



Koneru Lakshmaiah Education Foundation

(Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A' Grade University ♦ Approved by AICTE ♦ ISO 9001-2015 Certified
Campus: Green Fields, Vaddeswaram - 522 502, Guntur District, Andhra Pradesh, INDIA.

Phone No. 0863 - 2399999; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in

Admin Off: 29-36-38, Museum Road, Government, Vijayawada - 520 002 Ph. +91 - 866 -2577715, Fax: +91-866-2577717.

KL College of Pharmacy

4th BOS Meeting Minutes

4th BOS meeting of KL College of Pharmacy was held on 28-07-2018 at the Principal chamber R-309B from 10.00am onwards.

WELCOMED ALL THE MEMBERS

At the beginning of the meeting, the Chairman of the BOS welcomed all the members and briefed them about the progress of the College of pharmacy.

Following members are present

1. Dr. Subhrasnu Panda, BOS Chairman.
2. Dr. Pranvir S Satvat, BOS Patron.
3. Dr. A. Prameela Rani, External Member
4. Dr. G. Kishore Babu, External Member.
5. Dr. Sireesha Boyapati, External Member.
6. Dr A Sunil Kumar Reddy, External Member.
7. Dr. K.L Narayana, Member.
8. Dr Sabita Kumari Fransis, Member.
9. Dr D.V. Vasanth Kumar, Member.
10. Dr. B. Jaya Kumar Singh, Member.
11. Dr. R. Subhakar Raju, Member.
12. Dr. K. Uma Sankar, Member.
13. Dr. G S N Koteswara Rao, Member.
14. Dr D Damayanthi, BOS Secretary
15. Mr. Uttam Prasad Panigrahy, BOS Secretary
16. Dr. Siva Prasad Panda, Member.
17. Dr. A. Raja Sekhar Reddy, Member.

28/7/18
PRINCIPAL

KL College of Pharmacy
Koneru Lakshmaiah Educational Foundation
(Deemed to be University)
Green Fields, Vaddeswaram-522502
Guntur District, Andhra Pradesh.

AGENDA and RESOLUTIONS

AGENDA ITEM-1

To consider and approve the resolutions made by 3 rd BOS conducted on 4 th January 2018	Approved and Recommended to Academic Council
---	--

Discussion: The minutes of 3rd BOS meeting conducted on 4th January 2018 were circulated among the BOS members and all the BOS members reviewed the 3rd BOS minutes.

Resolution: It was resolved to approve the 3rd BOS meeting minutes conducted on 4th January 2018. **(Annexure: I)**

AGENDA ITEM-2

To consider and approve the resolutions made by 4 th DAC conducted on 14 th July 2018	Approved and Recommended to Academic Council
---	--

Discussion: The minutes of 4th DAC meeting conducted on 14th July 2018 will be circulated among the BOS members and all the BOS members reviewed the DAC minutes.

Resolution: It was resolved to approve the 4th DAC meeting minutes conducted on 14th July 2018. **(Annexure: II)**

AGENDA ITEM-3

To consider and approve Structure for the A.Y. 2018-19 as per the PCI norms	Approved and Recommended to Academic Council
---	--

Discussion: As per the norms set by PCI, the syllabus for B. Pharmacy programme has to be followed without any deviations and all the members agreed to incorporate the Y18 structure as per the PCI norms for the A.Y. 2018-19.

Resolution: It was resolved to include the Y18 structure as per the PCI norms. **(Annexure: III)**

KL
28/2/18
PRINCIPAL
Koneru Lakshmaiah College of Pharmacy
(Deemed to be University)
Green Fields, Vaddeswaram-522502
Guntur District, Andhra Pradesh.

AGENDA ITEM-4

To consider and approve the incorporation of new courses from the A.Y 2018-19.	Approved and Recommended to Academic Council
--	--

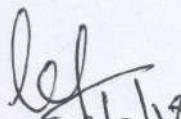
Discussion:

- a. The following new courses were added into the curriculum from the A.Y. 2018-19 which were not offered in the previous academic year and the student will gain 8 credits more than the previous batch. Further, it was discussed that these courses will enhance the language and communication skills of the student.
- b. The following new courses were added into the curriculum from the A.Y. 2018-19 which were not offered in the previous academic year. Further, it was discussed that these courses will make the student to understand the impact of pharmaceutical products on environment and also the ethics to be followed in this pharmacist profession.

Resolution: Upon discussion, all the BoS members approved the incorporation of the following new courses into the curriculum from the A.Y. 2018-19 and the detailed course structure for the proposed new courses is given below (**Annexure: III**).

Course Structure for New Courses

S No	Course Code	Course Title	Category	LTPS	Offering Year
1.	18UC1202	English Proficiency	HAS	0-0-4-0	I Year (2018-19 Even)
2.	18UC2103	Professional Communication skills (Practical)	HAS	0-0-4-0	II Year (2019-20 Odd)
3.	18UC2204	Aptitude builder I (Practical)	HAS	0-0-4-0	II Year (2019-20 Even)
4.	18UC3105	Aptitude builder II (Practical)	HAS	0-0-4-0	III Year (2020-21 Odd)


 28/12/18
 PRINCIPAL
 KL College of Pharmacy
 Veneru Lakshmaiah Educational Foundation
 (Deemed to be University)
 Green Feilds, Vaddeswaram-522502
 Guntur District, Andhra Pradesh.

S No	Course Code	Course Title	Category	LTPS	Offering Year
1.	18UC0009	Ecology & Environment	BSC	3-0-0-0	I Year (2018-19 Even)
2.	18UC0010	Universal Human Values and Professional Ethics	HAS	2-0-0-0	IV Year (2021-22 Odd)

AGENDA ITEM-5

To consider and approve the incorporation of skill course Operation of Analytical Instruments from the A.Y 2018-19.	Approved and Recommended to Academic Council
---	--

Discussion: The following skill course will be added into the curriculum from the A.Y. 2018-19 which was not offered in the previous academic year and the student will gain an extra credit than the previous batch. Further, it was discussed that this course will make the student to gain the skill set to operate various analytical instruments.

Resolution: Upon discussion, all the BoS members approved the incorporation of above-mentioned skill course into the curriculum from the A.Y. 2018-19 and the course structure for the proposed new skill course is given below. **(Annexure: III)**

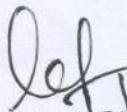
Course Structure for New Skill Course

S No	Course Code	Course Title	Category	LTPS	Offering Year
1.	18PH4133S	Operation of Analytical Instruments	Skill	0-0-0-4	IV Year (2021-22 Odd)

AGENDA ITEM-6

To consider and approve the incorporation of open electives for the A.Y 2018-19.	Approved and Recommended to Academic Council
--	--

Discussion: The following open electives will be added into the curriculum from the A.Y. 2018-19 which were not offered in the previous academic year.


 26/11/2018 PRINCIPAL
 Konenu Lakshmaiah College of Pharmacy
 (Deemed to be University)
 Green Fields, Vaddeswaram-522502
 Guntur District, Andhra Pradesh.

