- Professional bodies
- e-Books and Journals
- Special Assembly

S.No	Self-Learning Sources	Tools / Support
1	e-Books & digital books	Library and Internet
2	Books, Magazines, Journals, News-Paper Clippings	Library NPTEL/ SWAYAM etc./uploaded lectures material
3	Online Courses	1. Swayam- https://swayam.gov.in/ 2. NPTEL- List of Websites which offers online certification courses. https://onlinecourses.nptel.ac.in/
4	Lectures, Instructional materials by faculties	Online through links on websites, Google classrooms
5	Activities through professional bodies	Students are encouraged to become members of professional bodies like ISTE, IEEE, CSI etc. for the career enhancement and self-learning.
6	Club Activities	Various students club activities are organized to enhance team work and inter-personal skills like sports, cultural, literary, tech-fest etc.
7	Assignments	It enables students to go through the topics in a more elaborate manner in order to explore the academic topic and enhances higher order thinking.
8	Internship, summer trainings, webinar and projects	Internships, summer trainings Project Based Learning offered to the students to enhance the real-time knowledge and exposure of the students.

Table 8.6: Following are the various modes of self-learning and facilities

1. Internship, Summer Trainings, Webinar and Projects:

Webinars are designed as a flexible framework within which talent, innovation and growth would be nurtured rather than constrained by a rigid one-size-fits-all solution. Opportunities are provided to keep promising engineering interns on track academically, such as "curriculum adjustment" which increases their general employability upon graduation. To ensure a successful internship experience, a small team supports its multiple aspects. This provides checks, balances, and a rich complex of relevant experiences to benefit the intern.

2. NPTEL Materials

National Programme on Technology Enhanced Learning (NPTEL) is created to provide quality education at campus to anyone interested in learning from the IITs. Students are encouraged to register for various NPTEL courses and clear exams. In the month of every January and July, courses are offered online, free of cost for the students and faculties.

8.4.2 Institutional Level Facilities for Improvement of Learning Skills of The Students

1. Newspaper Distribution: The newspaper clippings are provided to the students for improving communication skill and general awareness.
2. 'Book Bank' in library: Institute provide Book Bank facility for the students, which is very helpful in fulfilling student requirements for prescribed books on semester basis. Book Bank functions as one section of the library.
 - Distribution of books and magazines
 - Book bank facilities are available for students
 - E-book facility is also available in the library
 - Technical magazines are also available in the library
3. E-notes for all subjects: e-notes are provided regularly by faculties to supplement teaching-learning process.
4. Access to Journals: Students can also access the online free journals and get beneficial for publication of research papers and projects. They can access the DELNET digital library

8.5 Career Guidance, Training, Placement (10)

Total Marks 10.00

Institute has Placement & Training Cell for career counseling and higher learning in Engineering & Technology fields. It has been set up for conducting value added training programs and enhances employability of students. The cell has been set up in the institute to give training and guidance to students on career related matters and assist them in exploring new opportunities. The student's abilities are evaluated individually and are advised the way forward accordingly. The cell organizes training sessions that prepares the students to compete with the challenges in the industry. Career counselling programs are undertaken periodically by the placement cell to guide the students. Interactive sessions by the eminent persons with rich industry experience in respective fields are conducted regularly.

8.5.1. Availability of Career Guidance Facilities

1. Prepare the students for placement and organize pre-placement training for them as well as guide for higher education.
2. Organize seminar for students to provide information about Career/Education related opportunities (current trends of industries, emerging areas, scholarship for higher studies India or abroad).
3. Help in building the self confidence of students and develop aptitude solving ability.
4. Help to the students in career selection.
5. Conduct motivational address time to time for students and faculty those who are involved with students for the purpose of guiding.
6. Online tests of students and on the basis of their results guide them for corrective measure.
7. The necessary infrastructure provided is given below:

1.Events for Career Guidance of students:

S.N	Date	Name of Activity	Resource Person
1	31st May,2020	Career Opportunities and Challenges in Ms. Anuradha Singh Head-HR & Admin hiring post Covid Era	NICHROME, Pune
2	17 th June 2020	Global Business and Career Opportunities for Students Arising Post COVID-19	Dr. Malay Nayak (Fellow Royal Society of Art UK & Executive Director, IT Buzz Ltd. London)
3	3rd July 2020	Scenario of Education Sector in Post Covid Era - Challenges and Opportunities	Mr. Ashish Gakrey (Founder, HR Shapers)
4	8th July2020	"Emerging Trends in Automotive Industry - Digital Age"	Dr. Omkar Rai, DG STPI new Delhi
5	4th August,2020	Motivational Program	Mr. Rajeev Agrawal
6	07 th Nov ,2020	Preparation For Service Selection Board Interview And Tips	CAPT ARUN KUMAR SRIVASTVA EX-Group Captain- IAF
7	12 th Nov,2020	Latest hiring Trend of Pharmacy/Biotechnology	Mr. Ananda Gawde- Vice President Zydus
8	14th May,2021	Expert Talk "Professional In You"	Mr.AjayTyagi, Founder CEO, Vait consulting pvt. Ltd.
9	2 nd June,2021	Global Trend Of Clinical Researc	Dr. Ashish Singh Parihar,MedicalWriter,CBCC Global Research LLP,Ahmedabad
10	15 th Jan,2022	Career in Medical Coding	Pawan Kumar Khatri- Alumni 2021 Batch
11	11th Feb,2022	"Bridging the gap between academia and industry,"	Achala Gupta, Project Tecnical Lead, TCS,Mumbai
12	29 th March,2022	Career Opportunities in Drug Manufacturing in Pharma Industries.	Mr. K.C. Sharma- EX. Senior Vice president, Lupin Ltd., Mandeedip
13	6 th May,2022	Career Opportunities in Pharmacy	Dr. AKhileshSinghai - Director LNCT, Bhopal
14	5 th Dec,2022	Challenges and scope in medical writing	Dr. Abhishek Budhiraja- Senior Consultant- RWE,IQVIA

Table 8.7 :Events for Career Guidance of Students





Figure 8.4: Career Guidance Sessions

2. Counseling for the Higher Studies

The training and placement cell also does counseling of the students for the professional goals, selection of career and higher education. It also provides guidance for various competitions. The cell motivates and guides the students for the higher studies as per their area of interest, and also arranges the in house training classes on aptitude, and general knowledge.