Further, these courses will make the student to gain enhanced job opportunities in various departments of pharmaceutical industries.

Resolution: Upon discussion, all the BoS members approved the incorporation of the following open electives into the curriculum for the A.Y. 2018-19. **(Annexure: III)**

S No	Course Code	Course Title	Category	LTPS	Offering Year
1.	18PH40D1	Regulatory Affairs	OE	3-1-0-0	IV Year (2021-22 Odd)
2.	18PH40D2	Immunotechnology	OE	3-1-0-0	IV Year (2021-22 Odd)
3.	18PH40D3	Advanced Organic Chemistry	OE	3-1-0-0	IV Year (2021-22 Odd)
4.	18PH40D4	Food Analysis	OE	3-1-0-0	IV Year (2021-22 Even)
5.	18PH40D5	Clinical Research Regulations	OE	3-1-0-0	IV Year (2021-22 Even)

AGENDA ITEM-7

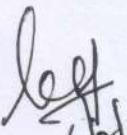
To consider and approve the Program development documents for Y18	Approved and Recommended to Academic Council
---	--

Discussion: Program development document of B. Pharmacy for AY 2018-19 was circulated among members and the members verified the document and ensured that the course structure developed for the same has not deviated from the structure suggested by PCI.

Resolution: All the members reviewed all the PDD Y18 document including the thrust areas and approved it.

AGENDA ITEM-8

To consider the feedback received from various stakeholders.	Approved and Recommended to Academic Council
--	--


 26/12/18
 PRINCIPAL
 KL College of Pharmacy
 Moneru Lakshmaiah Educational Foundation
 (Deemed to be University)
 Green Fields, Vaddeswaram-522502
 Guntur District, Andhra Pradesh.

Following is the feedback given by stakeholders on curriculum

- ❖ Mr. A. Rajashekhar Reddy Emp Id: 4460 had put the proposal to approve the syllabus for Pre-PhD examinations. Upon discussion, the resolution was passed and recommended to the academic council for approval.
- ❖ Dr P Raghuveer Varma, Principal, Dr CSN Institute of Pharmacy, Bhimavaram has advised the course structure for the A.Y. 2018-19 as per the PCI norms. Upon discussion, it was recommended to strictly follow the syllabus according to PCI norms for the AY 2018-19 and the same was forwarded to Academic Council for approval.
- ❖ Dr. Gananadhamu, Assistant Professor, NIPER, Hyderabad has given the feedback to design the syllabus with industrial orientation. Upon discussion, it was recommended to include industry related topics in the curriculum without deviating the PCI norms.
- ❖ Trilochana Margana, Senior Manager, Gravity Pharma, India has given the feedback to initiate lateral entry admissions. Upon discussion, it was recommended to initiate lateral entry admissions and the same was forwarded to Academic Council for approval. **(Annexure: IV)**

AGENDA ITEM-9

To approve the syllabus of Pre Ph.D.- Examinations in the department of Pharmacy.	Approved and Recommended to Academic Council
---	--

Discussion: Syllabus of various Pre Ph.D courses were circulated among the BOS members and the members verified the syllabus and approved it.

Resolution: It was resolved to approve the syllabus of Pre Ph.D.- Examinations in the department of Pharmacy.

lal
26/10/18
PRINCIPAL
KL College of Pharmacy
Koneru Lakshmaiah Educational Foundation
(Deemed to be University)
Green Fields, Vaddeswaram-522502
Guntur District, Andhra Pradesh.

AGENDA ITEM-10

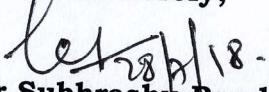
To identify the eligibility for the foreign students towards lateral entry admission in B. Pharmacy as per PCI.

Approved and Recommended to Academic Council

Discussion: By providing the lateral entry admission to foreign students more students will gain the eligibility to study B. Pharmacy without deviating the PCI norms.

Resolution: It was resolved to identify the eligibility for the foreign students towards lateral entry admission in B. Pharmacy as per PCI.

Yours Sincerely,

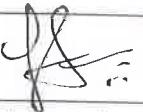
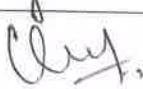
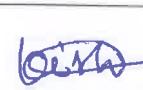
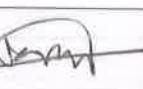
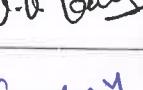
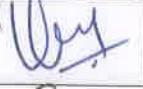

Dr Subhrashu Panda

BOS Chairman

K L College of Pharmacy, KLEP

KL College of Pharmacy
PRINCIPAL
(Deemed to be University)
Konuru Lakshmaiah Educational Foundation
Green Feilds, Vaddeswaram 522502
Guntur District, Andhra Pradesh

The following members have attended the 6th BOS meeting held on 16-11-2019 at from 10.00am to 12.00 pm, Venue: Principal Chamber, K L College of Pharmacy

S.NO	Full Name	Designation	Organization	Position of the meeting	Signature
1	Dr. Pranvir S Satvat	Dean – Academics,	KLEF	BOS Patron	
2	Dr. Subhrasnhu Pand	Professor & Principal	K L College of Pharmacy, KLEF	Chairman	
3	Dr. A. Prameela Rani	Principal	College of Pharmaceutical Sciences, ANU, Guntur	External member	
4	Dr. G. Kishore Babu	Head, Formulation research & Process development	Laila Nutraceuticals Private Limited, Vijayawada	External member	
5	Dr. Sireesha Boyapati	Principal & Professor	University College of sciences & arts, Telangana University, Nizamabad	External member	
6	Dr A Sunil Kumar Reddy	Scientist – III	Chemical research development, Arabindo Pharma Ltd., Indrakan road, sangareddy, Telangana	External member	
7	Dr. K.L Narayana	Dean, R&D	KLEF	External member	
8	Dr Sabita Kumari Fransis	HOD – English	KLEF	External member	
9	Dr D.V. Vasanth Kumar	HOD – Maths	KLEF	Member	
10	Dr. B. Jaya Kumar Singh	Prof. & Associate Dean	KLEF	Member	
11	Dr. R. Subhakar Raju,	Professor	K L College of Pharmacy, KLEF	Member	
12	Dr. K. Uma Sankar	Professor	KLEF	Member	
13	Dr. G S N	Assoc. Professor	K L College of Pharmacy,	Member	

Uday
22/11/2019
PRINCIPAL
K L College of Pharmacy
Acharya Lakshmaiah Educational Foundation
(Deemed to be University)
Green Fields, Vaddeswaram-522507
Guntur District, Andhra Pradesh.

	Koteswara Rao		KLEF		
14	Dr D Damayanthi	Assoc. Professor	K L College of Pharmacy, KLEF	BoS Secretary	<i>Dam</i>
15	Mr. Uttam Prasad Panigrahy	Asst. Professor	K L College of Pharmacy, KLEF	BoS Secretary	<i>Uttam</i>
16	Dr. Siva Prasad Panda	Assoc. Professor	K L College of Pharmacy, KLEF	Member	<i>S.P.</i>
17	Dr. A. Raja Sekhar Reddy	Asst. Professor	K L College of Pharmacy, KLEF	Member	<i>AR</i>

Mr
28/7/18

PRINCIPAL
KL College of Pharmacy
Konuru Lakshmaiah Educational Foundation
(Deemed to be University)
Green Fields, Vaddeswaram-522502
Guntur District, Andhra Pradesh.

Annexure I

Minutes of 3rd BOS Meeting conducted on 4th January 2018

AGENDA and RESOLUTIONS

AGENDA ITEM-1

To discuss about the feedback received from the stakeholders	Approved and Recommended to Academic Council
--	--

Resolution: It was resolved to implement the suggestions provided by the stakeholders from the academic year 2018-19 onwards.

AGENDA ITEM-2

To construct the new labs as per PCI requirements	Approved and Recommended to Academic Council
---	--

Discussion: As per the guidelines given by PCI it is mandatory to establish certain number of labs.

Resolution: It was resolved to construct the required laboratories to conduct lab courses.

AGENDA ITEM-3

To discuss about the infrastructure facilities	Approved and Recommended to Academic Council
--	--

Discussion: As per PCI guidelines basic infrastructure is required to run both UG and PG programmes.

Resolution: It was resolved to approve the infrastructure facilities to conduct classes from the A.Y. 2018-19.

AGENDA ITEM-4

To discuss about the Faculty Recruitment	Approved and Recommended to Academic Council
--	--

Discussion: As per the PCI norms required number of faculty should be recruited

Resolution: It was resolved to recruit the faculty to as per the PCI norms.

lakshmaiah
26/1/18
PRINCIPAL
KL College of Pharmacy
Gonuru Lakshmaiah Educational Foundation
(Deemed to be University)
Green Fields, Vaddeswaram-522502
Guntur District, Andhra Pradesh.

Annexure II

**Minutes of the 4th DAC meeting, held on 14-07-2018 at Room 309 B,
KL College of pharmacy from 12:30pm -01:30 pm.**

AGENDA ITEM-1

❖ Structure for the A.Y. 2018-19 as per the PCI norms	
❖ Resolution: It was resolved to include the Y18 structure as per the PCI norms. All the members agreed to incorporate the Y18 structure as per the PCI norms for the A.Y. 2018-19.	Approved

AGENDA ITEM-2

❖ To consider the feedback received from various stakeholders. Following is the feedback given by stakeholders on curriculum	Approved
❖ Mr. A. Rajashekhar Reddy Emp Id: 4460 had put the proposal to approve the syllabus for Pre-PhD examinations. Upon discussion, the resolution was passed and recommended to the academic council for the approval. ❖ Dr P Raghuveer Varma, Principal, Dr CSN Institute of Pharmacy, Bhimavaram has advised the course structure for the A.Y. 2018-19 as per the PCI norms. Upon discussion it was recommended to strictly follow the syllabus according to PCI norms for the AY 2018-19 and the same was forwarded to Academic Council for approval. ❖ Dr. Gananadhamu, Assistant Professor, NIPER, Hyderabad has given the feedback to design the syllabus with industrial orientation. Upon discussion it was recommended to include industry related topics in the curriculum without deviating the PCI norms.	

lel
PRINCIPAL
KL College of Pharmacy
T. oneru Lakshmaiah Educational Foundation
(Deemed to be University)
Green Feilds, Vaddeswaram-522502
Guntur District, Andhra Pradesh.

<ul style="list-style-type: none"> ❖ Trilochana Margana, Senior Manager, Gravity Pharma, India has given the feedback to initiate lateral entry admissions. Upon discussion it was recommended to initiate lateral entry admissions and the same has been forwarded to Academic Council for approval 	
---	--

AGENDA ITEM-3

<ul style="list-style-type: none"> ❖ To confirm the Program development documents for Y18 ❖ Resolution: All the members reviewed all the PDD Y18 documents including the thrust areas and approved it 	Approved
---	----------

AGENDA ITEM-4

<ul style="list-style-type: none"> ❖ To approve the syllabus of Pre Ph.D.-Examinations in the department of Pharmacy. ❖ Resolution: It was resolved to approve the syllabus of Pre Ph.D.-Examinations in the department of Pharmacy. 	Approved
--	----------

AGENDA ITEM-5

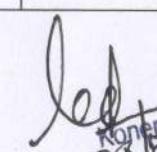
<ul style="list-style-type: none"> ❖ To identify the eligibility for the foreign students towards lateral entry admission in B. Pharmacy as per PCI. ❖ Resolution: It was resolved to identify the eligibility for the foreign students towards lateral entry admission in B. Pharmacy as per PCI. 	Approved
--	----------

lly
28/7/18

PRINCIPAL
KL College of Pharmacy
Koneru Lakshmaiah Educational Foundation
(Deemed to be University)
Green Fields, Vaddeswaram-522502
Guntur District, Andhra Pradesh.

Annexure III: B. Pharm Y18 Program Structure Focused on Employability/Entrepreneurship/Skill Development

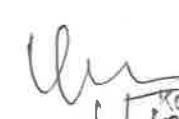
SNO	COURSE CODE	COURSE NAME	Course Category	L	T	P	S	CR	Pre-requisite	New Course/Revised Course/Retained Course	Changes Proposed by	Focused on Skill Development
1.	18PH1101	Human Anatomy and Physiology I	PC	3	1	3	0	5.5	NIL	Retained	-	Employability
2.	18PH1102	Pharmaceutical Analysis	PC	3	1	3	0	5.5	NIL	Retained	-	Employability
3.	18PH1103	General Pharmaceutics	PC	3	1	3	0	5.5	NIL	Retained	-	Employability
4.	18PH1104	Pharmaceutical Inorganic Chemistry	PC	3	1	4	0	5.5	NIL	Retained	-	Employability
5.	18UC1101	Basic English	HSS	0	0	4	0	2	NIL	New course	-	Skilling
6.	18PH1106RB	Remedial Biology	BS	2	0	2	0	3	NIL	Retained	-	Skilling
7.	18PH1106RM	Remedial Mathematics	BS	2	1	0	0	3	NIL	Retained	-	Employability
8.	18PH1207	Human Anatomy and Physiology II	PC	3	1	3	0	5.5	NIL	Retained	-	Employability
9.	18PH1208	Pharmaceutical Organic Chemistry I	PC	3	1	4	0	6	NIL	Retained	-	Employability
10.	18PH1209	Biochemistry	PC	3	1	4	0	6	NIL	Retained	-	Employability
11.	18PH1210	Pathophysiology	PC	3	1	0	0	4	NIL	Retained	-	Employability
12.	18PH1211	Computer Applications in Pharmacy	BS	3	0	2	0	4	NIL	Retained	-	Employability
13.	18UC0009	Ecology & Environment	BS	2	0	0	0	2	NIL	New Course	-	Employability
14.	18UC1202	English Proficiency	HSS	0	0	4	0	2	NIL	New Course	-	Skilling