3. Pre-placement Training:

Training and placement cell organizes in-house training classes, conduct various contest and interactive sessions on pre-placement training from outside trainers. The cell conducts the training classes on communication skill, aptitude and reasoning, technical subjects, programming languages and others.

4. Placement Process and Support:

The training and placement cell is established; it is responsible for campus placement (including off campus). This cell provides various training of students which can improve technical, aptitude, communication, and personality development skills. It also provides the infra-structural facility to conduct group discussion, mock test, online/offline tests, and interviews besides catering to other logistics.

- The institute interacts with beneficiaries through Career guidance cell, Academic council and Industry- Institute Partnership Cell.
- The Training and Placement Cell maintains professional relations with the representatives of industry.
- It assists development of graduates with balanced set of communication, technical and interpersonal skills with positive attitude towards life.
- HR managers of various companies are invited to the college campus to interact with the students.
- The cells invites companies for campus interviews and provides them necessary facilities for conducting written test, Group discussion, Technical and HR interview etc. as well as arrange industrial visit and training for final year and pre-final year students.

8.6 Entrepreneurship Cell (5)

Total Marks 5.00

This cell is launched with a view to encourage students to consider self employment as a career option, provide training in Entrepreneurship through modular courses and increase the relevance of Management particularly in the non-corporate and under managed sectors.

Entrepreneurship initiatives

Institute has a cell which improves entrepreneurship development skills in the students by doing activities as seminar, workshops and awareness camps.

The entrepreneurship cell has following roles & responsibilities:

- To nurture the student ideas and to develop innovative products.
- To support the student projects with funding.
- To establish & maintain incubation centre.
- To create entrepreneurs, echo system for students.
- To maintain data relevant to entrepreneurship program.

The ED cell include the training modules are developed to describe employer requirements, behavior and environment of different industries. This module covers the following skills:

- Leadership Skills
- Business Development skills
- Marketing skills
- Managerial skills
- Communication /Soft skills
- Team- building skills.

S. No.	Date	Topic	Expert Details
1	28rd April 2022	Hand's-On Workshop On Biological Prospects Innovation and Invention	Dr. BhupendraPrasad, Dr. VnayKhare
2	28 th March, 2022	Developing Online Repository of Business Plan/ Prototypes Developed and Way forward plan	Dr. Ajay Kumar,Dr. JyotiramSawale
3	20thMay 2022	Enterprenureship and Innovation as a Career Opportunity	Dr. Vinod Kumar Gauttam
4	11-05-2022	National Technology Day	Dr.Durgesh K Mishra
5	01-04-2022	Session on How to plan for the Start-Up and legal & Ethical Steps	Dr. Monika Vishwakarma
6	21-04-2022	Session on Business Model Canvas (BMC)	Dr.PrashantRichhariya
7	22thApril 2022	Technology based on Ideation for Innovation and Incubation	Dr. MykhailoSavchak
8	01-04-2022	Workshop on Process and Development - Prototyping	Dr.Naveen B P
9	13-05-2022	Workshop on Intellectual Property Right(IPRs) and IP Management for start-up	Mr. Arpit Jain
10	25th to 27th April 2022	World Intellectual Property Day	Prof S.K Soni, Dr. N.K Choubey,Dr. Ajay Thakur,Dr. Yashw Dev Panwar
11	23 to 25 May 2022	National Summit on Startup Ecosystem	IAS Shri Ankit Asthana, Mr. Ganesh Gaikawad, Ms. Ashwini, Mr. DushyantBhati
12	10-Mar-22	Expert Talk on "Design Thinking, Critical Thinking & Innovation Design"	Dr. Pooja Raundale
13	09-Mar-22	Expert Talk on Entrepreneurship Skill, Attitude and Behavior Development	Mr. SuneelWattal
14	09-Mar-22	Expert Talk on "Pitching for Ideas Scouted & Linkage for Mentorship Support"	Mr. Chandrabhan Singh
15	08-Mar-22	Expert Talk on "Process of Innovation Development and Technology"	Dr. Saurabh Mehta
16	07-Mar-22	IIC Ambassador Training Program on "Achieving Problem Solution Fit and Product Market Fit"	Dr. Arti M Karande
17	24-Feb-22	IPR Awareness Program Under the aegis of Intellectual Property Office	Shree Arpit Jain
18	04-Feb-22	Live National Webinar on "How to build world class educational – Institutional"	Dr. NeerajSaxena, Dr. Anil Kothari, Dr. yashwant dev panwar, R.K. Singhai
19	29-Jan-22	My Story: Motivational Session by Successful Entrepreneur	Mr. Raghu Pandey
20	12-Jan-22	My Story:Motivation Session of an Entrepreneur	Mr. Ankit Yadav
21	27-Dec-21	Entrepreneurship & Innovation as Career Opportunities	Mr. Rajeev Agrawal, Mr. Suresh Jain
22	29-Dec-21	My Story: "Motivation Session of an Entrepreneur	Mr. Ankit Thakur

Table 8.8: Events organized under Entrepreneurship Development Cell

8.7 Co-curricular and Extra-curricular Activities (10)

Total Marks 10.00

Institute has always been playing a leading role in co-curricular and extra-curricular activities in multiple directions, such as social services including rural development and up-liftment, extension of literacy and issues related to national and international importance, games and sports, blood donations, promotion of cultural activities, arts and science, welfare and promotional activities related to different classes of society.

8.7.1. Availability of sports and cultural facilities

Extracurricular activities form a vital part of experience in institute, creating unique opportunities for students. They get plenty of platforms for representing the college and to develop sporting skills. As an integral part of the curriculum there is a balanced Scheme of Physical Education which teaches skills, develops overall fitness and complements the games programme. College aims to help students to understand benefits and enjoy regular Yoga, Kho-kho, and exercise to get confidence in team and individual sport. The playing fields for basketball, football, cricket or athletics are used according to the season.



Figure 8.5. Sports Facility @ IES Institute of Pharmacy, Bhopal

Sports Facility:

To ensure Physical fitness of students sports facilities have been created within the campus which comprises of indoor and outdoor games as detailed below in tabular form, as an integral part of the curriculum there is a balanced Scheme of Physical Education that teaches skills, develops overall fitness and complements the games programme. College aims to help students to understand the benefits and enjoyment of regular exercise and feel confident in team and individual sport.

Every year the RGPV University nominates our Institute as a nodal centre for various games like.

- Cricket
- Basket Ball
- Volley Ball



Figure 8.6. :Indoor sports|

Indoor sports: Students can choose from Table tennis, Carom, chess, Badminton, etc. among indoor activities to engage themselves to remain physically and mentally fit.

Table 8.9 Sports Facilities

S. No.	Category	Game	Dimension
--------	----------	------	-----------

01	Outdoor	Cricket	As per Standard Games Norm
02		Volley Ball	
03		Basket Ball	
04		Kho-Kho	
05		Kabaddi	
06		Foot Ball	
07		Athletics	
08		Hand-Ball	
09	Indoor	Table tennis	
10		Badminton	
11		Chess	
12		Carom	
13		Judo	
14		Gymnasium	

Cultural:

College has been organising large number of cultural activities throughout the year to provide a platform to the college students to exhibit their talents.

Table 8.10 Cultural activities at IES

S. No.	Particular of Event	Detail of Event
1	AAGAZ	Dedicated for fresher's Students
2	UTKARSH	Annual function
3	JUDAAN	Farewell to final year students
4	Diwali Carnival	Celebration of Diwali prior to the holidays.



Figure 8.8 : Cultural Events

8.7.2. NCC, NSS and Other Clubs

NCC/NSS Committee basically focus on extra-curricular activities and holistic personality development of students & also include rural outreach programs.

Roles & Responsibilities:

- Develop a sense of social and civic responsibility amongst students.
- Utilize student's knowledge in finding practical solution to individual and community problems.
- Train students to acquire leadership qualities and democratic attitude.
- Develop community service attitude for handling emergencies and natural disasters.
- Develop character, comradeship, discipline, secular outlook, the spirit of adventure and ideals of selfless service amongst young citizens.

Following activities are organized with deep and active participation of the students.

1. National Cadet Corps Scheme (NCC)
2. National Service Scheme (NSS)
3. Corporate Social Responsibility (CSR)
4. Blood Donation
5. Village adoption for overall awareness development.
6. Tobacco free campus awareness program

Institute conducts Orientation Programmes through Program Officers and committee every year and through it new students register as volunteers and present message to others. NSS Coordinator and District level officer like the Collector and Commissioner are invited to grace the occasion. They provide information related to CSR activities and motivate them.

Table 8.11 Details of Events

S. No.	Particular of Event	Detail of Event
01	NCC	Training in NCC instils qualities like nationalism, patriotism, discipline, team spirit, esprit-de-corps, leadership and self confidence and promotes overall personality development. Some Industries give preference to NCC Certificate holders for various jobs.
02	NSS	Students are motivated through personality development and encouraged to participate in activities for social and community service. In our institute NSS implements the issues in society such as tree-plantation, eradication of child labour and other issues in rural areas

03	Blood donation	The college is regularly organizing bloods donation camp under the patronage of RED CROSS in the campus in which large number of students donates blood voluntarily & play their part in lending helping hand to people in the region.
04	Village adoption for over- all awareness development.	A village, BERKHEDI, near the college has been adopted by the Institute; Support for the growth of villagers is being given by providing various facilities.
05	Tobacco free campus awareness program	Regular Programmes are organized on issues of National and International importance such as National Security, Cancer eradication, effect of smoking and relief from smoking and relief from chewing tobacco etc by explaining to students its harmful effect. Drug addiction eradication programmes also organised.