PRINCIPAL
 K L College of Pharmacy
 Deemed to be University
 Green Fields, Vaddeswaram-522502
 Guntur District, Andhra Pradesh

15.	18GN1202	Counselling II	HSS	0	0	1	0	0.5	NIL	New Course	-	Skilling
16.	18GN1208	Co-curricular Activity II	HSS	0	0	0	2	0.5	NIL	New Course	-	Skilling
17.	18PH2113T	Pharmaceutical Organic Chemistry II (Theory)	PC	3	1	-	0	4	Nil	Retained	-	Employability
18.	18PH2113P	Pharmaceutical Organic Chemistry II (Practical)	PC	-	-	4	0	2	NIL	Retained	-	Skilling
19.	18PH2114T	Physical Pharmaceutics I (Theory)	PC	3	1	-	0	4	Nil	Retained	-	Employability
20.	18PH2114P	Physical Pharmaceutics I (Practical)	PC	-	-	4	0	2	Nil	Retained	-	Skilling
21.	18PH2115T	Pharmaceutical Microbiology (Theory)	PC	3	1	-	0	4	NIL	Retained	-	Employability
22.	18PH2115P	Pharmaceutical Microbiology (Practical)	PC	-	-	4	0	2	Nil	Retained	-	Skilling
23.	18PH2116T	Pharmaceutical Engineering (Theory)	PC	3	1	-	0	4	Nil	Retained	-	Employability
24.	18PH2116P	Pharmaceutical Engineering (Practical)	PC	-	-	4	0	2	NIL	Retained	-	Skilling
25.	18UC2103	Professional Communication skills (Practical)	HSS	0	0	4	0	2	Nil	New Course	-	Skilling
26.	18PH2217T	Pharmaceutical Organic Chemistry III (Theory)	PC	3	1	-	0	4	NIL	Retained	-	Employability
27.	18PH2218T	Medicinal Chemistry I (Theory)	PC	3	1	-	0	4	Nil	Retained	-	Employability
28.	18PH2218P	Medicinal Chemistry I (Practical)	PC	-	-	4	0	2	NIL	Retained	-	Skilling


 PRINCIPAL
 KL College of Pharmacy
 Ponneru Lakshmaiah Educational Foundation
 (Deemed to be University)
 28/07/18
 Green Feilds, Vaddeswaram-522502
 Guntur District, Andhra Pradesh.

29.	18PH2219T	Physical Pharmaceutics II (Theory)	PC	3	1	-	0	4	Nil	Retained	-	Employability
30.	18PH2219P	Physical Pharmaceutics II (Practical)	PC	-	-	4	0	2	NIL	Retained	-	Skilling
31.	18PH2220T	Pharmacology I (Theory)	PC	3	1	-	0	4	Nil	Retained	-	Employability
32.	18PH2220P	Pharmacology I (Practical)	PCC	-	-	4	0	2	Nil	Retained	-	Skilling
33.	18PH2221T	Pharmacognosy and Phytochemistry I (Theory)	PCC	3	1	-	0	4	NIL	Retained	-	Employability
34.	18PH2221P	Pharmacognosy and Phytochemistry I (Practical)	PCC	-	-	4	0	2	Nil	Retained	-	Skilling
35.	18UC2204	Aptitude builder I (Practical)	HSS	0	0	4	0	2	NIL	New Course	-	Skilling
36.	18PH3122T	Medicinal Chemistry II (Theory)	PC	3	1	0	0	4	Nil	Retained	-	Employability
37.	18PH3123T	Industrial Pharmacy I (Theory)	PC	3	1	-	0	4	NIL	Retained	-	Employability
38.	18PH3123P	Industrial Pharmacy I (Practical)	PC	-	-	4	0	2	Nil	Retained	-	Skilling
39.	18PH3124T	Pharmacology II (Theory)	PC	3	1	-	0	4	NIL	Retained	-	Employability
40.	18PH3124P	Pharmacology II (Practical)	PC	-	-	4	0	2	Nil	Retained	-	Skilling
41.	18PH3125T	Pharmacognosy and Phytochemistry II (Theory)	PC	3	1	-	0	4	Nil	Retained	-	Employability
42.	18PH3125P	Pharmacognosy and Phytochemistry II (Practical)	PC	-	-	4	0	2	NIL	Retained	-	Skilling
43.	18PH3126T	Pharmaceutical Jurisprudence (Theory)	PC	3	1	0	0	4	Nil	Retained	-	Employability


PRINCIPAL
 KL College of Pharmacy
 Koneru Lakshmaiah Educational Foundation
 (Deemed to be University)
 28/9/18
 Green Fields, Vaddeswaram-522502
 Guntur District, Andhra Pradesh.

44.	18UC3105	Aptitude builder II (Practical)	HSS	0	0	4	0	2	NIL	New Course	-	Skilling
45.	18PH3227T	Medicinal Chemistry III (Theory)	PC	3	1	-	0	4	Nil	Retained	-	Employability
46.	18PH3227P	Medicinal Chemistry III (Practical)	PC	-	-	4	0	2	NIL	Retained	-	Skilling
47.	18PH3228T	Pharmacology III (Theory)	PC	3	1	-	0	4	Nil	Retained	-	Employability
48.	18PH3228P	Pharmacology III (Practical)	PC	-	-	4	0	2	Nil	Retained	-	Skilling
49.	18PH3229T	Herbal Drug Technology (Theory)	PC	3	1	-	0	4	NIL	Retained	-	Employability
50.	18PH3229P	Herbal Drug Technology (Practical)	PC	-	-	4	0	2	Nil	Retained	-	Skilling
51.	18PH3230T	Biopharmaceutics and Pharmacokinetics (Theory)	PC	3	1	0	0	4	NIL	Retained	-	Employability
52.	18PH3231T	Pharmaceutical Biotechnology (Theory)	PC	3	1	0	0	4	Nil	Retained	-	Employability
53.	18PH3232T	Quality Assurance (Theory)	PC	3	1	0	0	4	NIL	Retained	-	Employability
54.	18PH3206P	Campus to Hospitality / Industry (Practical)	HSS	0	0	4	0	2	Nil	New Course	-	Skilling
55.	18PH4133T	Instrumental Methods of Analysis (Theory)	PC	3	1	-	0	4	Nil	Retained	-	Employability
56.	18PH4133P	Instrumental Methods of Analysis (Practical)	PC	-	-	4	0	2	Nil	Retained	-	Skilling
57.	18PH4134T	Industrial Pharmacy II (Theory)	PC	3	1	0	0	4	Nil	Retained	-	Employability


PRINCIPAL
 KL College of Pharmacy
 Koneru Lakshmaiah Educational Foundation
 (Deemed to be University)
 28/AT/18
 Green Fields, Vaddeswaram-522502
 Guntur District, Andhra Pradesh.