Table 8.12 The Various activities are under NCC & NSS

S.No	Activity	Details	Date	Person	No. of Students
1	Enrollment of NCC 2020 (Selection Process)	Enrollment of Students done once in year under the supervision of NCC Unit 1MP-CTR Bhopal (To maintain the enrolled strength 50)	13-Aug-20	AkhileshDwivedi (Associate NCC Officer) & 1MPCTR Bhopal (Col. N P Semalti, Commanding Officer)	6
2	Online Webinar on National Constitution Day	Online Webinar on National Constitution Day, Expert ; Justice AlokVerma (Judge High Court	26th Nov,2020	AkhileshDwivedi (Associate NCC Officer) & Senior Faculty Member of IES College of Technology	6
3	International yoga day	International yoga day	21-Jun-21	AkhileshDwivedi (Associate NCC Officer)	6
4	NCC Enrollment 2021	Enrollment of Students done once in year under the supervision of NCC Unit 1MP-CTR Bhopal (To maintain the enrolled strength 50)	13/10/2021	AkhileshDwivedi (Associate NCC Officer) & 1MPCTR Bhopal (Col. N P Semalti, Commanding Officer)	0
5	Plantation Drive	Plantation activities done under Social Service & Community Development	15/12/2021	AkhileshDwivedi (Associate NCC Officer) & Senior Faculty Member of IES College of Technology	6
6	CATC Camp	Combined Annual Training Camp is Compulsory activity of NCC. Each cadet attend at least 1 NCC Camp	13- 17/12/ 2021	...	3
7	CATC Camp	Combined Annual Training Camp is Compulsory activity of NCC. Each cadet attend at least 1 NCC Camp	21 – 27/02/2022	AkhileshDwivedi (Associate NCC Officer)	1
8	Army Attachment Camp at 68 Engr. Regmt Bhopal	Army Attachment Camp is a special camp scheduled by NCC Directorate	21 March 22 – 02 April 22	AkhileshDwivedi (Associate NCC Officer)	1
9	CAMP-III (IBC, TSC SELECTION CAMP)	Combined Annual Training Camp is Compulsory activity of NCC. Each cadet attend at least 1 NCC Camp	05 June-14 June 2022	AkhileshDwivedi (Associate NCC Officer)	3
10	International yoga day	International yoga day	21-Jun-22	AkhileshDwivedi (Associate NCC Officer)	6
11	Trekking Camp at Orrisca Trek	Trekking is one of the adventurous activity in NCC	19 Sept- 25 Sept. 2022	...	2

Blood Donation Camp: IES Institute of Pharmacy, Bhopal has been participating regularly in blood donation camps conducted by our group of Institutes.

Various Donation activities include:

Table 8.13: Detail of Blood Donation Camp

S. No.	Date	Activity
1	6 th Feb,2020	Blood Donation Camp by Gandhi Medical College Bhopal
2	17 th Sept,2022	Blood Donation Camp



Figure 8.9: Blood Donation Camp

Clubs / Other Activities:

S. No	Date	Activity
1	3 rd Nov,2022	Poster Presentation
2	17 th Feb,2022	Plantation Drive
3	26 th Jan,2022	Plantation Drive
4	26 th Sept,2022	World pharmacist day
5	28 th Sept,2022	Health Awareness Rally in Village
6	27 th Sept,2022	Health check up Camp

Table 8.14: Club Activities



Figure 8.10: Club Activities



Figure 8.11: Club Activities

9 GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES (100)

Total Marks 100.00

9.1 Organization, Governance and Transparency (50)

Total Marks 50.00

9.1.1. Governing body, administrative setup, functions of various bodies, service rules procedures, recruitment and promotional policies (10)

Governance is the key activity that develops the relationship among the management, staff, students and the community. We believe it should be effective, efficient and economical in execution of its duties. We support modern governance and proper administration and believe these should be carried out in a way that actively acknowledges diversity. The Institute has a governing body in place wherein the members are drawn from distinguished cross-sections of the society, as shown in Table below

A. Governing Body

The members of Governing Body for the Session 2022-23

S. No.	Name	Designation	Designation in the Governing body
1	Er. B. S. Yadav	Chairman, Infotech Education Society, Bhopal	Chairman
2	Dr. Sunita Singh	Secretary, Infotech Education Society, Bhopal	Member
3	Mr. Devansh Singh	Treasurer, Infotech Education Society, Bhopal	Member
4	Mrs. Usha Singh	Member, Infotech Education Society, Bhopal	Member
5	Mr. Rajeev Agrawal	Industrialist	Member
6	Vacant	DTE Representative	Member
7	Prof.(Dr.) O.P. Modi	Professor- IITM IES University, Bhopal	Member
8	Prof. P. N. Mishra	Educationist	Member
9	Dr. Gaurav Jain	Professor, IOP, Bhopal	Member
10	Mr. Phool Singh Yaduwanshi	Asst Professor, IOP, Bhopal	Member
11	Dr. Vinod Kumar Gauttam	Principal, IOP, Bhopal	Member secretary

Table 9.1: Member of Governing Body

Functions of the Governing Body:

The Governing Body besides being the supreme administrative authority of the Institute shall have the following additional functions:

- To monitor the academic and other related activities of the college.
- To consider the important communications, policy decisions received from the University, Government, AICTE, PCI etc.
- To monitor the development programme of students and faculty.
- To make recommendations on the planning and monitoring the college.
- Approve the institution's new programmes of study leading to the award of Degrees based on the recommendations of the DCC.
- Perform such other as may be necessary and deemed fit for the proper Development and fulfill the objectives of the college.
- To pass the annual budget of the college.
- To check the audited income and expenditure accounts and approve the same of the college annually.

Frequency of Meeting: Bi-Annually

Meetings conducted by Governing Body (Part Three Years):

S. No.	Academic Year	No of Meeting Conducted
1	2022-23	02
2	2021-22	02
3	2020-21	02



Governing Body

Minutes of the meeting of Governing Body of IES Institute of Pharmacy, Bhopal held on 11/05/2022 in the Board Room at 4:30 pm

Members Present:

Following members attended the meeting:

S. No.	Name	Designation	Designation in GB
1	Er. B. S. Yadav	Chairman, Infotech Education Society, Bhopal	Chairman
2	Dr. Sunita Singh	Secretary, Infotech Education Society, Bhopal	Member
3	Mr. Devansh Singh	Treasurer, Infotech Education Society, Bhopal	Member
4	Mrs. Usha Singh	Member, Infotech Education Society, Bhopal	Member
5	Vacant	DTE Representative	Member
6	Mr. Rajeev Agrawal	Industrialist	Member
7	Prof.(Dr.) O.P. Modi	Professor- IITM IES University, Bhopal	Member
8	Prof. P. N. Mishra	Educationist	Member
9	Dr. Gaurav Jain	Professor, IES Institute of Pharmacy, Bhopal	Member
10	Mr. Phool Singh Yaduwanshi	Asst Professor, IES Institute of Pharmacy, Bhopal	Member
11	Dr. Vinod K. Gauttam	Principal, IES Institute of Pharmacy, Bhopal	Member Secretary

Chairman, Governing Body welcomed all members present and urged the Member Secretary to take up agenda points of the meeting.