58.	18PH4135T	Pharmacy Practice (Theory)	PC	3	1	0	0	4	NIL	Retained	-	Employability
59.	18PH4136T	Novel Drug Delivery System (Theory)	PC	3	1	0	0	4	Nil	Retained	-	Employability
60.	18PH4137PS	Practice School*	PC	0	0	12	0	6	Nil	Retained	-	Skilling
61.	18UC0010	Universal Human Values and Professional Ethics	HSS	2	0	0	0	0	Nil	New Course	-	Employability
62.	18PH4133S	Operation of Analytical Instruments	Skill	0	0	0	4	1	NIL	New Course	-	Skilling
63.	18PH4238T	Biostatistics and Research Methodology	PC	3	1	0	0	4	Nil	Retained	-	Employability
64.	18PH4239T	Social and Preventive Pharmacy	PC	3	1	0	0	4	Nil	Retained	-	Employability
65.	18PH4240ET	Pharma Marketing Management	PE	3	1	0	0	4	NIL	Retained	-	Entrepreneurship
66.	18PH4241ET	Pharmaceutical Regulatory Science (Theory)	PE	3	1	0	0	4	NIL	Retained	-	Entrepreneurship
67.	18PH4242ET	Pharmacovigilance (Theory)	PE	3	1	0	0	4	NIL	Retained	-	Entrepreneurship
68.	18PH4243ET	Quality Control and Standardization of Herbals (Theory)	PE	3	1	0	0	4	NIL	Retained	-	Entrepreneurship
69.	18PH4244ET	Computer Aided Drug Design (Theory)	PE	3	1	0	0	4	NIL	Retained	-	Entrepreneurship
70.	18PH4245ET	Cell and Molecular Biology (Theory)	PE	3	1	0	0	4	NIL	Retained	-	Entrepreneurship
71.	18PH4246ET	Cosmetic Science (Theory)	PE	3	1	0	0	4	NIL	Retained	-	Entrepreneurship
72.	18PH4247ET	Experimental Pharmacology (Theory)	PE	3	1	0	0	4	NIL	Retained	-	Entrepreneurship
73.	18PH4248ET	Advanced Instrumentation Techniques (Theory)	PE	3	1	0	0	4	NIL	Retained	-	Entrepreneurship


PRINCIPAL
 KL College of Pharmacy
 (Deemed to be University)
 Green Fields, Vaddeswaram-522502
 Guntur District, Andhra Pradesh.

74.	18PH4249ET	Dietary Supplements and Nutraceuticals (Theory)	PE	3	1	0	0	4	NIL	Retained	-	Entrepreneurship
75.	18PH4250PW	Project Work	PW	0	0	12	0	6	NIL	Retained	-	Skilling
76.	18PH40D1	Regulatory Affairs	OE	3	1	0	0	4	NIL	New Course	-	Employability
77.	18PH40D2	Immunotechnology	OE	3	1	0	0	4	NIL	New Course	-	Employability
78.	18PH40D3	Advanced Organic Chemistry	OE	3	1	0	0	4	NIL	New Course	-	Employability
79.	18PH40D4	Food Analysis	OE	3	1	0	0	4	NIL	New Course	-	Employability
80.	18PH40D5	Clinical Research Regulations.	OE	3	1	0	0	4	NIL	New Course	-	Employability

Percentage of Syllabus Revision= 20%

Percentage of Courses focusing on Employability= 50.66%

Percentage of Courses focusing on Entrepreneurship= 13.33%

Percentage of Courses focusing on Skill Development = 36.66%

28/10/18

 PRINCIPAL
 Koneru Lakshmaiah Educational Foundation
 (Deemed to be University)
 Green Fields, Vaddeswaram-522502
 Guntur District, Andhra Pradesh.

Syllabus of New Course

S.NO	Course Code	Course Name	Course Category	Existing Syllabus	New Syllabus	Topics Added	Change in Outcome	Revision Percentage
1	18GN1202	Counselling II	HSS	NIL	Non-Instructional	Non-Instructional	Yes	100
2	18GN1208	Co-curricular Activity II	HSS	NIL	Non-Instructional	Non-Instructional	Yes	100

18UC1101: BASIC ENGLISH (Theory)

L-T-P-S:0-0-4

Credits:2

Prerequisite: Nil

Mapping of Course outcomes (CO) with program outcomes (PO):

CO NO	Course Outcomes	PO/PSO	BTL
CO1	Apply the practical knowledge of using action words in sentence construction.	10	3
CO2	Apply and analyse the right kind of pronunciation with regards to speech sounds and able to get different types of pronunciations.	10	3
CO3	Apply the concept of fundamental principle of counting to solve the problems on linear, circular permutations and also for the problems on selections. Apply the concept of probability, while doing the problems on Leap year & Non-Leap year problems, coins, dice, balls and cards.	1	3
CO4	Analyze the given conditions and finding out all the possible arrangements in linear & circular order. Analyze the given numbers or letters to find out the hidden analogy and apply that analogy to find solutions. Finding the odd man out by observing the principle which makes the others similar.	5	4

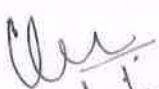
Concept of communication skills, its barriers, perspectives, elements and styles. Understanding basic listening skills, writing skills and interview skills.

Syllabus

Interactive Grammar: Action Words-Modifiers, Intensifiers, Connectives, Sentence Skills: Tense, Voice, Case, Gender, Reported Speech, Syntax, Types of Sentences, Syntactic Ordering, Introduction to the Sounds of English: Basic English Sounds, Distinctive Sounds of English, Assimilation, Contraction, Elision, Twinning, Stress, Syllables, Word- stress, Tone and Intonation- Rising, Falling, Rise-fall and Fall-rise. **Language Laboratory Interactive:** Esca talk, JAM, Ranking, Shrinking Story, Desperate Decision, Listening for Specifics, Pronunciation Practice. **Quantitative Aptitude:** Permutations and Combinations, Probability. **Reasoning:** Number and Letter Analogy, Odd Man out, Analytical Reasoning-I

Reference Books

1. Kerry Patterson, Joseph Grenny, Ron McMillan: *Crucial Conversations: Tools for Talking When Stakes Are High*. Switzler: Paperback – Animated, September 9, 2011.
2. Douglas Stone, Bruce Patton, Sheila Heen, and Roger Fisher : *Difficult Conversations: How to Have Conversations that Matter the Most* . Paperback – November 2, 2010
3. R.K. Bansal, J.B. Harrison: *Spoken English*. Delhi: Orient Black Swan.2009.
4. Language Laboratory Teacher Manual, KLEFU


 28/9/18
 PRINCIPAL
 KL College of Pharmacy
 Koneru Lakshmaiah Educational Foundation
 (Deemed to be University)
 Green Fields, Vaddeswaram-522502
 Guntur District, Andhra Pradesh.

18UC0009- ECOLOGY AND ENVIRONMENT

L-T-P-S: 3-0-0

Credits: 3

Prerequisite: Nil

Mapping of Course outcomes (CO) with program outcomes (PO):

CO NO	CourseOutcomes	PO	BTL
CO1	Understand the importance of Environmental education and conservation of natural resources.	6	1
CO2	Understand the importance of ecosystems and biodiversity.	12	1
CO3	Apply the environmental science knowledge on solid waste management, disaster management and EIA process.	6	3

Syllabus:

The Multidisciplinary nature of Environmental Studies - Natural Resources- Forest resources - Mining its impact on environment - Water resources - Mineral resources- Energy resources - Land resource s- Soil erosion - Ecosystems - Biodiversity and its ConservationEnvironmental Pollution - Soil waste management - Electronic waste management, biomedical waste management - Disaster management -Environmental Legislation Environmental Impact Assessment Process.

Text Book:

1. Anubha Kaushik, C.P.Kaushik, "Environmental Studies" , New Age International, (2007).
2. Benny Joseph, "Environmental Studies", Tata McGraw-Hill companies, New Delhi, (2009).

18UC1202- ENGLISH PROFICIENCY

L-T-P-S: 2-0-0

Credits: 2

Prerequisite: Nil

Mapping of Course outcomes (CO) with program outcomes (PO):

CO NO	Course Outcomes	PO/PSO	BTL
CO1	Apply the concepts of accurate English while writing and become equally at ease in using good vocabulary and language skills.	8, 9, 10	3
CO2	Understand the importance of pronunciation and apply the same day to day conversation.	8, 9, 10	3
CO3	Apply the concepts of Ratios, Percentages, Averages and Analysing the given information, a student is required to understand the given information and thereafter answer the given questions on the basis of comparative analysis of the data in the form of tabulation, bar graphs, pie charts, line graphs. Analyse the given data to find whether it is sufficient or not.	1, 4	3
CO4	Apply the basic functionality of Clocks and Calendars to find the solutions for the problems. Analyze the given symbols to understand the hidden meaning of the given expression and finding the solutions. Analyze the given conditions and finding out all the possible arrangements in linear & circular order.	1, 5	4

Syllabus:

Writing Skills: How to Write a Definition, Defining Technical Terms, Product and Process Description. Advanced Grammar Skills: Transformation of Sentences, Phrases, Clauses, Sentences—Simple, Compound, Complex Sentences, Concord, Lexis 1:Synonyms, Antonyms, Analogies, Sentence Equivalence-One-Word Substitutes.

Language Laboratory Interactives: Debate, Blind-fold, Role Play, Situation Reaction Test--Build an Island nation.

Quantitative Aptitude: Data Interpretation, Data Sufficiency.

Reasoning: Symbols and Notations, Clocks and Calendars, Analytical Reasoning-II

Reference Books:

1. Dictionary of Technical Terms

[Signature]
PRINCIPAL
KL College of Pharmacy
(Deemed to be University)
Green Feilds, Vaddeswaram-522502
Guntur District, Andhra Pradesh.

2. Dr. Meenakshi Raman and Dr. Sangeetha Sarma: *Technical Communication*. Oxford University Press: Delhi.2016.
3. The Ultimate Verbal and Vocabulary Builder. Texas: Lighthouse Review.2000.
4. Rajeev Vasisth: *Interactive Vocabulary Drills*. New Delhi: Arihant Publications Limited. 2011.
5. Language Laboratory Teacher Manual, KLEFU

18UC2103: PROFESSIONAL COMMUNICATION SKILLS

L-T-P-S: 0-0-4

Credits: 2

Prerequisite: Nil

Mapping of Course Outcomes (CO) with program Outcomes (PO):

CO NO	Course Outcomes	PO/PSO	BTL
CO1	Able to spot the common grammatical errors related to Sentence Structure, Preposition, Concord, Relative and Conditional Clauses, and Parallel Structures. The learner should be efficient to construct a context-determined text in addition to learning Technical Writing Skills. One should be enabled to use English Language efficiently in the written medium to communicate Personal as well as Professional.	9, 10	3
CO2	Able to read, understand, and interpret a text intrinsically as well as extrinsically. The learner can browse a text quickly to come-up with a gist and personal interpretation. One is able to create a healthy work-environment and prove to be an asset or one of the most reliable resources to the Organization. As a professional, one is mature to bridge the gulf between the existing behavior/lifestyle and the expected corporate behaviour cum lifestyle.	8	4
CO3	Apply the concepts of Time and Work, the students will be able to solve the questions related to Men-Time-Work, problems based on wages, pipes and cisterns. Apply the concepts of Time and Distance and solve the problems related to average speed, relative speed, problems based on trains, boats, circular tracks, races and games.	1	3
CO4	Apply Venn diagrams to the given statements to find out whether the given conclusions can be deducted from the given statements. Apply the logical implications and also the negations of various connectives to find the solutions. Analyze the given data and representing the data in the form of Venn Diagrams to find relations between any given set of elements.	1,5	3

Syllabus

Grammar and Usage: Error Analysis.

Writing Skills: Topic sentence, Linkers, Connectors and Transition, Paragraph Writing, Letter Writing

Reading Comprehension: Techniques, Skimming and Scanning, Vertical Reading, Reading Perception Tests (RPT): (Graphic) Reading Perception Tests (RPT), Semantic Interpretation of the Text, Reading Speed Enhancement.

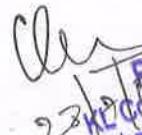
Soft Skills: Interpersonal Skills, Adjusting Your Attitude-Arrogance has no Place in the Workplace, Cultural Sensitivity in the Workplace, Corporate Culture: Learning How to Fit In.

Quantitative Aptitude: Time and Work, Time and Distance.

Reasoning: Deductions, Logical Connectives, Venn Diagrams

Reference Books:

1. Gajendra Singh Chauhan and Smita Kashiramka. Technical Communication. Delhi:Cengage Learning India.2018.
2. Andrea Penruddocke and Christopher A. Warnasch.English for the Real World.USA:Living Language.2004


 22/10/2018
PRINCIPAL
 KLE College of Pharmacy
 (Deemed to be University)
 Green Fields, Vaddeswaram-522502
 Guntur District, Andhra Pradesh.

3. Gerald J Alfred, Charles T Brusaw and Walter E. Oliu. *Hand Book of Technical Writing*. USA: Betford.2000.
4. Asher Cashdan: *Language, Reading and Learning*. Oxford: Basil Blackwell.1979.