Item 1: Confirmation of minutes of the previous meeting held on 27/03/2022

Resolution: Governing Body confirmed the minutes of the previous meeting held on 27/03/2022.

Item 2: Review of work carrying out for accreditation or ranking process.

Resolution: Dr. Vinod Kumar Gauttam, Principal, IOP presented the preparations and route map to achieve standards and accreditation with respect to pharmacy program as per the vision of the University. Dr. Gauttam further assured the committee members about the commitment of the department regarding

obtaining the NBA accreditation from the very first year of eligibility. Mr. Rajiv Agarwal suggested projects to be given those are more industry oriented and should be from all different areas of the profession. Dr. Gaurav and Mr. Prasad Singh ensured the committee regarding academic and non-academic projects and industrial training of final year students along with D. Pharmacy program students.

Item 3: Report on proposal submission in the PCL, New Delhi for starting PG program in Pharmacy for 14 seats.

Report: Dr. Vinod Kumar Gauram put the proposal in the committee to start PG program in pharmacy in one subject (Pharmaceutics) at beginning from the coming session (2022-23). Dr. Gauram further informed to committee members about the eligibility to start PG program i.e. two batches of PG program must be put out. The committee accepted the proposal and advised Dr. Gauram to do the needful action with respect to regulatory bodies (PCI, New Delhi, IIS University, Bhopal) to start the program from Academic session 2022-23.

Item 3: To present the result of B. Pharmacy exam of first semester.

Report: Mr. Prasad Singh presented the result summary of 2nd, 4th and 8th Semester students result in both End semester and mid semester examination. The members of the committee gave satisfactory remark on the results but further suggested to the principal about improvement and use of pedagogy to get the best outcome from the students.

Item 4: Approval of teaching staff recommended by Selection Committee.

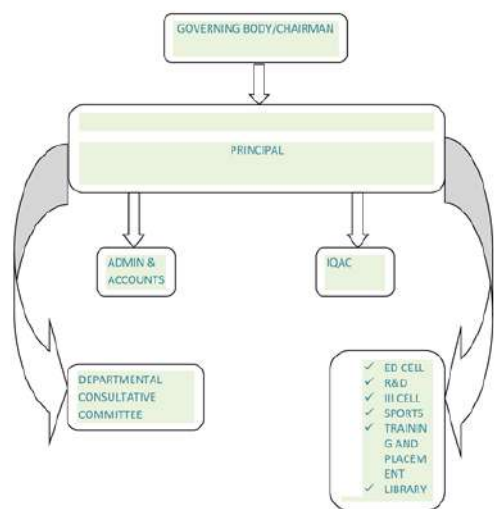
Report: Mr. Prasad Singh shared the staff list those who have joined the teaching faculties including one Professor (Dr. Gaurav Jain), Associate Professor (Dr. Sima Singh) and Assistant Professor (Ms. Pooja/Selwyn). The committee members approved all the recruitments as recommended by Staff Selection Committee.

Item 5: To present placement records of first pass out batch of B. Pharmacy program.

Report: The placement details of the B. Pharmacy and D. Pharmacy program is presented in front of the committee by Dr. Gauram, who informed all the members regarding placement in manufacturing (17), Marketing (15), Medical coding and scientific publications (05) higher study (05) and students number those opted their own family business (15) in the profession. The committee members appreciated the Training and placement committee and efforts of faculties for such contribution. Though the target for coming session was proposed more towards higher study, entrepreneurship, more placements in software based companies.



B. Administrative Set up



9.1.2 Decentralization in working and grievance redressal mechanism (15)

Institute Marks : 15.00

List the names of the faculty members who are administrators/decision makers for various responsibilities. Specify the mechanism and composition of grievance redressal cell.

A. Administration

Principal is assisted by an administrative officer, who is assisted by office assistants looking after correspondence, admissions, HR, Scholarships etc.

Finance is looked after by accountant.

Administrative officer (Management) looks after all the support services and

Maintenance.

S. No.	Administration	Coordinator/Co-coordinator
Curricular		
1	B.Pharm. (Academics & Discipline)	Dr.Jyotiram Sawale Ms.Damini Singh
2	Class Time Tables	Mr.PhoolsinghYaduwanshi Ms.Neelima Chauhan
3	Library	Dr. Sameer Sapra
4	Chemicals and Glassware	Mr.Manglesh Kumar Mr. Anand Rao
5	Research Committee	Dr.Sima Singh Dr. Gaurav Jain Dr. Gaurav
Co-Curricular		
6	Cultural Committee	Ms.Prinsi Sahrpuriya Ms.Jyoti Patidar Mr Vijay Vishwakarma
7	Sports Committee	Mr. RajkishoreKushwaha Ms.MonamKushwaha
Others		
8	Training & Placement Committee	Dr. Vinod Kumar Gauttam Dr. Jyotiram Sawale Dr. Gaurav Jain Mr. Phool singh Yaduwanshi Dr. Sima Singh
9	Alumni Committee	Mr.Phool singh Yaduwanshi Ms. Rukhsar Syed

Table 9.12 Administrative Responsibility

A. Examinations

Examinations are an important factor for assessment of the progress of the Learning.

- All the examination matters are deal by Controller of Examinations, RGPV, Bhopal and IES University, Bhopal for their respective batches.
- Mid examinations are conducted by examinations cell with the help and assistance of class teachers.

S. No.	Name of the Faculty	Designation
1	Mr. Phool Singh Yaduwanshi	Chief Superintendent
2	Dr. Vivek Chourasia	Exam Branch In-charge
3	Ms. Ravina Sinha	Assistant to Exam Branch In-charge

Table 9.13 Member of Examination Committee

Though all teachers are involved in the examinations, the class teachers assist in compilation of marks, attendance etc.

B. Grievance Redressal Committee

All grievances of staff and students are redressed expeditiously by the committee.

S. No.	Name	Designation
1	Dr. Vinod Kumar Gauttam	Chairman
2	Mr. PhoolsinghYaduwanshi	Member
3	Dr. Gourav	Member
4	Ms. Damini Singh	Member
5	Ms. PrincyShahpuriya	Member

Table 9.14 Member of Grievance Redressal Committee

Any grievances reported verbally or written are appropriately dealt by the committee.

The grievance redressal committee also identifies the nature of complaint and forward the complaint to any of the following committee for its appropriate action:

1. Anti-Ragging committee
2. Anti-Sexual harassment cell

1. Anti-Ragging committee

The committee involves in creating awareness among students and parents. The guidelines, rules, regulations, preventive measures given by AICTE, PCI, University, and Government are strictly followed to curb the menace and at-most care is taken to make the complete campus Ragging free zone.

Composition of Anti-Ragging Committee:

S. No.	Name	Designation
1	Dr. Dr. Vinod Kumar Gauttam	Chairman
2	Mr. Mr. PhoolsinghYaduwanshi	Member
3	Ms. Damni Singh	Member
4	Ms. GyatriKushwaha	Member Secretary
5	Mr. Nitin Chaurasia	Member
6	MrSachin Kumar	Member
7	Ms. Ms. Sheelu Singh	Member

Table 9.15 Member of Anti-Ragging Committee

As per the regulatory bodies guidelines, the college follow the following procedures:

1. A pledge is administered to the students by the principal/class incharge.
2. The students submit the affidavit to the college as per the format.
3. An undertaking from the students and parents.
4. An undertaking from the employees.

The salient features of the Prohibition of Ragging Act, 1997, are displayed in the college premises at prominent places.

Gender Sensitizing Committee:

The college has constituted a committee as per the directions of Honorable Supreme Court of India and is known as 'Gender Sensitizing Committee'. The committee conducts meeting once in two months or on the basis of the complaints received.

Composition of the committee:

S. No.	Name of the faculty	Designation
1.	Dr. Vinod Kumar Gauttam	Chairman
2.	Ms. Sheelu Singh	Member
3.	Mr. Sunil Rai	Advocate
4.	Ms. Damini Singh	Member Secretary
5.	Dr. Preeti Pandey	External Member

Table 9.16 Member of Gender Sensitizing Committee

With regard to the Supreme Court Judgment and guidelines issued in 1997 to provide for the effective enforcement of the basic human right of gender equality and guarantee against sexual harassment and abuse, more particularly against harassment at work places. The University Grants Commission(UGC) has issued circulars since 1998 to all the universities, advising them to establish a permanent cell and a committee and to develop guidelines to combat sexual harassment, violence against women and ragging at the universities and colleges. It has further advised the universities to be proactive and they are treated with. Keeping the above guidelines in view, Institute has constituted a committee against sexual harassment.

The sexual harassment includes the

- Physical contact and advances.
- A demand or request for sexual favors.
- Sexually colored remarks.
- Showing porn ography.
- Any other unwelcome physical, verbal or non-verbal conduct of sexual nature.

Where any of these acts committed in circumstances where-under the victim of such conduct has areas on able apprehension that in relation to the victim's employment or work, whether drawing salary, or honorarium or voluntary, whether in government, public or private enterprise, such conduct can be humiliating and is punishable.

Role of the committee:

1. The committee shall decide whether the facts contained in the complaint make out a case of "sexual harassment" in light of the definition contained in the policy.
2. The committee shall recommend the penalties/action to be taken against any person found guilty of having sexually harassed the complainant, up to and including termination, from of job.
3. The committee shall recommend the penalties/action to be taken against any person found guilty of having retaliated against/victimized the complainant or any other person assisting her as a result of such complaint having been made or such assistance having been offered.

4. The committee shall monitor the follow-up action to be taken by the Organization on receipt of the report of committee.

Preventive steps: All employers or persons in-charge of work place, whether in public or private sector, should take appropriate steps to prevent sexual harassment. Without prejudiced the generality of this obligation, they should take the several steps as per the Act.

IES has a firm belief in participative style of management and this is achieved by decentralizing & delegating its functions with empowerment at various levels in all spheres.

Delegation of Powers:

The empowerment up to the last level in the organization not only helps in effective & efficient functioning of the organization, but also generates self-confidence and sense of responsibilities in the individual.

Table 9.17 Academics & Administration:

S.N.	Levels	Authority
1	Principal	Ensure implementation of MOM of Governing Body meetings & execute day to day academic activities.
2	HODs	To follow Principal's Instructions & ensure progress on advisory board meeting objectives.
3	Faculty	Compliance of all work delegated by HOD/Principal in respect of day to day activities, daily lab performance etc.