18UC2204: APTITUDE BUILDER -I

L-T-P-S: 0-0-4

Credits: 2

Prerequisite: Nil

Mapping of Course Outcomes (CO) with program Outcomes (PO):

CO No	Course Outcomes (CO)	PO/PSO	BTL
CO1	Apply the concept of Critical Reading and Analytical Reading and comprehend the key ideas and gist of a passage. Understand the importance of the presentation skills, analyze the given topic, apply various strategies and the principles of grammar in written expression.	5,6	3
CO2	Apply the concepts of grammar, various strategies and the usage of formal language in written expression. By using synonyms rewrite the same text in the same format and meaning. Write the gist of the given text.	7,10	3
CO3	Apply the concepts of Numbers to solve the problems related to divisibility rules, problems based on Unit's digit, Remainders, Successive Division, Prime Factorization, LCM & HCF problems. Apply the concepts of Averages & Alligations, students will be able to solve the problems related to Averages as well as problems based on Mixtures.	1, 5	3
CO4	Apply the various concepts of cubes to find out how to cut a cube to get the maximum number of smaller identical pieces, how to minimize the number of cuts required to cut a cube into the given number of smaller identical pieces, how to count the number of smaller cubes which satisfy the given painting scheme. Apply the principles of binary logic to solve problems involving truth tellers, liars and alternators. Analyze the given data to form an ordered arrangement from an unorganized raw data	1, 5	4

Syllabus

Directed Listening and Thinking Activity (DLTA) Skills: Reading, Listening, Thinking, Writing, Presentation - Method: Flipped Classroom. Writing Skills: Paraphrasing, Summarizing, Notice, Circular, Agenda, Minutes, Memo; **Body Language (Kinesics):** Postures, gestures, eye contact. Self-confidence: Self-esteem. SoftSkills: The Art of Compromise, Learn to Say: "I Don't Know", Being organized, Showing Self-awareness, An eye on success, being self-motivated, Showing self-awareness, Find Direction from Someone Who Is Lost: "The Drifter" Self-Assessment for Attainable Career Objectives--Defining a Career Objective. **Quantitative Aptitude:** Numbers, Averages and Alligations, Mensuration. **Reasoning:** Cubes, Binary Logic, Ordering and Sequencing.

Reference Books:

1. Daniel G. Riordan and Steven E. Pauley: *Technical Report Writing Today*. New Delhi: Biztantra.2004.
2. Ken Taylor. *Telephoning and Teleconferencing Skills*. Hyderabad: Orient Black Swan.2008.
3. E. Suresh Kumar, B. Sandhya. *Communication for Professional Success*. Delhi: Orient Black Swan.2013
4. Reasoning Trainer Plus.: Hyderabad: Brain Mapping Academy.2012

28/7/18
 PRINCIPAL
 Koneru Lakshmaiah Educational Foundation
 KL College of Pharmacy
 (Deemed to be University)
 Green Fields, Vaddeswaram-522502
 Guntur District, Andhra Pradesh.

18UC3105: APTITUDE BUILDER -II

L-T-P-S: 0-0-4

Credits: 2

Prerequisite: Nil

Mapping of Course Outcomes (CO) with program Outcomes (PO):

CO No	Course Outcomes	PO No	BTL
CO 1	To enhance the verbal aptitude and language comprehension of the students.	1,5	2
CO 2	To improve aptitude, problem solving skills and reasoning ability of the students	1,5	2
CO 3	To improve aptitude, problem solving skills and reasoning ability of the students	1,5	2
CO 4	To understand the Number and Letter Series, Number and Letter Analogy, Coding and decoding, Odd man out, Selections	1,5	2

Syllabus

Directed Listening and Thinking Activity (DLTA) Skills: Reading, Listening, Thinking, Writing, Presentation - Method: Flipped Classroom. Writing Skills: Paraphrasing, Summarizing, Notice, Circular, Agenda, Minutes, Memo; **Body Language (Kinesics)** :Postures, gestures, eye contact. Self-confidence: Self-esteem. SoftSkills: The Art of Compromise, Learn to Say: "I Don't Know", Being organized, Showing Self-awareness, An eye on success, being self-motivated, Showing self-awareness, Find Direction from Someone Who Is Lost: "The Drifter" Self-Assessment for Attainable Career Objectives--Defining a Career Objective. **Quantitative Aptitude:** Numbers, Averages andAlligations, Mensuration. **Reasoning:** Cubes, Binary Logic, Ordering and Sequencing

Reference Books:

1. Daniel G. Riordan and Steven E. Pauley: Technical Report Writing Today. New Delhi: Biztantra.2004.
2. Ken Taylor. Telephoning and Teleconferencing Skills. Hyderabad:Orient Black Swan.2008.
3. E. Suresh Kumar, B. Sandhya. Communication for Professional Success. Delhi: Orient Black Swan.2013
- 4 Reasoning Trainer Plus.:Hyderabad:Brain Mapping Academy.2012

18PH3206P - CAMPUS TO CORPORATE

L-T-P-S: 0-0-4-0

Credits: 2

Prerequisite: Nil

Mapping of Course Outcomes with Program Outcomes

CO	Course Outcomes (CO)	PO/PSO	BTL
CO1	Applying basic concepts of Presentation skills to analyze issues, arguments and some aspects of corporate communication.	9,10	3
CO2	Applying the concepts of corporate etiquette and Personal Grooming.	9,10	3
CO3	Apply the concepts of Listening skills, vocabulary and team working	9,10	3
CO4	Understanding the importance of changing attitude	9,10	2

Syllabus

Presentation Skills: Platform Skills, Rules of Presentation, Communicating with Confidence, Overcoming Stage Fear, Planning & Organizing the Presentation, Use of Powerpoint, Audio Visuals, Managing Audience, Handling Questions, Opening & Closing the Presentation, Use of Icebreakers, Body Language & Voice Modulation .Confidence Building & Self Esteem Development of Students. Communication with Seniors, Juniors, Clients & Stakeholders, Writing Skills, Writing E-Mails, Business Letters. **Corporate Etiquette & Personal Grooming:** Introductions, Language Etiquette, Presenting Business Cards, Dressing, Personal Hygiene, Dining Etiquette, Introduction to International Culture & Sensitivity & Gender Sensitivity .Facing Interviews: Preparing to Face Interviews, Greetings to Introducing Self, Being Confident, Negotiating Salary, Facing Questions, Body Language, Grooming & Dressing. **Participating in Group Discussions:** Talking in Groups, Thinking in Points, Being Assertive, Not being Aggressive, Listening Skills, Presenting your Views

with Confidence, Opening & Closing the Discussion. Preparing The Right Resume: Major Information to be Shared, Do's & Don'ts, The Sequence, The Structure of Resume, English Speaking : Step by Step Approach towards Learning to Talk, Vocabulary Building & Listening & Learning Team Working & Interpersonal Relationships. **Role of Attitude & Changing Attitude:** Understanding Attitude, Importance of Changing Attitude, Impact of Positive Attitude on our lives Goal Setting, Time Management & Stress Management Health & Hygiene: Importance of Healthy Living, Diet, Sleep Patterns & Health, Exercise & Fitness, Hygiene etc. Basics of Financial Planning for New Employees.