Table 9.18 Expenditure (Annually) &Recurring:

S.N.	Levels	Authority
1	Secretary, Infotech Education Society	Full but not exceeding budget limit as approved by executive Committee. It is the responsibility of principal to take sanction of secretary for the expenses.
2	Principal	3,00,000/ For expenses more than 3,00,000/ approval of the society will be required after approval of executive committee.
3	HODs	25,000/-
4	Coordinators/ Committee Heads	25,000/-
5	Lab Assistant	2000/-

Table 9.19 Infrastructure development & maintenance (Recurring):

S.N.	Levels	Authority
1	Secretary, Infotech Education Society	Full but not exceeding budget limit as approved by executive Committee.

Table 9.20 Laboratory Instruments/Library / Computer Peripherals/ Infrastructure/ equipment:

S.N.	Levels	Authority
1	Secretary, Infotech Education Society	Full but not exceeding budget limit as approved by executive Committee.
2	Principal	3,00,000/ Decision of purchase committee and final purchase action to be informed to secretary by the Principal.
3	HODs	25,000/

Table 9.21 Power for Sanction of Leave: (CL/EL/SL/ML):

S.N.	Levels	Authority
1	Secretary, Infotech Education Society	Sanctioning authority of Leave for Principal
2	Principal	Full for HOD/ Faculty/ Staff(For more than 3 days leave)
3	HODs	To sanction Leave upto 3 days for Faculty/ Lab I/C. Beyond this application & will be submitted to the Principal.

Table 9.22 Utilization of Financial Powers for Each of the Assessment Years

Designation	Decision Amount	2021-22	2020-21	2019-2020
Principal	3,00,000/ Decision of purchase committee and final purchase action to be informed to Secretary by the Principal.	To promote the growth of Academic activities. (like repairing of instruments, college level cultural, sports, technical events etc)	To promote the growth of Academic Activities. (like repairing of instruments, college level cultural, sports, technical events etc)	To promote the growth of Academic activities. (like repairing of instruments, college level cultural, sports, technical events etc)
HODs	25,000/	To Spend for different departmental activities (like stationary, industrial visits expenditures, culturalevents, models, projects, sports, lab manuals, charts etc.)	To Spend for different departmental activities (like stationary, industrial visitsexpenditures, culturalevents, models, projects, sports, lab manuals, charts etc.)	To Spend for different departmental activities (like stationary, industrial visits expenditures, culturalevents, models, projects, sports, lab manuals, charts etc.)

Coordinators/ Committee Heads	25,000/	To Spend for their committee activities (assembly activity gifts, T&P activities, scholarship tests gifts, Grievances etc.)	To Spend for their committee activities (assembly activity gifts, T&P activities, scholarship tests gifts, Grievances etc.)	To Spend for their committee activities (assembly activity gifts, T&P activities, scholarship tests gifts, Grievances etc.)
-------------------------------------	---------	--	--	--

9.1.4 Transparency and availability of correct/unambiguous information in public domain (10)

Institute Marks : 10.00

Information about the institute, infrastructure and facilities are being hosted on the institute Website: <http://iiop.co.in/> (<http://iiop.co.in/>) along with information of procedure related to admission, academic, & placement.

9.2 Budget Allocation, Utilization, and Public Accounting at Institute level (30)

Total Marks 30.00

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3

CFY : (Current Financial Year),

CFYm1 : (Current Financial Year minus 1),

CFYm2 : (Current Financial Year minus 2) and

CFYm3 : (Current Financial Year minus 3)

Table 1 - CFY 2021-2022

Total Income 31245047				Actual expenditure(till...): 24725398			Total No. Of Students 371
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
29451233	0	0	1793814	22030356	2695042	0	66645.28

Table 2 - CFYm1 2020-2021

Total Income 26112359				Actual expenditure(till...): 22125700			Total No. Of Students 353
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
26112359	0	0	0	19987965	2137735	0	62679.04

Table 3 - CFYm2 2019-2020

Total Income 22716570				Actual expenditure(till...): 18403378			Total No. Of Students 264
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
22716570	0	0	0	16562748	1840630		69709.77

Table 4 - CFYm3 2018-2019

Total Income 14203965				Actual expenditure(till...): 13038054			Total No. Of Students 188
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
13580509	623456	0	0	12233740	804314		69351.35

Items	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till	Budgeted in 2020-2021	Actual Expenses in 2020-2021 till	Budgeted in 2019-2020	Actual Expenses in 2019-2020 till	Budgeted in 2018-2019	Actual Expenses in 2018-2019 till
Maintenance and spares	350000	315330	190000	184664	125000	104203	100000	94203
R&D	600000	555650	100000	80320	100000	75750	125000	113577
Training and Travel	190000	187650	200000	183919	500000	490790	250000	244863
Miscellaneous expenses*	100000	90604	350000	333559	400000	308561	150000	132727
Others, specify	6000000	5845431	10500000	10254972	10500000	10395785	9500000	9081391.68
Infrastructure Built-Up	1200000	1051285	1800000	1716085	1050000	995329	600000	577089
Library	250000	239752	150000	125325	200000	178384	150000	116100
Laboratory equipment	1430000	1404005	300000	296325	750000	666917	150000	111125
Laboratory consumables	500000	480022	100000	90636	200000	130350	275000	250417
Teaching and non-teaching staff salary	14700000	14555669	9000000	8859895	5500000	5057309	2400000	2316561
Total	25320000	24725398	22690000	22125700	19325000	18403378	13700000	13038053.68

9.2.1 Adequacy of budget allocation (10)

Institute Marks : 10.00

The yearly budget is prepared according to the needs & requirements of the institute taking into consideration annual intake of students, laboratory & infrastructure requirements. Formal budget estimates are prepared by Managing Committee of the institute and reviewed by the governing body. In cases where there are urgent requirements not taken into consideration while preparing budget, special allocation of funds are made on a case to case basis.

Table 9.28 Adequacy of Budget allocation

S.No.	Financial Year	Request Budget	Approved Budget	Adequate/Not Adequate
1	2021-22	25320000	25320000	Adequate
2	2020-21	22690000	22690000	Adequate
3	2019-20	19325000	19325000	Adequate
4	2018-19	13700000	13700000	Adequate

9.2.2 Utilization of allocated funds (15)

Institute Marks : 15.00

Table 9.29 Utilization of allocated funds

S. No	Financial Year	Approved Budget	Actual Expenditure	Percentage Utilization
1	2021-22	25320000	24725398	97.65%
2	2020-21	22690000	22125700	97.51%
3	2019-20	19325000	18403378	95.23%
4	2018-19	13700000	13038053.68	95.16%

9.2.3 Availability of the audited statements on the institute's website (5)

Institute Marks : 5.00

Audited statements for the financial years 2021-22, 2020-21, 2019-20 and 2018-19 are available on institute website <http://iiop.co.in/> (<http://iiop.co.in/>)

9.3 Library and Internet

It is assumed that zero deficiency report was received by the institution, Effective availability and utilization to be demonstrated. (20)

Total Marks 20.00

9.3.1 Quality of learning resources (hard/soft) (10)

Institute Marks : 10.00

It is assumed that zero deficiency report was received by the institution, Effective availability and utilization to be demonstrated.

9.3.1. Quality of Learning Resources (Hard/Soft)(10)

Institutes has library which is well stocked with books, Journals, E-book, E-journals. Students are allowed to go to the library in library hour as mentioned in time table and thus encourage reading habit. Beside this library is also open after college hour to facilitate its optimum use. The following process is used to meet the criteria.

1. A wide range of reading materials, learning resources and information helps to support the Development of successful learners and confident individuals.
2. Promoting independent learning skills supports lifelong learning and encourages students to grow as responsible citizens.
3. Every year books, magazines, journals are added as per the needs of staff and students. for research. Introduction of e-journals for faculty and students.
4. Library hours are mentioned in the time table.
5. Wi-Fi enabled campus.

A. **Library details:** Zero deficiency report was received by the Institution for all the assessment years.

Availability of Digital Library Contents: Yes	
Following digital contents are made available	
Content	Accessibility
NPTEL Video Lecture	Access Provided to NPTEL Video Lecture Content
Departmental Library	Available
Access to RGPV Library	Access provided to open source Journals & e-Books.
Institutional Repository	Access provided to open source e-Books, e-Journals , previous year question papers, faculty publications etc.

Note: Library books issued at a time to faculty – 2 and for students – 5.

DELNET: By using DELNET software, students and faculty will get HOD and concerned subject faculty recommends the books to be purchased for the college before commencement of each semester.

Library Facilities

S. No.	Particulars	Available
1	Volumes	4575
2	Titles	1112
3	Journals	15
4	Library Management Software	01
5	Reading Room Seating Capacity	80
6	Multi Media PC	10

B. Computer & Internet facility:

Institution has total 65 computer nodes with 100 Mbps BSNL Leased line facilities. The Central computer Lab is on ground floor in which all the facilities are maintained. This central computer lab has different labs according to the programs and need of students. The total nodes of this central computer lab are 492.

Another Computer lab is on First Floor which has with dual core 50 nodes. The Specification of nodes is:

65 Computers with 3.2 GHz Processor dual core

- HDD: 320GB
- RAM: 2 GB
- Monitor: 15" TFT
- Keyboard: Multimedia
- Mouse: Optical

Accessibility to Students

Each student is given book bank, i.e., a set of 3 books. By rotation, each student get book so fall subjects in each semester. In addition, 2 books are issued for a period of Ten days. Further when the books are revised, the revised editions are also procured and made available to the students.

9.3.2 Internet (10)

Institute Marks : 10.00

Name of the Internet provider	BSNL & Jio
Available band width	100 Mbps & 10 Mbps
WiFi availability	Yes
Internet access in labs, classrooms, library and offices of all Departments	Yes
Security arrangements	Yes

Annexure I
(A) PROGRAM OUTCOME (POs)
ANNEXURE I: PROGRAM OUTCOMES

- 1. Pharmacy Knowledge:** Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.
- 2. Planning Abilities:** Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines.
- 3. Problem analysis:** Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.
- 4. Modern tool usage:** Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.
- 5. Leadership skills:** Understand and consider the human reaction to change, motivation issues, leadership and team-building when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and well-being.
- 6. Professional Identity:** Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).
- 7. Pharmaceutical Ethics:** Honour personal values and apply ethical principles in professional and social contexts. Demonstrate behavior that recognizes cultural and personal variability in values, communication and lifestyles. Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.
- 8. Communication:** Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.
- 9. The Pharmacist and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.
- 10. Environment and sustainability:** Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 11. Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. Self-assess and use feedback effectively from others to identify learning needs and to satisfy these needs on an ongoing basis.

Declaration

The head of the institution needs to make a declaration as per the format given -

- I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines in force as on date and the institutes shall fully abide by them.
- It is submitted that information provided in this Self Assessment Report is factually correct.
- I understand and agree that an appropriate disciplinary action against the Institute will be initiated by the NBA. In case, any false statement/information is observed during pre-visit, visit, postvisit and subsequent to grant of accreditation.

Head of the Institute

Name : Dr. Vinod Kumar Gauttam

Designation : Principal

Signature :

Seal of The Institution :

Place : BHOPAL

Date : 02-12-2022 18:23:52