Reference Books

1. Ken Taylor. *Telephoning and Teleconferencing Skills*. Hyderabad: Orient Black Swan.2008.
2. E. Suresh Kumar, B. Sandhya. *Communication for Professional Success*. Delhi: Orient Black Swan.2013
3. Judith Verify: *Succeeding at Interview*. Mumbai: Viva Books Private Limited.2000
4. Norman L. Frigon, Sr. & Harry K. Jackson, Jr. *The Leader- Developing the Skills and Personal Qualities*. Mumbai: Magna Publishing Co Ltd.2000.

18UC0010- UNIVERSAL HUMAN VALUES AND PROFESSIONAL ETHICS

L-T-P-S: 0-0-4-0

Credits:0

Prerequisite: Nil

Mapping of Course outcomes (CO) with program outcomes (PO):

CO No	Course Outcomes (CO)	PO/PSO	BTL
CO1	Realize the basic aspiration and understanding harmony in the human being. Understand the process of Self-exploration and able to differentiate between right and wrong. Realize the harmony in the self, and body.	PO8	1
CO2	Realize the purpose of family and understand about relationship and attain harmony in society	PO8	1
CO3	Realize ways to attain harmony in nature. Realize the root cause of the technogenic maladies and able to identify the solution and understand harmony in the human being.	PO8	2
CO4	Realize the definitiveness of human conduct. Analyze the profession and his role in this existence.	PO8	2

Syllabus

Introduction to Value Education: Understanding Value Education, Self-exploration as the Process for Value Education, Continuous Happiness and Prosperity - The Basic Human Aspirations, Right Understanding, Relationship and Physical Facilities, Happiness and Prosperity – Current Scenario, Method to fulfill the Basic Human Aspirations. **Harmony in the Human Being:** Understanding the Human Being as Co-existence of Self ('I') and Body, Discriminating between the Needs of the Self and the Body, The Body as an Instrument of 'I', Understand Harmony in the Self ('I'), Harmony of the Self ('I') with the Body, Program to Ensure Sanyam and Svasthya. **Harmony in the Family and Society:** Harmony in the Family - the Basic Unit of Human Interaction, Values in Human-to-Human Relationships, 'Trust' – the Foundational Value in Relationships, 'Respect' – as the Right Evaluation, Understand Harmony in the Society, Vision for the Universal Human Order. **Harmony in the Nature (Existence):** Understand Harmony in the Nature, Interconnectedness, Self-regulation and Mutual Fulfillment among the Four Orders of Nature, Realizing 'Existence is Co-existence' at All Levels, The Holistic Perception of Harmony in Existence. **Implications of the Right Understanding – a Look at Professional Ethics:** Natural Acceptance of Human Values, Definitiveness of (Ethical) Human Conduct, A Basis for Humanistic Education, Humanistic Constitution and Universal Human Order, Competence in Professional Ethics, Holistic Technologies, Production Systems and Management Models - Typical Case Studies, Strategies for Transition towards Value-based Life and Profession.

Text Book:

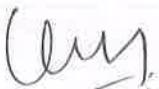
1. A Foundation Course in Human Values and Professional Ethics - R R Gaur, R Sangal and G PB Bagaria, First Edition, Excel Books.

18PH4133S – Operation of Analytical Instruments**L-T-P-S: 0-0-0-4****Credits: 1****Prerequisite: Nil**

CO#	Course Outcome	PO/PSO	BTL
CO1	Explanation of basic principles of analytical instruments used in life science sector. Summarize application of each analytical instrument and Operation of pH meter, conductivity meter, hardness tester as per SOP	2,4/1	4
CO2	Operation of analytical weighing balance, Operation of moisture analyser, disintegration tester, loss on drying (LOD) machine, dissolution apparatus, Karl Fisher (KF)apparatus, viscometer, density tester, refractometer, polarimeter, autotitrator, torque tester, leak test apparatus, pycnometer, tensile strength tester, Operation and maintain centrifuge, autoclave, thin layer chromatography (TLC)chamber, hot air oven, muffle furnace	2,4/1	4
CO3	Operation and maintain high performance liquid chromatography (HPLC) instrument Operation of infrared Fourier-transform infrared(FT-IR) spectrometer Operation of Ultraviolet and visible (UV-Vis) analyser	2,4/1	4
CO4	Operation gas chromatography (GC)instrument Performing calibration and validation of analytical instrument as per SOP and manual Performing maintenance procedure for analytical instruments as per SOP	2,4/1	5

Syllabus:

1. Explain basic principles of analytical instruments used in life sciences sector
2. Summarize application of each analytical instrument
3. Operate pH meter, conductivity meter, hardness tester as per SOP
4. Operate analytical weighing balance as per SOP
5. Operate, moisture analyser, disintegration tester, loss on drying (LOD) machine, dissolution apparatus, Karl Fisher (KF)apparatus, viscometer, density tester, refractometer, polarimeter, autotitrator, torque tester, leak test apparatus, pycnometer, tensile strength tester
6. Operate and maintain centrifuge, autoclave, thin layer chromatography (TLC)chamber, hot air oven, muffle furnace
7. Operate and maintain high performance liquid chromatography (HPLC) instrument
8. Operate infrared Fourier-transform infrared (FT-IR) spectrometer
9. Operate Ultraviolet and visible (UV-Vis) analyser
10. Operate gas chromatography (GC)instrument
11. Perform calibration and validation of analytical instrument as per SOP and manual
12. Perform maintenance procedure for analytical instruments as per SOP



PRINCIPAL
KL College of Pharmacy
Koneru Lakshmaiah Educational Foundation
(Deemed to be University)
Green Fields, Vaddeswaram-522502
Guntur District, Andhra Pradesh,

Annexure IV: Feedback comments from various stakeholders

S. No	Recommendations	Action taken	Name of the Programme	Department
1. Faculty				
1	Mr. A. Rajashekhar Reddy Emp Id: 4460 had put the proposal to approve the syllabus for Pre-PhD examinations	Resolution Passed and recommended for Academic Council for approval	B. Pharmacy	Pharmacy
2. Academic Peer				
1	Dr P Raghuveer Varma, Principal, Dr CSN Institute of Pharmacy, Bhimavaram has advised the course structure for the A.Y. 2018-19 as per the PCI norms	Recommended to strictly follow the syllabus according to PCI norms for the AY 2018-19 and the same has been forwarded to Academic Council for approval	B. Pharmacy	Pharmacy
2	Dr. Gananadhamu, Assistant Professor, NIPER, Hyderabad has given the feedback to design the syllabus with industrial orientation	Recommended to include industry related topics in the curriculum without deviating the PCI norms	B. Pharmacy	Pharmacy
3. Industry Personnel				
1	Trilochana Margana, Senior Manager, Gravity Pharma, India has given the feedback to initiate lateral entry admissions	Recommended to initiate lateral entry admissions and the same has been forwarded to Academic Council for approval	B. Pharmacy	Pharmacy


 KL COLLEGE OF PHARMACY
 (Deemed to be University)
 Green Fields, Vaddeswaram-522502
 Guntur District, Andhra Pradesh.